- 澳門大學的校徽由一個五座城堡冠頂的盾牌和分別用中葡文書寫的「澳門大學」的校名字樣 組成。
- 書上的鑰匙是知識之匙,用以打開知識寶庫;四周的海浪代表著大學身處中國海域的一個小 島上。
- 大橋寓意文化的溝通,是連接東西方文化的象徵。
- 「仁、義、禮、知、信」為中國聖賢提倡的五種美德典範。
- 校徽採用紅、藍、金三色,代表著希望、幸福及人類之進步。

# Emblem

#### For University of Macau



- The emblem of the University of Macau features a five-towered crest encircled by golden rings and the name of the University in Chinese and Portuguese.
- The key on the book is the key to knowledge, and the waves represent the University in its island setting in the South China Sea.
- The Bridge links together the Eastern and Western cultures.
- On the ribbon is a Chinese motto listing the five virtues of an ideal scholar: humanity, integrity, propriety, wisdom and sincerity.
- The colours are red for hope, blue for the joy of well-being, and gold for the advancement of humanity.

澳門大學以立足澳門,共建灣區,融入國家,走向世界為發展定位,通過以學 生為本的優質教育、具國際影響力的重點研究,以及高水平的社會服務,矢志 成為一所國際公認的卓越大學。

The University of Macau (UM) wishes to position itself as a university with firm roots in Macao, while at the same time being committed to participating in the development of the Greater Bay Area. UM hopes to integrate itself into national development while reaching out to the world. Through quality student-centred education, key research subjects with international impact, and a high standard of community services, it aspires to become an internationally recognised university of excellence.

# Mission\_

澳門大學充分發揮其以中華文化為主流、多元文化共存的校園環境,協同學院 與書院的全人教育體系以及國際化的辦學模式等特色和優勢,致力於: The University of Macau endeavours to leverage its uniqueness and strengths, as highlighted by a learning environment where Chinese culture plays a major role and diverse cultures coexist, and by a system of whole-person education underpinned by faculties and residential colleges in

● 秉承"仁、義、禮、知、信"的校訓; Upholding the university motto – Humanity, Integrity, Propriety, Wisdom and Sincerity;

an international education setup. The university is committed to:

- 培養具家國情懷、國際視野、全球競爭力和有社會責任感的公民和創新型 人才,服務澳門、國家及世界發展所需; Cultivating citizens with innovative abilities who exhibit love for their home country, possess global perspectives and competitiveness, and shoulder social responsibilities necessary for the development of Macao, the nation and beyond;
- 促進學術研究,推動產學研合作,助力澳門經濟社會可持續發展,助力粵 港澳大灣區建設、服務國家,貢獻人類; Promoting academic research and industry-academia-research cooperation to facilitate sustainable socio-economic development of Macao and support the development of the Guangdong-Hong Kong-Macao Greater Bay Area, thus serving the nation and humanity at large;
- 植根澳門,多層次、全方位服務澳門社群,造福澳門社會。 Being firmly rooted in Macao, serving and enriching the local community at multiple levels and on all fronts.

# CONTENTS

University Almanac	6
The University	9
Introduction	10
Governance and Organisation	14
Chancellor	15
University Council Principal Officers	15
University Principal Officers	16
University Assembly	17
University Council	19
The Senate and its Sub-Committees         The Senate         1. General Affairs Committee         2. Research Committee         3. Academic Quality Assurance Committee         4. Library Committee         5. Information and Education Technology Committee         6. Graduate Studies Committee         7. General Education Committee         8. Committee on Teaching and Learning Enhancement         9. Scholarship Committee         10. Sports Committee         11. Staff-Student Consultative Committee         12. Student Disciplinary Committee	21 23 24 24 25 26 26 26 27 28 29 29 30
Finance Management Committee	32
Academic Dress for Graduates	33
Admission Rules	36
PhD and Other Doctoral Degree Programmes	37
Master's Degree & Postgraduate Certificate/ Diploma Programmes	42

Bachelor's Degree Programmes	50
Academic Regulations and Rules	72
Regulations of the Programmes of the University of Macau General Rules Governing PhD and Other Doctoral Degree Programm General Rules Governing Master's Degree & Postgraduate Certificate Programmes General Rules Governing Bachelor's Degree Programmes	nes 76 e/Diploma 93
Examination Rules	121
Student Disciplinary Regulations of the University of Macau Rules on Handling Student Academic Dishonesty	
Undergraduate Curriculum Model & General Education	100
Programme	138
Programmes of Study	166
Faculty of Arts and Humanities Doctoral Degree Programmes Master's Degree Programmes Bachelor's Degree Programmes	167 176
Faculty of Business Administration Doctoral Degree Programmes Master's Degree Programmes Bachelor's Degree Programmes	280 285
Faculty of Education Doctoral Degree Programme Master's Degree Programmes Postgraduate Certificate Programmes Bachelor's Degree Programmes	371 374 381
Faculty of Health Sciences Doctoral Degree Programme Master's Degree Programme Bachelor's Degree Programmes	454 456
Faculty of Law Doctoral Degree Programmes Master's Degree Programmes Postgraduate Diploma in Law Programme Bachelor's Degree Programmes	478 479 486

Faculty of Science and Technology Doctoral Degree Programmes Master's Degree Programmes Bachelor's Degree Programmes	563 569
Faculty of Social Sciences Doctoral Degree Programmes Master's Degree Programmes Bachelor's Degree Programmes.	665 674
Honours College	763
Institute of Applied Physics and Materials Engineering Doctoral Degree Programme	
Institute of Collaborative Innovation Master's Degree Programmes	
Institute of Chinese Medical Sciences Doctoral Degree Programme Master's Degree Programmes	792
Institute of Microelectronics Master's Degree Programmes	
Residential Colleges	812
Residential Colleges	
	815
Student Life	815 826
Student Life	<b>815</b> <b>826</b> 827
Student Life	815 826 827 828
Student Life	815 826 827 828 829
Student Life	815 826 827 828 829 831
Student Life	815 826 827 828 829 831 832
Student Life	815 826 827 828 829 831 832 837
Student Life         Academic Support Services         Centre for Teaching and Learning Enhancement         Information and Communication Technology Office         University Library         Research Centres and Laboratories         Research Centres         Laboratories	815 826 827 828 829 831 832 837 841

Guidelines for Student Conduct in the Classrooms	0
Acceptable Use Policy - ICTO Computing Facilities, Campus Network and Internet85	
Academic Computing Facility Room Rules85	7
Fees and Charges for 2022/2023 Newly Admitted Students	2
Rules Governing the Use of UM Campus Card87	5
Academic Prizes	7
Scholarships and Studentships       88         Undergraduate Scholarships       88         Postgraduate Scholarships and Assistantship       89         Principals' Recommended Admission Rules       91         Rules on University of Macau Lotus Scholarship for Admission Examination . 91       91         Scholarship Continuation Policy for UM's Outgoing Exchange Students       92	2 6 3 9
Statistics of Registered Students for Academic Year 2021/202292	2
Staff List       924         Fundamental Academic Units       92         Faculty of Arts and Humanities       92         Faculty of Business Administration       93         Faculty of Education       94         Faculty of Health Sciences       95         Faculty of Law       96         Faculty of Science and Technology       96         Faculty of Scial Sciences       97         Independent Academic Units       98         Asia-Pacific Academy of Economics and Management       98         Centre for Continuing Education       98         Graduate School       99         Honours College       99         Institute of Advanced Studies in Humanities and Social Sciences       99         Institute of Chinese Medical Sciences       99         Institute of Collaborative Innovation       100         Institute of Microelectronics       100         Residential Colleges       100         State Key Laboratory of Analog and Mixed-Signal VLSI       100	556521886689014570246

State Key Laboratory of Quality Research in Chinese Medicine Administration and Support Services	
Staff List index	1021
Campus Map	1042
Enquiries	1044

# **University Almanac**

# University Almanac for Academic Year 2022/2023

Week	s	М	т	w	т	F	s		Events	Put	olic Holidays and University Recesses
August 2022					-						
		1	2	3	4	5	6	4	Last day of Student Summer Recess		
	7	8	9	10	11	12	13				
1	14	15	16	17	18	19	20	18	First day of 1st semester's classes		
2	21	22	23	24	25	26	27				
3	28	29	30	31							
			Sep	otem	ber						
3					1	2	3				
4	4	5	6	7	8	9	10				
5	11	12	13	14	15	16	17			11	The Day following Mid-Autumn Festival
6	18	19	20	21	22	23	24			12	Compensatory rest day set forth in No. 4 of Article
7	25	26	27	28	29	30					79 of the ETAPM
			о	ctob	er						
7							1			1	National Day of the People's Republic of China
8	2	3	4	5	6	7	8			2	The Day following National Day of the People's Republic of China
8	9	10	11	12	13	14	15			3	Compensatory rest day set forth in No. 4 of Article 79 of the ETAPM
9	16	17	18	19	20	21	22			4	Chong Yeung Festival
10	23	24	25	26	27	28	29			5	Compensatory rest day set forth in No. 4 of Article 79 of the ETAPM
11	30	31									
			No	vem	ber						
11			1	2	3	4	5			2	All Soul's Day
12	6	7	8	9	10	11	12				-
13	13	14	15	16	17	18	19				
14	20	21	22	23	24	25	26				
15	27	28	29	30				30	Last day of 1st semester's classes		
									-		
			De	cem	ber						
					1	2	3	1-4	Examination Study Period	8	Feast of Immaculate Conception
	4	5	6	7	8	9	10	5-17 11 &	1st semester's final examinations Contingency plan for final	20 22	Macao S.A.R. Establishment Day Winter Solstice
	11	12	13	14	15	16	17	18	examinations	24 25	Christmas Eve Christmas Day
	18	19	20	21	22	23	24			26-27	Compensatory rest days set forth in No. 4 of Article
	25	26	27	28	29	30	31			18/12-	79 of the ETAPM Christmas/New Year Recess for students
										1/1	

Week S M T W T F S									Events	Public Holidays and University Recesses		
meen	January 2023						•		Litento	T UK		
1	1	2	3	4	5	<b>,</b> 6	7	3	Release of Academic Reports of	1	New Year's Day	
2	8	9	10	11	12	13	14	, e	Undergraduate Programmes	2-4 2	Semester Break Compensatory rest day set forth in No. 4 of Article	
2	15	16	17	18	19	20	21	5	First day of 2nd semester's classes		79 of the ETAPM	
	22	23	24	25	26	27	28	5	First day of 2nd semester's classes	15-29 22-24	Lunar New Year Recess for students Lunar New Year	
3	29	30	31	20	20	- '	20			25	Compensatory rest day set forth in No. 4 of Article	
3	23	50	51								79 of the ETAPM	
			г.	<b>h</b>								
			Fe	brua 1	ary 2	3	4					
3	5	6	7	8	2	10	4 11					
4	12	13	, 14	15	9 16	17	18					
5	12	20			23		25					
6				22	23	24	25					
7	20	27	28									
			_									
			N	<b>/arc</b>		2	4					
7	5	e	7	1 8	2 9	3 10	4 11					
8	5 12	6			9 16	10	11	18-19	UM Admission Examination and			
9		13	14	15			-	10-19	Joint Admission Examination for			
10	19	20	21	22	23	24	25		Macao Four Higher Education Institutions			
11	26	27	28	29	30	31			inditationo			
			4	Apri	I					-		
11				_		_	1			5 7	Cheng Ming Festival Good Friday	
12	2	3	4	5	6	7	8			8 7-10	The Day before Easter Easter Recess for students	
12	9	10	11	12	13	14	15			10	Compensatory rest day set forth in No. 4 of Article	
13	16	17	18	19	20	21	22				79 of the ETAPM	
14	23	24	25	26	27	28	29					
15	30											
				May		~	0	3	Last day of 2nd semester's classes	1	Labour Day	
15	-	1	2	3	4	5	6	4-7	Examination Study Period	1	Labour Day	
	7	8	9	10	11	12	13	8-19 14 &	2nd semester's final examinations Contingency plan for final			
	14	15	16	17	18	19	20	20	examinations	26	The Buddha's Birthday	
	21	22	23	24	25	26	27					
	28	29	30	31								
					_							
				June	9 1	2	3	2	Release of Academic Reports of			
	4	5	6	7	8	2	з 10		Undergraduate Programmes			
	4 11	5 12	0 13	7 14	o 15	9 16	10	5 9	First day of Summer Term First day of Student Summer Recess			
	11	12 19	13 20	14 21	15	23	17 24		-			
							24			22	Tuen Ng Festival	
	25	20	27	∠ŏ	29	30						
				July	1		1					
	2	3	4	F	e	7	8					
				5 12	6 12							
	9	10	11	12	13	14	15					
	16	17	18	19	20	21	22					
	23	24	25	26	27	28	29	31	Last day of Summer Term			
	30	31										

Public holidays/Exemption from work/Compensatory rest days for staff are in .
 Final examination days are in .
 University Recesses are highlighted in RED.

# **The University**

#### Introduction

Founded in 1981, the University of Macau (UM) is an international public comprehensive university in Macao, with a multicultural campus and a system of whole-person education underpinned by faculties and residential colleges in an international education setup. 80 per cent of its faculty members are from outside Macao. With English as the main medium of instruction, the university is committed to producing creative and socially responsible graduates with a global mindset and international competitiveness.

#### **Quality Education**

Teaching units at UM include Faculty of Arts and Humanities, Faculty of Business Administration, Faculty of Education, Faculty of Health Sciences, Faculty of Law, Faculty of Science and Technology, Faculty of Social Sciences, Honours College, Graduate School, and Centre for Continuing Education. Research institutes include Institute of Advanced Studies in Humanities and Social Sciences, Institute of Applied Physics and Materials Engineering, Institute of Chinese Medical Sciences, Institute of Collaborative Innovation, Institute of Microelectronics, Asia-Pacific Academy of Economics and Management, and Centre for Macau Studies.

Currently, there are more than 12,500 students at UM. For undergraduate education, the university adopts a '4-in-1' collaborative education model, which consists of discipline-specific education, general education, research and internship education, and community and peer education. With a credit system and a collegiate system, the university offers over 100 degree programmes at bachelor's, master's, and doctoral levels, covering a variety of fields, including literature, language, business administration, marketing, accounting, finance, international integrated resort management, science, education, biomedical science, law, history, economics, psychology, sociology, communication, engineering, computer science, and Chinese medical sciences.

#### International Reputation

UM is ranked in the 201-250 bracket in the Times Higher Education (THE) World University Rankings, with a global ranking of No 5 in International Outlook, No 26 in the THE Young University Rankings, No 33 in the THE Asia University Rankings, and No 1 in the Association of Portuguese Speaking Universities. In the Quacquarelli Symonds (QS) World University Rankings, it is ranked No 304. It is among the top 1% in Essential Sciences Indicators (ESI) rankings in ten subjects, namely Engineering, Computer Science, Chemistry, Materials Science, Pharmacology & Toxicology, Clinical Medicine, Psychiatry/Psychology, Biology & Biochemistry, Social Sciences General, and Agricultural Sciences.

#### Internationalisation

UM is an international university with a multicultural campus. It adopts a modern governance model and recruits faculty members internationally. 80 per cent of its faculty members are from outside Macao. The fact that English is the main medium of instruction at UM has attracted outstanding students from around the world, which in turn has created a vibrant, multicultural campus.

The university constantly expands its international network and actively builds new platforms for international collaboration in order to broaden the students' horizons. UM has developed partnerships with more than 320 higher education institutions spanning over 30 countries and regions, and has signed agreements on student exchange with over 150 higher education institutions in 24 of these countries and regions.

The university also provides students with many internship opportunities, both local and overseas, in order to enhance their employability upon graduation.

#### **Outstanding Faculty**

UM has recruited a team of high-calibre faculty members from around the world. Many of them have earned prestigious titles, such as member of Academia Europaea (Academy of Europe), fellow of the Royal Academy of Engineering, fellow of the Royal Society of Chemistry, fellow of the Royal Society of Biology, fellow of the Institution of Engineering and Technology, member of the European Academy of Sciences and Arts, member of the Portuguese Academy of Sciences, fellow of the Institute of Electrical and Electronics Engineers, fellow of the American Association for the Advancement of Science, fellow of the American Society of Dechanical Engineers, fellow of the Society of Photographic Instrumentation Engineers, and Chang Jiang Scholar Chair Professor (Ministry of Education).

Not only does the university constantly search for high-calibre scholars, but it also offers attractive work conditions to enable faculty members to achieve their full potential. For example, the university offers the UM Macao Talent Programme to nurture young local scholars and to encourage talented professionals to develop their careers in Macao.

#### A Unique Residential College System

UM's residential college (RC) system provides a platform for knowledge integration based on the university's '4-in-1' model of whole-person education. This is unique among universities in Macao. There are currently ten RCs at UM, namely Chao Kuang Piu College, Cheng Yu Tung College, Cheong Kun Lun College, Choi Kai Yau College, Henry Fok Pearl Jubilee College, Lui Che Woo College, Ma Man Kei and Lo Pak Sam College, Moon Chun Memorial College, Shiu Pong College, and Stanley Ho East Asia College. As a complement to the university's faculty-based system, the RCs serve as a vehicle for whole-person education through systematic planning of experiential programmes, with the aim of nurturing students who are successful in their studies and of high moral character. The RCs strive to enhance students' seven competencies: civic responsibility, global competitiveness, knowledge integration, teamwork, service and leadership, cultural engagement, and healthy living.

#### **Cutting-edge Research**

UM adopts a research policy that can be summarised as 'highlighting characteristics, leveraging strengths, creating peaks, and strengthening cooperation', with a focus on supporting academic disciplines that reflect Macao's characteristics, meet the needs of Macao and the country, and are in line with international trends. UM has established a '3+3+3+3' strategic research blueprint, with the four '3s' referring to three state key laboratories (State Key Laboratory of Analog and Mixed-Signal VLSI, State Key Laboratory of Internet of Things for Smart City and State Key Laboratory of Quality Research in Chinese Medicine), three emerging research fields (precision medicine, advanced materials, and regional oceanology), three interdisciplinary research fields (cognitive and brain sciences, data science, artificial intelligence and robotics), and three research platforms for the humanities and social sciences (Institute of Advanced Studies in Humanities and Social Sciences, Centre for Macao Studies, and Asia-Pacific Academy of Economics and Management). The university encourages interdisciplinary collaboration, especially the integration of modem technology, humanities, and social sciences.

At the same time, UM is strengthening entrepreneurship and knowledge transfer to enhance the social impact of its research results. Zhuhai UM Science & Technology Research Institute was the first industry-academia collaboration demonstration base established by UM and UMTEC

Limited in the Greater Bay Area (GBA) for this very purpose. The institute is a hub of cooperation between Zhuhai and Macao in building an international science and technology innovation centre in the GBA. It relies on the research strengths of the three state key laboratories and institutes with competitive disciplines to integrate into the GBA and participate in national research projects, promote technology transfer, and foster emerging industries. The university's Centre for Innovation and Entrepreneurship has received approval to serve as a national coworking space. Via the centre, UM faculty members and students have established more than 40 companies to facilitate technology transfer.

According to statistics from the Web of Science (WOS), the number of papers published by UM scholars in high-impact journals increased from 77 in 2007 to 2,379 in 2021, with over 68,877 citations in 2021. Chip research is a key research area at UM. Chip researchers at UM aim to develop analogue and mixed-signal integrated circuits and systems, and to establish advanced research and development platforms. They have received a second prize of the State Scientific and Technological Progress Award. At the International Solid-State Circuits Conference 2019, the university was ranked second in the world in terms of the number of papers accepted by the conference, next only to Intel. Chinese medicine is another signature research area at UM. Researchers in this field focus on the quality of Chinese medicinal plants. The researchers have received a second prize of the State Scientific and Technological Progress Award, gold awards at the International Exhibition of Inventions of Geneva, Technology Progress Awards in Macao, and a Medal of Merit – Professions in Macao.

#### **Building Strong Alliances**

UM has established close strategic partnerships with leading academic institutions in China and abroad, including those in Portuguese- and English-speaking countries. The university has launched joint training programmes with a number of world-renowned universities, including Imperial College London, the University of Edinburgh, the University of Bristol, Queen's University Belfast, the University of Bath, the University of Toronto, Temple University, Washington University in St Louis, the University of Lisbon, Tsinghua University, Peking University, Zhejiang University, and the South China University of Technology.

In addition, UM has established five joint laboratories with institutes under the Chinese Academy of Sciences to carry out joint research and development projects in five areas, namely brain science, artificial intelligence, spatial information, marine environment and ocean engineering, and precision medicine.

#### Serving Macao

The university has spared no effort in the study of the different aspects of Macao, including literature, history, society, law, education, and commerce, in order to provide empirical data and advanced theories for enriching the cultural life and enhancing the well-being of Macao residents. It has established the Macao Base for Primary & Secondary Education in Humanities & Social Sciences, and the Macao Base for Primary & Secondary STEM Education to support basic education in Macao. In addition, UM actively supports Macao's development into 'One Centre, One Platform, and One Base' by nurturing professionals in various fields, including the Chinese and Portuguese languages, Chinese history and culture, data science, innovation and entrepreneurship, physics, chemistry, and biology.

In line with the Macao SAR government's policy 'Education for Macao, Talent for Macao', the university continues to offer new degree programmes to nurture more high-level professionals to promote economic diversification in Macao. In 2020, it established the Public Administration Training Centre to help build a talent pipeline for the Macao SAR government.

#### An Environment Conducive to Education

Thanks to the support of the central and Macao SAR governments, UM received approval in 2009 to build its new campus on Hengqin island in Guangdong province, which would come under the jurisdiction of the Macao SAR government. Then President Hu Jintao officiated at the groundbreaking ceremony for the campus on 20 December 2009. UM relocated to the new campus in 2014. Separated from Taipa by a river, the campus covers approximately one square kilometre, with the lush Hengqin Hill serving as a beautiful backdrop. Designed with a people-centred approach, the campus aims to provide an environment that is conducive to scholarly pursuits. The campus is equipped with a complete set of teaching facilities, including a well-stocked library, the University Hall, a swimming pool, a sports complex, an archery range, basketball courts, a sports climbing wall, and gym rooms.

#### Support for the University

UM has progressed in leaps and bounds in recent years, thanks to the support of the central government, the Macao SAR government, and all sectors of society. Both the current president, Xi Jinping, and the former president, Hu Jintao, have visited UM and given important instructions for the university's future development. In 2018, President Xi replied to a joint letter from UM and several other higher education institutions in Macao, instructing them to cultivate more patriotic and Macao-loving talent and create more scientific and technological achievements.

As a public comprehensive university in Macao, with the Macao SAR chief executive serving as its chancellor and chair of the University Assembly, UM enjoys the unparalleled advantage of having the unreserved support of the SAR government. In 2016, it became the first institution of higher learning in Macao to receive the Medal of Merit—Education from the SAR government, in recognition of its contributions to education.

#### **Vision and Mission**

Today's UM is on the threshold of a new era. It will continue to uphold the five virtues listed in the university motto, namely humanity, integrity, propriety, wisdom, and sincerity, to make further improvements and bring about innovation. As a university firmly rooted in Macao, UM strives to participate in the development of the GBA, integrate itself into national development, and reach out to the world. UM aims to become an internationally recognised university of excellence through quality student-centred education, internationally impactful research, and high-quality community services.

# Governance and Organisation

Updated on: July 2022

# Chancellor

The Chief Executive of the Macao SAR, Mr HO lat Seng 澳門特別行政區行政長官賀一誠先生

# **University Council Principal Officers**

Chair of the Council Dr LAM Kam Seng Peter 林金城博士

First Vice Chair of the Council Mr LEI Pui Lam 李沛霖先生

Second Vice Chair of the Council Mr HUEN Wing Ming Patrick 禤永明先生

**Treasurer of the Council** Mr LAU Veng Lin 劉永年先生

# **University Principal Officers**

#### Rector

Prof. Yonghua SONG 宋永華教授 PhD, China Electric Power Research Institute; DSc, Brunel University; Fellow of the Royal Academy of Engineering; Fellow of International Euro-Asia Academy of Sciences; IEEE Fellow

#### Vice Rector (Academic Affairs)

Prof. Michael King Man HUI 許敬文教授 BBA (First class Hons), The Chinese University of Hong Kong; CAAE, IAE Aix-en-Provence; PhD, London Business School

#### Vice Rector (Global Affairs)

Prof. Rui Paulo da Silva MARTINS 馬許願教授 BSc, MSc, PhD, Instituto Superior Técnico da Universidade Técnica de Lisboa; IEEE Fellow; Academy of Sciences of Lisbon

#### Vice Rector (Research)

Prof. Wei GE 葛偉教授 BSc, Nanjing University; MSc, Institute of Hydrobiology, Chinese Academy of Sciences; PhD, University of Alberta

#### Vice Rector (Student Affairs)

Prof. Kai Meng MOK 莫啓明教授 PhD, MS, BS, University of Washington (USA), Civil Engineering

#### Vice Rector (Administration)

Dr Claudia Jian XU 徐建博士 BEng, Zhejiang University; MEng, Asian Institute of Technology; PhD, National Polytechnic Institute of Toulouse

# **University Assembly**

The University Assembly is a consultative body of the University. It advises on the general policies, academic plans and development plans of the University.

#### Chair

Chancellor of UM and Chief Executive of the Macao SAR, HO lat Seng 賀一誠

#### External Members appointed by the Chief Executive

WONG Chong Fat 王宗發 HO Hao Tong 何厚鐣 LEE Bun Sang Stephen 李斌生 SIU Yin Wai 邵腎偉 Maria Edith da SILVA 施綺蓮 MA lao Lai 馬有禮 KOU Hoi In 高開腎 Stanlev AU Chong Kit 區宗傑 CHUI Sai Cheong 崔世昌 Susana CHOU 曹其直 CHAN Hong 陳虹 Joaquim Jorge Perestrelo Neto VALENTE 華年達 FONG Son Kin 馮信堅 WONG King Keung 黃景強 YEUNG Tsun Man Eric 楊俊文 LAO Ngai Leong 劉藝良 CHENG Kar Shing 鄭家成 FOK Chun-Wan 霍震寰 TSE Chi Wai 謝志偉 Paulo TSE 謝思訓 KONG Tat Choi *酈達*財

#### **Chair of the University Council**

LAM Kam Seng Peter 林金城

First Vice Chair of the University Council LEI Pui Lam 李沛霖

#### **Treasurer of the University Council**

LAU Veng Lin 劉永年

#### **Internal Members**

Rector Vice Rector (Academic Affairs) Vice Rector (Global Affairs) Vice Rector (Research) Vice Rector (Student Affairs) Vice Rector (Administration) President of the General Assembly of the University of Macau Alumni Association President of the General Assembly of the University of Macau Students' Union

#### Secretary

LEUNG Kai Chun Chris 深佳俊 (Secretary-General of the University Council)

Please refer to the link below for the most updated member list of UA : https://ua.um.edu.mo/membership/

# **University Council**

The University Council is the highest collegial body of the University. It is responsible for defining the University's development policies, supervising the implementation of the policies, and promoting connections between the University and the community.

#### Chair

LAM Kam Seng Peter 林金城

First Vice Chair LEI Pui Lam 李沛霖

Second Vice Chair HUEN Wing Ming Patrick 禤永明

#### Treasurer

LAU Veng Lin 劉永年

#### External Members appointed by the Chief Executive

LAM Kam Seng Peter 林金城 LEI Pui Lam 李沛霖 HUEN Wing Ming Patrick 禤永明 LAU Veng Lin 劉永年 TOU Kei San 杜琪新 Anabela Fátima Xavier Sales RITCHIE 林綺濤 António José de FREITAS 飛安達 TONG Chi Kin 唐志堅 MA Chi Ngai Frederico 馬志毅 KOU Kam Fai 高錦輝 CHUI Sai Peng 崔世平 CHUI Yuk Lum António 崔煜林 VONG Hin Fai 黃顯輝 SIO Chi Wai 蕭志偉

Representative of the Secretary for Social Affairs and Culture HO loc San 何新珊

Director of the Education and Youth Development Bureau KONG Chi Meng 龔志明

#### **Director of the Financial Services Bureau**

IONG Kong Leong 容光亮

#### Internal University Council Members

Rector Vice Rector (Academic Affairs) Vice Rector (Global Affairs) Vice Rector (Research) Vice Rector (Student Affairs) Vice Rector (Administration) Two Deans of Faculties, from among all Deans of Faculties by rotation Two Senate members, elected in a full session of the Senate President of the Executive Committee of the University of Macau Alumni Association Director General of the Board of Directors of the University of Macau Students' Union

Secretary-General

LEUNG Kai Chun Chris 梁佳俊

Please refer to the link below for the most updated member lists of UC and UC committees : https://uc.um.edu.mo/membership/ https://uc.um.edu.mo/uc-committees/

# The Senate and its Sub-Committees

(For academic year 2021/2022\* )

# The Senate

The Senate is the supreme body responsible for academic affairs of the University and guides the University in its teaching and research activities. It plays a leading role in the University's pursuits of teaching and research activities and ensures high academic standards and rigour.

#### Chair

Prof. Yonghua SONG 宋永華教授, Rector

#### Members

Prof. Michael King Man HUI 許敬文教授, Vice Rector (Academic Affairs) Prof. Rui Paulo da Silva MARTINS 馬許願教授, Vice Rector (Global Affairs) Prof. Wei GE 葛偉教授, Vice Rector (Research) Prof. Kai Meng MOK 莫啟明教授, Vice Rector (Student Affairs) Dr Claudia Jian XU 徐建博士, Vice Rector (Administration)

Prof. Jie XU 徐杰教授, Dean of Faculty of Arts and Humanities Prof. Wei GE 葛偉教授, Interim Dean of Faculty of Business Administration Prof. Chuang WANG 王闆教授, Dean of Faculty of Education Prof. Chuxia DENG 鄧初夏教授, Dean of Faculty of Health Sciences Prof. Io Cheng TONG 唐曉晴教授, Dean of Faculty of Law Prof. Chengzhong XU 須成忠教授, Dean of Faculty of Science and Technology Prof. Weixing HU 胡偉星教授, Dean of Faculty of Sciences

Prof. Pak Kin WONG 王百鍵教授, Interim Dean of Graduate School

Prof. Rose Neng LAI 黎寧教授, Dean of Honours College

Prof. Chengzhong XU 須成忠教授, Interim Director of Institute of Collaborative Innovation Prof. Xin CHEN 陳新教授, Director of Institute of Chinese Medical Sciences

Prof. Matthew Ting Chi LIU 劉丁己教授, Director of Centre for Continuing Education

Prof. Zikang TANG 湯子康教授, Director of Institute of Applied Physics and Materials Engineering

Prof. Rui Paulo da Silva MARTINS 馬許願教授, Director of Institute of Microelectronics Prof. Billy Kee Long SO 蘇基朗教授, Interim Director of Institute of Advanced Studies in Humanities and Social Sciences

Prof. Rico Long Wai LAM 林朗為教授, Registrar Dr Jianzhong WU 吳建中博士, University Librarian Ms Carol Kei WONG 汪淇女士, Director of Rector's Office Prof. Katrine Ka Ki WONG 王嘉祺教授, Director of Centre for Teaching and Learning Enhancement Mr Paul Chap Chong PANG 彭執中先生, Dean of Students

Prof. Defeng LI 李德鳳教授, Faculty of Arts and Humanities Prof. Qingjie WANG 王慶節教授, Faculty of Arts and Humanities Prof. Bin YANG 楊斌教授, Faculty of Arts and Humanities Prof. Shoutong ZHU 朱壽桐教授, Faculty of Arts and Humanities Prof. Glen TIMMERMANS, Faculty of Arts and Humanities Prof. Yue ZHANG 張月教授, Faculty of Arts and Humanities Prof. Jeremy De CHAVEZ. Faculty of Arts and Humanities Dr Sónia Sio Heng AO 區少卿博士, Faculty of Arts and Humanities Prof. Davis Ka Chio FONG 馮家超教授, Faculty of Business Administration Prof. Zhaotong LIAN 練肇通教授, Faculty of Business Administration Prof. Jet Lianjie SHU 舒連杰教授, Faculty of Business Administration Prof. Jason Zezhong XIAO 蕭澤忠教授, Faculty of Business Administration Prof. Glenn MCCARTNEY 默希濂教授, Faculty of Business Administration Prof. Jacky Fok Loi HONG 洪福來教授, Faculty of Business Administration Prof. Henry Chun Kwok LEI 李振國教授, Faculty of Business Administration Prof. Simon Man Shing SO 蘇文成教授, Faculty of Business Administration Ms Winnie Un Fong KUAN 關婉芳女十, Faculty of Business Administration Prof. Kwok Cheung CHEUNG 張國祥教授. Faculty of Education Prof. George Chun Wai CHENG 鄭振偉教授. Faculty of Education Prof. Barry Lee REYNOLDS. Faculty of Education Ms Fanny Shuk Fan WONG 黃淑芬女士, Faculty of Education Prof. Hanming SHEN 沈漢明教授, Faculty of Health Sciences Prof. Henry Hang Fai KWOK 郭珩輝教授, Faculty of Health Sciences Prof. Leo Tsz On LEE 李子安教授. Faculty of Health Sciences Dr Weiwei LIU 劉蔚蔚博十. Faculty of Health Sciences Prof. Guangijan TU 涂廣建教授, Faculty of Law Prof. Muruga Perumal RAMASWAMY 白祿孟教授, Faculty of Law Prof. Miguel Ângelo LOUREIRO MANERO DE LEMOS. Faculty of Law Mr Heng Man HO 何慶文先生, Faculty of Law Prof. Kai Meng MOK 莫啟明教授, Faculty of Science and Technology Prof. Carlos Jorge Ferreira SILVESTRE, Faculty of Science and Technology Prof. Ken Kam Weng TAM 譚錦榮教授, Faculty of Science and Technology Prof. Kun Pang KOU 高冠鵬教授, Faculty of Science and Technology Prof. Wai Meng QUACH 郭偉明教授, Faculty of Science and Technology Prof. Valentino Anok Melo CRISTINO 紀天龍教授, Faculty of Science and Technology Prof. Keng Weng LAO 劉景榮教授, Faculty of Science and Technology Mr Miguel Junior GOMES DA COSTA, Faculty of Science and Technology Prof. Lei CHANG 張雷教授, Faculty of Social Sciences Prof. Lampo LEONG 梁藍波教授, Faculty of Social Sciences Prof. Li SHENG 盛力教授, Faculty of Social Sciences Prof. Wen-yu CHANG 張文瑜教授, Faculty of Social Sciences Prof. Peilian CHI 池培蓮教授, Faculty of Social Sciences Prof. Jianhua XU 徐建華教授, Faculty of Social Sciences Mr Raymond Fei Loi LAI 黎飛雷先生, Faculty of Social Sciences

Ms Chi leng LEI 李梓瑩女士, Student representative of UM Students' Union Mr Zhen Kun WENG 翁振坤先生, Student representative of UM Postgraduate Association

#### Secretary

Prof. Rico Long Wai LAM 林朗為教授, Registrar

The Standing Committees of the Senate include:

- 1. General Affairs Committee
- 2. Research Committee
- 3. Academic Quality Assurance Committee
- 4. Library Committee
- 5. Information and Education Technology Committee
- 6. Graduate Studies Committee
- 7. General Education Committee
- 8. Committee on Teaching and Learning Enhancement
- 9. Scholarship Committee
- 10. Sports Committee
- 11. Staff-Student Consultative Committee
- 12. Student Disciplinary Committee

## 1. General Affairs Committee

The General Affairs Committee handles admission and academic affairs, advises the Senate on the creation and revision of programmes, courses and academic regulations and provides preparatory work for the Senate meetings.

Composition

Chair Prof. Yonghua SONG 宋永華教授, Rector

#### Members

Prof. Michael King Man HUI 許敬文教授, Vice Rector (Academic Affairs) Prof. Rui Paulo da Silva MARTINS 馬許願教授, Vice Rector (Global Affairs) Prof. Wei GE 葛偉教授, Vice Rector (Research) Prof. Kai Meng MOK 莫啟明教授, Vice Rector (Student Affairs)

Prof. Jie XU 徐杰教授, Dean of Faculty of Arts and Humanities Prof. Wei GE 葛偉教授, Interim Dean of Faculty of Business Administration Prof. Chuang WANG 王闖教授, Dean of Faculty of Education Prof. Chuxia DENG 鄧初夏教授, Dean of Faculty of Health Sciences Prof. Io Cheng TONG 唐曉晴教授, Dean of Faculty of Law Prof. Chengzhong XU 須成忠教授, Dean of Faculty of Science and Technology Prof. Weixing HU 胡偉星教授, Dean of Faculty of Sciences

Prof. Pak Kin WONG 王百鍵教授, Interim Dean of Graduate School Prof. Rose Neng LAI 黎寧教授, Dean of Honours College Prof. Xin CHEN 陳新教授, Director of Institute of Chinese Medical Sciences Prof. Zikang TANG 湯子康教授, Director of Institute of Applied Physics and Materials Engineering Prof. Pui-In MAK 麥沛然教授, Representative of Institute of Microelectronics

Prof. Rico Long Wai LAM 林朗為教授, Registrar Ms Carol Kei WONG 汪淇女士, Director of Rector's Office Prof. Billy Kee Long SO 蘇基朗教授, Interim Director of Institute of Advanced Studies in Humanities and Social Sciences

## 2. Research Committee

The Research Committee plans, promotes and governs research activities of the University. It also approves research project funding and assists in managing external research funding.

#### **Composition**

#### Chair

Prof. Wei GE 葛偉教授, Vice Rector (Research)

#### Members

Prof. Defeng LI 李德鳳教授, Associate Dean of Faculty of Arts and Humanities Prof. Ricardo Chi Sen SIU 蕭志成教授, Associate Dean of Faculty of Business Administration Prof. Mingming ZHOU 周明明教授, Associate Dean of Faculty of Education Prof. Renhe XU 徐仁和教授, Associate Dean of Faculty of Health Sciences Prof. Augusto Teixeira GARCIA. Associate Dean of Faculty of Law Prof. Xiao Chuan CAI 蔡小川教授, Associate Dean of Faculty of Science and Technology Prof. Anise Man Sze WU 胡文詩教授, Associate Dean of Faculty of Social Sciences Prof. Pak Kin WONG 王百鍵教授, Interim Dean of Graduate School Prof. Chengzhong XU 須成忠教授, Interim Director of Institute of Collaborative Innovation Prof. Xin CHEN 陳新教授, Director of Institute of Chinese Medical Sciences Prof. Pui-In MAK 麥沛然教授, Representative of the State Key Laboratory of Analog and Mixed-Signal VI SI Prof. Yitao WANG 王一濤教授, Director of the State Key Laboratory of Quality Research in Chinese Medicine Prof. Zikang TANG 湯子康教授, Director of Institute of Applied Physics and Materials Engineering Prof. Yonghua SONG 宋永華教授, Director of the State Key Laboratory of Internet of Things for Smart Citv Prof. Man Kay LAW 羅文基教授. Representative of Institute of Microelectronics Prof. Shoutong ZHU 朱壽桐教授, Faculty of Arts and Humanities Prof. Jason Zezhong XIAO 蕭澤忠教授, Faculty of Business Administration

Prof. Barry Lee REYNOLDS, Faculty of Education

Prof. Hanming SHEN 沈漢明教授, Faculty of Health Sciences

Prof. Miguel Ângelo LOUREIRO MANERO DE LEMOS, Faculty of Law

Prof. Carlos SILVESTRE, Faculty of Science and Technology

Prof. Li SHENG 盛力教授, Faculty of Social Sciences

## 3. Academic Quality Assurance Committee

The Academic Quality Assurance Committee arranges for prior academic assessment of new programmes and courses and periodic academic review of existing ones and manages to evaluate and improve the teaching quality, standard and performance of each teaching unit.

#### **Composition**

#### Chair

Prof. Michael King Man HUI 許敬文教授, Vice Rector (Academic Affairs)

#### Members

Prof. Jie XU 徐杰教授, Dean of Faculty of Arts and Humanities Prof. Wei GE 葛偉教授, Interim Dean of Faculty of Business Administration

Prof. Chuang WANG 王闆教授, Dean of Faculty of Education Prof. Chuxia DENG 鄧初夏教授, Dean of Faculty of Health Sciences Prof. Io Cheng TONG 唐曉晴教授, Dean of Faculty of Law Prof. Chengzhong XU 須成忠教授, Dean of Faculty of Science and Technology Prof. Weixing HU 胡偉星教授, Dean of Faculty of Social Sciences Prof. Yue ZHANG 張月教授, Faculty of Arts and Humanities Prof. Glenn MCCARTNEY 默希濂教授, Faculty of Business Administration Prof. George Chun Wai CHENG 鄭振偉教授, Faculty of Education Prof. Leo Tsz On LEE 李子安教授, Faculty of Health Sciences Prof. Guangjian TU 涂廣建教授, Faculty of Law Prof. Kun Pang KOU 高冠鵬教授, Faculty of Science and Technology Prof. Lampo LEONG 梁藍波教授, Faculty of Social Sciences Prof. Zikang TANG 湯子康教授, Director of Institute of Applied Physics and Materials Engineering Prof. Xin CHEN 陳新教授, Director of Institute of Chinese Medical Sciences Prof. Rose Neng LAI 黎寧教授, Dean of Honours College Prof. Matthew Ting Chi LIU 劉丁己教授, Director of Centre for Continuing Education Prof. Katrine Ka Ki WONG 王嘉祺教授, Director of Centre for Teaching and Learning Enhancement Prof. Chengzhong XU 須成忠教授, Interim Director of Institute of Collaborative Innovation Prof. Sai Weng SIN 冼世榮教授, Representative of Institute of Microelectronics Prof. Rico Long Wai LAM 林朗為教授, Registrar Prof. Pak Kin WONG 王百鍵教授, Interim Dean of Graduate School Dr Joey Chi Ngai LAO 柳智毅博士, Director of Strategy and Planning Office

Ms Chi leng LEI 李梓瑩女士, Student representative of UM Students' Union Mr Zhen Kun WENG 翁振坤先生, Student representative of UM Postgraduate Association

# 4. Library Committee

The Library Committee sets development and improvement plans for the Library and ensures that the resources the Library acquires in each academic year meet the needs of teaching and research of various academic units of the University.

## **Composition**

Chair Prof. Kwok Cheung CHEUNG 張國祥教授, Faculty of Education

## Members

Dr Jianzhong WU 吳建中博士, University Librarian

Prof. Glen TIMMERMANS, Faculty of Arts and Humanities Prof. Susan Jinjuan REN 任錦娟教授, Faculty of Business Administration Prof. Yang GONG 龔陽教授, Faculty of Education Prof. Vivien Ya Fan WANG 王雅凡教授, Faculty of Health Sciences Prof. Xiaobo ZHAI 翟小波教授, Faculty of Law Prof. Seak Weng VONG 黃錫榮教授, Faculty of Science and Technology Prof. Ying LI 李穎教授, Faculty of Social Sciences Prof. Chunming WANG 王春明教授, Institute of Chinese Medical Sciences Prof. Hou IAN 殷灝教授, Institute of Applied Physics and Materials Engineering Prof. Jun YIN 殷俊教授, Institute of Microelectronics

Ms Pui Lam TONG 唐珮琳女士, Student representative of UM Students' Union Mr Zhen Kun WENG 翁振坤先生, Student representative of UM Postgraduate Association

## 5. Information and Education Technology Committee

The Information and Education Technology Committee sets the University's policy and regulations for the use of information and education technology in academic and administrative work. It evaluates and introduces new technologies and facilities, in order to enhance the efficiency of teaching, research and learning.

#### **Composition**

#### Chair

Prof. Kun Pang KOU 高冠鵬教授, Faculty of Science and Technology

#### Members

Mr Antony SI TOU 司徒瓓璠先生, Director of Information and Communication Technology Office

Prof. Hari VENKATESAN 何立慧教授, Faculty of Arts and Humanities Prof. Jimmy Chi Ming LEE 李志明教授, Faculty of Business Administration Prof. Andy Chun Wai FAN 范進偉教授, Faculty of Education Prof. Edwin Chong Wing CHEUNG 張仲榮教授, Faculty of Health Sciences Prof. Muruga Perumal RAMASWAMY 白祿孟教授, Faculty of Law Prof. Leong Hou U 余亮豪教授, Faculty of Science and Technology Mr Raymond Fei Loi LAI 黎飛雷先生, Faculty of Social Sciences

Prof. Defang OUYANG 歐陽德方教授, Institute of Chinese Medical Sciences Prof. Hui PAN 潘暉教授, Institute of Applied Physics and Materials Engineering Prof. Chi Seng LAM 林智聲教授, Institute of Microelectronics Dr Christopher Allen FULTON, Centre for Teaching and Learning Enhancement Ms Stephanie IO 姚秀麗女士, Student Affairs Office

Ms Xiao Yue FAN 范曉月女士, Student representative of UM Students' Union Mr Zhen Kun WENG 翁振坤先生, Student representative of UM Postgraduate Association

## 6. Graduate Studies Committee

The Graduate Studies Committee examines and governs the development plans on postgraduate study programmes and research projects. It also handles admission and academic affairs relating to postgraduate programmes.

#### **Composition**

#### Chair

Prof. Yonghua SONG 宋永華教授, Rector

#### Members

Prof. Michael King Man HUI 許敬文教授, Vice Rector (Academic Affairs)

Prof. Rui Paulo da Silva MARTINS 馬許願教授, Vice Rector (Global Affairs) Prof. Wei GE 葛偉教授, Vice Rector (Research) Prof. Pak Kin WONG 王百鍵教授, Interim Dean of Graduate School

Prof. Defeng LI 李德鳳教授, Associate Dean of Faculty of Arts and Humanities Prof. Ricardo Chi Sen SIU 蕭志成教授, Associate Dean of Faculty of Business Administration Prof. Mingming ZHOU 周明明教授, Associate Dean of Faculty of Education Prof. Guokai CHEN 陳國凱教授, Associate Dean of Faculty of Health Sciences Prof. Augusto Teixeira GARCIA, Associate Dean of Faculty of Law Prof. Xiao Chuan CAI 蔡小川教授, Associate Dean of Faculty of Science and Technology Prof. Anise Man Sze WU 胡文詩教授, Associate Dean of Faculty of Social Sciences

Prof. Matthew GIBSON, Faculty of Arts and Humanities Prof. Jet Lianjie SHU 舒連杰教授, Faculty of Business Administration Prof. Yisu ZHOU 周憶粟教授, Faculty of Education Prof. Hanming SHEN 沈漢明教授, Faculty of Health Sciences Prof. Dan WEI 魏丹教授, Faculty of Law Prof. Kun Pang KOU 高冠鵬教授, Faculty of Science and Technology Prof. Spencer De LI 李德教授, Faculty of Social Sciences

Prof. Jianbo WAN 萬建波教授, Institute of Chinese Medical Sciences Prof. Zikang TANG 湯子康教授, Institute of Applied Physics and Materials Engineering Prof. Sai Weng SIN 冼世榮教授, Institute of Microelectronics

Prof. Katrine Ka Ki WONG 王嘉祺教授, Director of Centre for Teaching and Learning Enhancement Prof. Rico Long Wai LAM 林朗為教授, Registrar Ms Carol Kei WONG 汪淇女士, Director of Rector's Office

Mr Zhen Kun WENG 翁振坤先生, Student representative of UM Postgraduate Association

## 7. General Education Committee

The General Education Committee develops policies and objectives of general education curriculum, to assess the general education courses and to keep the curriculum under regular review. It also handles other related affairs at the request of the Senate and advises on the annual budget in support of its own areas of work.

#### **Composition**

Chair Prof. Michael King Man HUI 許敬文教授, Vice Rector (Academic Affairs)

#### Members

Prof. Kai Meng MOK 莫啟明教授, Vice Rector (Student Affairs)

Prof. Hans-Georg MOELLER, Faculty of Arts and Humanities Prof. Jacky Fok Loi HONG 洪福來教授, Faculty of Business Administration Prof. Zhaowei KONG 孔兆偉教授, Faculty of Education Prof. Gary WONG 黃值富教授, Faculty of Health Sciences Mr Man Teng IONG 翁文挺先生, Faculty of Law Prof. Pak Kin WONG 王百鍵教授, Faculty of Science and Technology Prof. Melody Chia-wen LU 呂家玟教授, Faculty of Social Sciences

Prof. Victoria Lai Cheng LEI 李麗青教授, Honours College Prof. Simon Ming Yuen LEE 李銘源教授, Institute of Chinese Medical Sciences Prof. Billy Kar Wei NG 吳嘉偉教授, Institute of Applied Physics and Materials Engineering Prof. Chi Hang CHAN 陳知行教授, Institute of Microelectronics

Prof. Katrine Ka Ki WONG 王嘉祺教授, Director of Centre for Teaching and Learning Enhancement Prof. Rico Long Wai LAM 林朗為教授, Registrar Mr Paul Chap Chong PANG 彭執中先生, Dean of Students

Mr Wai In PUN 潘偉彥先生, Student representative of UM Students' Union

## 8. Committee on Teaching and Learning Enhancement

The Committee on Teaching and Learning Enhancement assists the Centre for Teaching and Learning Enhancement to pursue standard of teaching and learning excellence. It endorses the funding of projects and educational programmes related to teaching and learning enhancement. It also submits strategic proposals to the Senate, and advises on the annual budget in support of its own areas of work.

#### **Composition**

#### Chair

Prof. Michael King Man HUI 許敬文教授, Vice Rector (Academic Affairs)

#### Members

Prof. Ricardo MOUTINHO, Faculty of Arts and Humanities Prof. Philip Kin Fun LAW 羅建勛教授, Faculty of Business Administration Prof. Boby Ho-Hong CHING 程浩航教授, Faculty of Education Prof. Henry Hang Fai KWOK 郭珩輝教授, Faculty of Health Sciences Prof. Rostam NEUWIRTH, Faculty of Law Prof. Che Man CHENG 鄭智文教授, Faculty of Science and Technology Prof. Wen-yu CHANG 張文瑜教授, Faculty of Social Sciences

Prof. Benjamin Kidder HODGES, Honours College Prof. Pui Man HOI 許貝文教授, Institute of Chinese Medical Sciences Prof. Guichuan XING 邢貴川教授, Institute of Applied Physics and Materials Engineering Prof. Yong CHEN 陳勇教授, Institute of Microelectronics Ms Alice Chong Kok FONG 馮鍾珏女士, Graduate School Ms Betty Wai Hong CHANG 曾偉紅女士, Academic Affairs Office

Prof. Katrine Ka Ki WONG 王嘉祺教授, Director of Centre for Teaching and Learning Enhancement Mr Elvo Kuai Long SOU 蘇桂龍先生, Student Affairs Office

Ms Pui Lam TONG 唐珮琳女士, Student representative of UM Students' Union Mr Zhen Kun WENG 翁振坤先生, Student representative of UM Postgraduate Association

## 9. Scholarship Committee

The Scholarship Committee advises and gives approval in respect of matters pertaining to scholarships and academic prizes.

#### **Composition**

#### Chair

Prof. Rico Long Wai LAM 林朗為教授, Registrar

#### Members

Prof. Io Kei KUONG 斷耀基教授, Faculty of Arts and Humanities Prof. Jacey Ja Young CHOE 崔慈瑛教授, Faculty of Business Administration Prof. Dennis Ping Cheng WANG 王秉正教授, Faculty of Education Prof. Qi ZHAO 趙琦教授, Faculty of Health Sciences Prof. Cheng Hang LEONG 梁靜姮教授, Faculty of Law Prof. Seng Peng MOK 莫昇萍教授, Faculty of Science and Technology Prof. Shih-Diing LIU 劉世鼎教授, Faculty of Social Sciences

Prof. Ruibing WANG 王瑞兵教授, Institute of Chinese Medical Sciences Prof. Hui PAN 潘暉教授, Institute of Applied Physics and Materials Engineering Prof. Yanwei JIA 賈艷偉教授, Institute of Microelectronics

Mr Paul Chap Chong PANG 彭執中先生, Dean of Students Ms Eduarda Ka Vai VU 鄔嘉慧女士, Head of Registry

# **10. Sports Committee**

The Sports Committee advises on policy making and strategic planning for sports development in the UM; ensures effective use and proper management of sports resources and facilities, encourages the development of organizational sports activities and active participation of members from the UM community.

## **Composition**

## Chair

Prof. Shing On LEUNG 梁成安教授, Faculty of Education

## Members

Mr Chi Meng CHEANG 鄭智明先生, Residential College - CKPC Mr Heung Chin HUI 許向前先生, Faculty of Education Ms Michelle Mei Teng LOI 雷美婷女士, Office of Administration Mr Ka Ip LEONG 梁嘉業先生, Campus Management and Development Office Ms Phoebe Sau Kun CHEANG 鄭秀娟女士, Office of Health, Safety and Environmental Affairs Mr Paul Chap Chong PANG 彭執中先生, Dean of Students Ms Grace Kwai Chee CHAU 周桂慈女士, Office of Sports Affairs Dr Tony Sio Weng TING 丁紹榮博士, Facility Development Section Dr Water WONG 黃水波博士, UM Staff Sports Club

Mr Alfonso CHOI YANG 蔡嘉樺先生, Student representative of UM Students' Union Mr Rui Peng SHI 石瑞鵬先生, Student representative of UM Postgraduate Association Mr Junxi HU 胡俊晞先生, President of Sports Association of UM Students' Union

## 11. Staff-Student Consultative Committee

The Committee aims to provide a forum for academic matters which may be raised by the members and to increase communication between students and the University on both academic matters and non-academic matters.

#### **Composition**

#### Chair

Prof. Katrine Ka Ki WONG 王嘉祺教授, Faculty of Arts and Humanities

#### Members

Prof. Victoria LEI 李麗青教授, Faculty of Arts and Humanities Prof. Toro Tao CHEN 陳濤教授, Faculty of Business Administration Prof. Yang GONG 龔陽教授, Faculty of Education Prof. Leo Tsz On LEE 李子安教授, Faculty of Health Sciences Mr Man Teng IONG 翁文挺先生, Faculty of Law Prof. Man Hoi LOK 陸萬海教授, Faculty of Science and Technology Prof. Kwok Kit TONG 唐國傑教授, Faculty of Social Sciences

Prof. Hao HU 胡豪教授, Institute of Chinese Medical Sciences Prof. Huaiyu SHAO 邵懷宇教授, Institute of Applied Physics and Materials Engineering Prof. Sio Hang PUN 潘少恆教授, Institute of Microelectronics

Mr Paul Chap Chong PANG 彭執中先生, Dean of Students

Mr Yiu Hang LAM 林耀鏗先生, Student representative of UM Students' Union Mr Han WANG 王瀚先生, Student representative of UM Postgraduate Association Ms Hong Lou CHEONG 張洪露女士, President of Faculty of Arts and Humanities Students' Association Ms Cho Ian IONG 翁楚欣女十, President of Faculty of Business Administration Students' Association Mr Chon Kit LEE 李駿杰先生, President of Faculty of Education Students' Association Mr Zihan WEI 魏子涵先生, President of Faculty of Health Sciences Students' Association Mr Chi Teng LAM 林子庭先生, President of Faculty of Law Students' Association Mr Hou Fai CHE 謝浩輝先生, President of Faculty of Science and Technology Students' Association Mr Kin Hou CHE 謝建豪先生, President of Faculty of Social Sciences Students' Association Ms Xiaoting ZHENG 鄭小婷女十, Student representative of Institute of Chinese Medical Sciences Ms Ziyi DAI 戴子憶女士, Student representative of Institute of Applied Physics and Materials Engineering

Mr Chi Wa U 余志樺先生, Student representative of Institute of Microelectronics

## 12. Student Disciplinary Committee

The Student Disciplinary Committee advises and makes recommendations on student disciplinary matters of the University. It reviews and conducts hearings on alleged infractions and acts with power to decide appropriate response and penalties.

#### **Composition**

#### Chair

Mr Paul Chap Chong PANG 彭執中先生, Dean of Students

#### Members

Prof. Rico Long Wai LAM 林朗為教授, Registrar Prof. Guokai CHEN 陳國凱教授, Faculty of Health Sciences Prof. Zhe LI 李哲教授, Faculty of Law Ms Katrina CHEONG 張惠琴女士, Director of Communication Office

Mr Yiu Hang LAM 林耀鏗先生, Student representative of UM Students' Union Ms Hui Ran PANG 龐卉冉女士, Student representative of UM Postgraduate Association

# **Finance Management Committee**

The Finance Management Committee is the executive body responsible for financial affairs of the University.

**Composition** 

Chair Prof. Yonghua SONG 宋永華教授, Rector

#### Members

Prof. Michael King Man HUI 許敬文教授, Vice Rector (Academic Affairs) Prof. Rui Paulo da Silva MARTINS 馬許願教授, Vice Rector (Global Affairs) Prof. Wei GE 葛偉教授, Vice Rector (Research) Prof. Kai Meng MOK 莫啓明教授, Vice Rector (Student Affairs) Dr Claudia Jian XU 徐建博士, Vice Rector (Administration)

#### Secretary

Ms Miu Mei LEI, Candy 李妙媚女士, Director of Finance Office

\* Last updated on June 2022.

Please refer to the link below for the most updated member lists of Senate and its subcommittees.

https://aao.um.edu.mo/the-um-senate/

# Academic Dress for Graduates

# **Academic Dress for Graduates**

# **Specifications of the Graduation Gown**

# **Doctoral Degree**

#### Gowns

- round sleeves in blue
- blue silk piping in front
- front pleats, hook and eye closure
- back yoke cord and button
- 9 cm hem
- in red color

Hoods - red hood with blue silk hem

Caps - round cap in black color with gold silk tassel

## **Master's Degree**

#### Gowns

- sleeves with arm slits closed
- front pleats, hook and eye closure
- back yoke cord and button
- 8.5 cm hem
- in black color

Caps - square cap in black color with black tassel

**Hoods** - black hood with 1 cm gold silk hem and color silk hem ranging from 4.5 to 7 cm, progressively wider towards the odd-shaped flap at the back of the hood

Faculty of Arts and Humanities - purple silk hem

Faculty of Business Administration - silver silk hem

Faculty of Education - blue silk hem

Faculty of Health Sciences - bitter lemon silk hem

Faculty of Law - red silk hem

Faculty of Science and Technology - orange silk hem

Faculty of Social Sciences - green silk hem

Institute of Chinese Medical Sciences - yellow silk hem

Institute of Collaborative Innovation - kelly green silk hem

Institute of Microelectronics - cobalt blue silk hem

# **Bachelor's Degree**

#### Gowns

- round sleeves
- front pleats, hook and eye closure
- 6 cm hem
- in black color

Caps - square cap in black color with black tassel

Hoods - black hood with color silk hem ranging from 4 to 4.5 cm, progressively wider towards the odd-shaped flap at the back of the hood

Faculty of Arts and Humanities - purple silk hem

Faculty of Business Administration - silver silk hem

Faculty of Education - blue silk hem

Faculty of Health Sciences - bitter lemon silk hem

Faculty of Law - red silk hem

Faculty of Science and Technology - orange silk hem

Faculty of Social Sciences - green silk hem

**Honours College** 

Stole - purple with 1 cm gold silk hem, embroidered with UM and HC logos

# **Admission Rules**

ADMISSION RULES

# PhD and Other Doctoral Degree Programmes

(Approved by the Rector on 16 November 2020)

# **1. ADMISSION REQUIREMENTS**

1.1 General Entry (for Master's Degree Holders)

Possess a Master's degree or academic background recognized as equivalent by the University of Macau.

1.2 Accelerated Entry (for Master's Students)

Have been registered in a Master's Programme at the University of Macau for at least one year.

Have successfully finished the coursework part with outstanding performance and have demonstrated strong research ability.

1.3 Direct Entry (for Bachelor's Degree Holders)

Possess a Bachelor's degree with outstanding performance and have demonstrated strong research ability.

1.4 Proof of English Proficiency

Applicants who received their Bachelor/Master's degree from a university where the medium of instruction was not English are required to provide any of the following as proof of English proficiency:

- Obtained a TOEFL\* score of 550 (paper-based examination)/80 (Internet-based examination) or above or,
- An IELTS\* overall score of 6.0 or above with no sub-score lower than 5.5 or,
- College English Test (CET) score is acceptable to some academic units, please visit corresponding website of each academic unit for details.

\*Note: TOEFL and IELTS scores are valid for two years from the test date.

For exceptional cases, admission should be endorsed by the Dean/Director of the academic unit concerned and be approved by the Graduate School.

Note:

Some programmes may have additional admission requirements. Please visit the corresponding website https://grs.um.edu.mo/for more details.

# 2. APPLICATION PROCEDURES

Online application forms will be available during the application period. Applicants should submit their application via the Online Application System of the University at http://grs.um.edu.mo/.

- 2.1 Read carefully the important notes before you proceed with your application.
- 2.2 You must have an e-mail address to register as a new user in order to submit an application. Applicants who have successfully registered will receive a reference number (e.g. 2XXXXXXX) and password by e-mail. You must keep such information to login to your account throughout the whole application procedure. (If you fail to receive the e-mail within 2 days, please contact us by phone at 8822 4898 or by e-mail at

gradschool@um.edu.mo.)

- 2.3 Complete all relevant sections of the Online Application. It is recommended that you supply a local mobile number so that the University may notify applicants of any news by e-mail and SMS.
- 2.4 Scan and upload all required documents to the Online Application System. All submitted documents must be in A4 size, PDF format and the total size for all attached documents should NOT be greater than 6MB.

The documents should include:

- 2.4.1 Identification card copy.
- 2.4.2 Personal curriculum vitae.
- 2.4.3 Passport size photo (in JPG format with 300dpi, with no border and white background).
- 2.4.4 Certificates and academic transcripts:
  - 2.4.4.1 General Entry (for Master's Degree Holders): each of the certificate and academic transcript of both the Bachelor's degree and Master's degree
  - 2.4.4.2 Accelerated Entry (for Master's Students): Bachelor's degree certificate and academic transcript, Master's academic transcript in University of Macau
  - 2.4.4.3 Direct Entry (for Bachelor's Degree Holders): Bachelor's degree certificate and academic transcript.
- 2.4.5 Non-UM current students must submit a testimonial which must be issued in not more than 60 days prior to the submission of the application for the PhD and other doctoral degree Programme.
- 2.4.6 Applicants currently studying in the final year of a Master's degree programme at the University of Macau do not need to submit the Master's degree transcript and testimonial.
- 2.4.7 Recommendation Forms. Applicants must use the recommendation forms provided by the Graduate School. Each application must contain two completed recommendation forms. At least one of the two recommendation forms must be completed by a university academic. The other one can be completed by either a university academic or an employer. Applicants can submit them either online or by post. However, to avoid possible postal delay, online recommendations are recommended.
  - 2.4.7.1 If you prefer to submit online recommendations, you must make sure your referees submit your recommendations to us before the application deadline. An automatic notification e-mail will be sent to the applicant once we receive the recommendations. If applicants do not receive this e-mail, it means your referee has not submitted the online recommendation for you yet. You should contact your referee as soon as possible to make sure that it is submitted by the application deadline.
  - 2.4.7.2 If you choose to submit by post, the forms should be sealed in an envelope by your referee and forwarded/sent to the Graduate School directly. Please write on the envelope your application number YP-CX-XXXX-X or reference number 2XXXXXXX before sending the recommendation form to us.

- 2.4.8 A statement addressing the area or topic of the applicant's interest in pursuing PhD and other doctoral studies. The statement must be of no more than 15 pages or of size less than 1 MB.
- 2.4.9 Proof of English proficiency (Please refer to Item 1.4 under Admission Requirements for details).
- 2.4.10 Applicants who received their Bachelor/Master's degree from a university where the medium of instruction was English are required to provide a proof of English as the medium of instruction, if deemed necessary, issued by the applicants' university where their Bachelor/Master's degree was obtained (UM's current students and graduates are not required to provide such proof).
- 2.4.11 Other documents as requested by the programme for which the candidate is applying (if applicable).
- 2.4.12 Application without the above mentioned documents enclosed will not be processed.
- 2.4.13 Documents submitted to the University will not be returned to the applicant.
- 2.5 Verify all application data before submitting the application. Once the application is submitted, no data can be changed. Each applicant can submit only one application in the same academic year. If necessary, the applicant can indicate in his/her application a maximum choice of two programmes in one application with priority given to each programme. Although the applicant can apply for two programmes, application fee will be charged once only.
- 2.6 Settle the application fee by the deadline of the application period (For more details, please refer to 2.11).
- 2.7 Once the application fee is settled, an acknowledgment e-mail with an application number (YP-CX-XXXX-X) will be sent to you by e-mail. Applications without an application number will not be regarded as valid. If you do not receive any acknowledgment e-mail, please contact us by e-mail at gradschool@um.edu.mo.
- 2.8 Academic documents (such as recommendation forms, certificates, testimonials, academic transcript, etc.) submitted must be of the same language version as that of the thesis language of the programme being applied. Otherwise, the application will not be considered.
- 2.9 Admission for PhD and other doctoral degree programmes in principle is open all year round. For practical purpose, most students should be admitted in the first semester of the forthcoming academic year. However, if necessary they can also be admitted in the second semester as requested by the academic unit concerned.
- 2.10 Applicants will be given conditional offer in the following circumstances.
  - 2.10.1 applicants currently studying in the final year of Bachelor's degree programmes (Direct Entry) / Master's degree programmes (General Entry) will be conditionally offered and will only be formally admitted upon successful completion of their Bachelor's degree programmes (Direct Entry) / Master's degree programmes (General Entry) with overall result satisfying the admission requirements.
  - 2.10.2 in special cases, applicants are required to submit proof of English proficiency before formally admitted.

2.11 The application fee for each application is MOP200.00. The application fee is non-refundable.

The application fee payments must be made by the deadline of the application period:

- 2.11.1 by online credit card payment (please follow the payment instructions on the website);
- 2.11.2 by cheque, bank draft or cashier's order drawn on a bank in Macao and made payable to the "University of Macau". An additional handling charge of MOP50 is required for each foreign bank draft or cashier's order. However, the exact amount of handling fees depends on the amount charged by banks. Our University reserves the right to recover the difference.

(Applicants who choose option 2.11.2 must print the application fee payment slip after they have completed the application at the Online Application System and submit the slip to the Treasury Section at Room 1012, Administration Building for payment.)

#### 3. INTERVIEW

If interviews are required, the academic unit concerned will inform the applicants about the interview details.

#### 4. TUITION FEES

- 4.1 Please refer to the Tuition Fees Scheme for postgradue programmes (which is available at GRS webpage: https://grs.um.edu.mo/) for further details.
- 4.2 Tuition Fees are subject to revision annually.

# 5. PHD SCHOLARSHIP AND ASSISTANTSHIP

The UM Macao PhD Scholarship and PhD Assistantship are available to PhD students of the University which serve as a source of stipend for students. Please refer to the *Guldelines for UM PhD Schloarship and Assistanthsip* for further details.

# 6. TERMINATION OF APPLICATION OR STUDY

- 6.1 Applicants must guarantee that the information given in the application form is TRUE and the UM reserves the right to terminate an application or study at any time if any information given in his/her application form is found later to be untrue, false or incorrect.
- 6.2 Students should not enrol/register in any other higher education programme in Macao in the same academic year, including programme offered by the University of Macau. If students are found to be registered for more than one higher education programme, the UM reserves the right to terminate his/her application or study at any time.

# 7. DEFERMENT OF STUDY FOR NEW STUDENTS

7.1 New students can apply for deferment of study for not more than one academic year. Application for such deferment should be made before class commencement. New students must fulfil all the conditions stated in their offer letters and submit the required amount of non-refundable deposit before they become eligible to apply for deferment of study. Such applications will only be permitted for medical reasons and exceptional cases with sound justification. For medical reasons, students are required to submit medical certificates issued by hospitals at the time of application. For exceptional cases with sound justification, students are required to specify the reason and submit written certifications at the time of application.

- 7.2 Students who have deferred their studies and wish to return to the University should apply for resumption of study. Resumption is not granted automatically. Besides, new students are not permitted to transfer to another programme when they apply for resumption of study.
- 7.3 If students neither apply for resumption of study nor submit another deferment application before class commencement of the next semester after they have reached the previously approved deferment period, they will be considered having withdrawn from the University, and they have to apply for re-admission of study later if they wish to return to the University.

# 8. PERSONAL IDENTIFICATION

Applicants must hold valid personal identification documents for admission:

- 8.1 Valid Macao identification card for local students;
- 8.2 Valid Hong Kong identification card for Hong Kong students;
- 8.3 Valid Mainalnd China identification card for Mainland China students;
- 8.4 Valid passport for non-local students.

For Mainland China identification card or passport holders, please refer to the admission guidelines for PhD and other doctoral degree Programmes for Mainland China applicants at https://grs.um.edu.mo/.

# 9. SUBMISSION OF DOCUMENTS

9.1 For Application:

Applicants must scan and upload all required documents to the Online Application System of the University for application. Otherwise, the application will not be considered. (For details, please refer to Point 2.4.)

9.2 Upon Offer of Admission:

Upon offer of admission, candidates will be requested to provide certified true copies of their academic documents or to present the originals before/during registration, otherwise, the offer of admission will be cancelled and the candidate will not be eligible for registration. All submitted documents will not be returned.

All documents submitted must be in A4 size. Applicants who fail to provide the required documents for verification will be disqualified from admission and subsequent enrolment in the University.

# **10. SPECIALIZATION**

For details, please refer to Specialization for PhD and other Doctoral Degree Programmes at the Graduate School's website: https://grs.um.edu.mo/.

# ADMISSION RULES Master's Degree & Postgraduate Certificate/ Diploma Programmes

(Approved by the Rector on 16 November 2020)

# 1. LIST OF MASTER'S DEGREE PROGRAMMES TO BE OFFERED IN 2022/2023

Faculty	Programme Code	Programme	Medium of Instruction	Normal Duration of Study
	MAHELS	1. Master of Arts - English Studies	English	
	PMAHCLN PMAHCLT	Master of Philosophy     Chinese Linguistics     Chinese Literature	Chinese	
Faculty of Arts and Humanities	PMAHPISLCS PMAHPISLG	<ol> <li>Master of Philosophy         <ul> <li>Portuguese Language &amp; Intercultural Studies</li> <li>(Literary &amp; Cultural Studies)<sup>®</sup></li> <li>Portuguese Language &amp; Intercultural Studies (Applied Linguistics)<sup>®</sup></li> </ul> </li> </ol>	Portuguese	2 academic years
and numarities	MAHTRSTEC	4. Master of Arts - Translation Studies(English - Chinese)	Chinese/ English	
	MAHTRSTPC	- Translation Studies (Portuguese - Chinese) <sup>©</sup>	Chinese/ Portuguese	
	МАННІТ	5. Master of Arts - History	English & Chinese	
	МАНССНС	- Chinese History and Culture	Chinese	
	EMBA	1. Executive Master of Business Administration	Chinese & English	
	MBA	2. Master of Business Administration		
Faculty of Business Administration	MSBACT MSBFNA MSBIRT	<ol> <li>Master of Science         <ul> <li>Accounting</li> <li>Finance</li> <li>International Integrated Resort Management</li> </ul> </li> </ol>	English	2 academic years
	PMEDCCI PMEDCCIENE	<ol> <li>Master of Philosophy <sup>@</sup></li> <li>Curriculum &amp; Instruction</li> <li>Curriculum &amp; Instruction - English Language Education</li> </ol>	Instruction Instruction - English	
Faculty of Education	PMEDEA PMEDECD	Educational Administration     Early Childhood Education and Child     Development	Chinese and English	2 academic years
	PMEDEPY PMEDPSS	Educational Pscyhology     Physical Education & Sport Studies	-	
	MSLLCBD	Master of Law (Chinese Language)     Constitutional Law, Basic Law     and Administrative Law		
	MSLLCPL	- Criminal Law and Criminal Procedural	Chinese	
Faculty of Law	MSLLCIP MSLLBUL	Law - Civil Law and Intellectual Property Law - International BusinessLaw		2 academic years
	MELLEUR MELLINL MELLCOL	<ol> <li>Master of Law in European Union Law International Law and Comparative Law (English Language)         <ul> <li>European Union Law</li> <li>International Law</li> <li>Comparative Law</li> </ul> </li> </ol>		

Faculty	Programme Code		Programme	Medium of Instruction	Normal Duration of Study
	MIBLINB	3.	Master of Law in International Business Law (English Language)	English	
Faculty of Law	MPLLJUS MPLLJPS	4.	Master of Law (Portuguese) - Juridical Sciences - Juridical-Political Sciences	Portuguese	2 academic years
	MMLLLP	5.	Master of Law in Macau Law and $Practice^{\textcircled{2}}$	Portuguese & Chinese	
	MASSCOMMCNM	1.	Master of Arts in Communication <sup>2</sup> - Communication and New Media	English	
	MASSCOMMVIC	1	- Visual Communication	Chinese/ English	
	MSSIRP	2.	Master of Social Sciences - International Relations and Public Policy <sup>©</sup>	English	
Faculty of Social	MSSEUS	ļ	- European Studies		2 academic years
Sciences	MSSPAD		<ul> <li>Public Administration<sup>2</sup></li> </ul>	Chinese	
	MSSCRI		- Criminology and Criminal Justice	English but supplemented with Chinese	
	MSSECO		- Economics <sup>®</sup>	English	
	MSSPSMT	ļ	<ul> <li>Public Security Management</li> </ul>	Chinese	
	PMSSMOS	3.	Master of Philosophy - Macao Studies	Chinese and English	
	MSCCVLHE	1.	Master of Science in Civil Engineering - Hydraulics and Environmental Engineering		
	MSCEMM	2.	Master of Science in E-Commerce Technology		2-3 academic years
	MSCECT	3.	Master of Science in Electrical and Computer Engineering		
Faculty of Science & Technology	MSCCOS	4.	Master of Science in Computer Science	English	
lecinology	MSCICIV	5.	Master of Science in Civil Engineering		
	MSCIEMG	6.	Master of Science in Electromechanical Engineering		2 academic years
	MSTMAT	7.	Master of Science in Mathematics		
	MSCIFNT	8.	Master of Science in Financial Technology		
Institute of	MSCIIOT MSDDTSAIA MSDDTSMKA MSDDTSFIT MSDDTSSYC	9.	Master of Science in Internet of Things           Master of Science in Data Science           - Artificial Intelligence Applications           - Marketing Analytics           - Financial Technology           - Data Strategy and Compliance	English/	2 academic years
Collaborative Innovation	MSDDTSPMD MSDDTSCPG MSDDTSATL MSDDTSSGO		Precision Medicine     Computational Linguistics     Analytics in Teaching and Learning     Smart Governance	Chinese	
	MSDCON	2.	Master of Science in Cognitive Neuroscience	English	2 academic years
Institute of Chinese Medical Sciences	PMCMCMS PMCMMAD	1.	Master of Philosophy - Chinese Medicinal Science - Medicinal Administration	English but supplemented with Chinese	2 academic years
Institute of	MSCEMIC	1.	Master of Science in Microelectronics	English	2 academic years
Microelectronics	PMSCEMIC	2.	Master of Philosophy in Microelectronics	English	3 academic years

Most of the above programmes are evening programmes, classes start after 6:00 p.m. Please consult the Academic Unit concerned for exact class schedule.

 $\odot$  Courses will normally be conducted in daytime during weekdays.  $\oslash$  Please visit the Graduate School's website for more details regarding the specific English proficiency requirement.

#### 2. LIST OF POSTGRADUATE CERTIFICATE / DIPLOMA PROGRAMMES TO BE OFFERED IN 2022/2023

Faculty	Programme Code	Programme	Medium of Instruction	Normal Duration of Study
Faculty of Education	PGCEPRD PGCEPYD PGCESED	<ol> <li>Postgraduate Certificate in Education         <ul> <li>Pre-Primary Education<sup>®</sup></li> <li>Primary Education<sup>®</sup></li> <li>Secondary Education<sup>®</sup></li> </ul> </li> </ol>	Chinese	1 academic year
Faculty of Law	LML	1. Introduction to Macao Law <sup>2</sup>	Chinese	2 academic years

© Please visit the Graduate School's website for more details regarding the specific English proficiency requirement.

# 3. ADMISSION REQUIREMENTS

- 3.1. Master's Degree Programmes
  - 3.1.1 An applicant of a Master's degree programme must possess a Bachelor's degree or academic background recognized as equivalent by the University of Macau. An applicant may also be required to posses other knowledge or professional experience.
  - 3.1.2 Applicants currently studying in the final year of Bachelor's degree programmes may also submit applications. Successful applicants will be provisionally offered and will only be formally admitted upon successful completion of their Bachelor's degree programmes with overall result satisfying the requirements set by the respective programme.
  - 3.1.3 Applicants should have achieved the equivalent\* of an overall result of Grade C+ or better in the Bachelor's degree studies. (Except for the Faculty of Law)
  - 3.1.4 Applicants must fulfil the Language Proficiency requirement of the specific programme.
  - \* The equivalent means 2.3 on the 4.0 GPA scale, 14 on the 20-point scale or 70 out of 100.
- 3.2. Postgraduate Certificate / Diploma Programmes
  - 3.2.1 An applicant of a postgraduate certificate / diploma programme must possess a Bachelor's degree or academic background recognized as equivalent by the University of Macau. An applicant may also be required to posses other knowledge or professional experience.
  - 3.2.2 Applicants currently studying in the final year of Bachelor's degree programmes may also submit applications. Successful applicants will be provisionally offered and will only be formally admitted upon successful completion of their Bachelor's degree programmes with overall result satisfying the requirements set by the respective programme.
  - 3.2.3 Applicants must fulfil the Language Proficiency requirement of the specific programme.
- 3.3 Applicants who received their Bachelor/Master's degree from a university where the medium of instruction was not English are required to provide one of the following as proof of English proficiency:
  - Obtained a Level 6 of the College English Test (CET) score of 430 or;
  - Obtained a TOEFL\* score of 550 (paper-based examination)/80 (Internet-based

examination) or;

• An IELTS\* overall score of 6.0 or above with no sub-score lower than 5.5 or;

• Passed the Level 4 or Level 8 of the Test for English Majors (TEM).

Some academic units may have different requirements for proof of English proficiency. Please visit the corresponding academic unit's website for more details.

\*Note: TOEFL and IELTS scores are valid for two years from the test date.

3.4 Please refer to the programme information for individual programme's specific admission requirements.

## 4. APPLICATION PROCEDURES

Online application forms will be available during the application period. Applicants should submit their application via the Online Application System of the University at http://grs.um.edu.mo/.

- 4.1 Read carefully the important notes before you proceed with your application.
- 4.2 You must have an e-mail address to register as a new user in order to submit an application. Applicants who have successfully registered will receive a reference number (e.g. 2XXXXXXX) and password by e-mail. You must keep such information to login to your account throughout the whole application procedure. (If you fail to receive the e-mail within 2 days, please contact us by phone at 8822 4898 or by e-mail at gradschool@um.edu.mo.)
- 4.3 Complete all relevant sections of the Online Application. It is recommended that you supply a local mobile number so that the University may notify applicants of any news by e-mail and SMS.
- 4.4 Scan and upload all required documents to the Online Application System. All submitted documents must be in A4 size, PDF format and the total size for all attached documents should NOT be greater than 6MB.

The documents should include:

- 4.4.1 Identification card copy.
- 4.4.2 Photo (passport size photo in JPG format with 300dpi, with no border and white background; this photo will be used for making the student identification card for all offered applicants.).
- 4.4.3 Certificate(s) and academic transcript(s) for the programme(s) taken and documents supporting information given in the application form.
- 4.4.4 Applicants currently studying in the final year of Bachelor's degree programmes should submit their most updated academic transcript (It must include at least 3 years' results, if the transcript has more than one page, you should scan all pages in ONE FILE and upload it at the appropriate area.), testimonial and documents supporting information given in the application form. (Applicants <u>currently studying</u> in the final year of Bachelor's degree at the University of Macau do not need to submit the Bachelor's degree transcript and testimonial, other documents remain the same with other applicants.)
- 4.4.5 Applicants (in-service teachers) of Postgraduate Certificate in Education Programme (PGCE) must submit one Teacher's I.D. card copy.

#### 4.4.6 Recommendation forms

4.4.6.1 Applying for the Postgraduate Certificate in Education Programme, in-

service teachers must use the paper recommendation form provided by the Faculty of Education (this recommendation form can be downloaded at the Graduate School's website at http://grs.um.edu.mo/). Pre-service teachers must use the paper recommendation form provided by the Graduate School. Only one recommendation form is required, the form should be sealed in an envelope by your referee and forwarded/sent to the Graduate School directly.

- 4.4.6.2 No recommendation form is required from applicants of Introduction to Macao Law programme (LML) and Improvement of Legal Practice and Language programme (LPL).
- 4.4.6.3 Applicants of all the other programmes must use the recommendation forms provided by the Graduate School. Each application must submit two recommendation forms. One of the recommendation forms must be completed by university academics. If applying for admission to programmes taught in English, English recommendation forms should be used.
- 4.4.6.4 Further to 4.4.6.3, paper recommendation and online recommendation forms are both accepted. If you prefer to submit online recommendation forms, you must make sure your referees submit your recommendation forms to us before the application deadline. An automatic notification e-mail will be sent to the applicant once we receive the recommendation forms. If applicants do not receive this e-mail, that means your referee has not submitted the online recommendation form for you yet. You should contact your referee as soon as possible to make sure that it is submitted by the application deadline. If you choose to use paper recommendation forms, the forms should be sealed in an envelope by your referee and forwarded/sent to the Graduate School directly. Please write on the envelope your application number DP-CX-XXXX-X or reference number 2XXXXXXX before sending the recommendation form to us.
- 4.4.7 Proof of English proficiency (please refer to Item 3.3 under Admission Requirements for details.)
- 4.4.8 Applicants who received their Bachelor/Master's degree from a university where the medium of instruction was English are required to provide a proof of English as the medium of instruction, if deemed necessary, issued by the applicants' university where their Bachelor/Master's degree was obtained (UM's current students and graduates are not required to provide such proof).
- 4.4.9 Students applying for admission to programmes taught in English must submit English version of certificate(s)/testimonial(s) and academic transcript(s).
- 4.4.10 Application without the above mentioned documents enclosed will not be processed.
- 4.4.11 Documents submitted to the University will not be returned to the applicant.
- 4.5 Verify all application data before submitting the application. Once the application is submitted, no data can be changed. Each applicant can submit only one application in the same academic year. If necessary, the applicant can indicate in his/her application a maximum choice of two programmes with priority given to each programme. Although the applicant can apply for two programmes, application fee will be charged once only.

- 4.6 Settle the application fee by the deadline of the application period (For more details, please refer to Point 7).
- 4.7 Once the application fee is settled, an acknowledgment e-mail with an application number (DP-CX-XXX-X) will be sent to you by e-mail. Applications without an application number will not be regarded as valid. If you do not receive any acknowledgment e-mail, please contact us by e-mail at gradschool@um.edu.mo.
- 4.8 If the academic documents provided are not in Chinese/English/Portuguese, applicants must submit an English version of certificate(s)/testimonial(s) and academic transcript(s) issued by the respective university/institution. Applicants can also submit translated English copies of the documents. Otherwise, the application will not be considered.
- 4.9 Late applications will be considered only under very special circumstances.
- 4.10 Applicants will be given conditional offer in the following circumstances.
  - 4.10.1 Applicants currently studying in the final year of Bachelor's degree programmes will be conditionally offered and will only be formally admitted upon successful completion of their Bachelor's degree programmes with overall result satisfying the admission requirements.
  - 4.10.2 In special cases, applicants are required to submit proof of English proficiency before formally admitted.

#### 5. SELECTION

Should an interview be required for application to a certain programme, the academic unit concerned will inform candidate for further details of the interview.

#### 6. MASTER ASSISTANTSHIP

Master assistantship is available to Master students of the University which serves as a source of stipend for students. Please refer to the *Guidelines for UM Master Assistantship* for further details.

#### 7. APPLICATION FEE

The application fee for each application is MOP200.00. The application fee is non-refundable. The application fee payments must be made by the deadline of the application period:

- 7.1 by online credit card payment (please follow the payment instructions on the website);
- 7.2 by cheque, bank draft or cashier's order drawn on a bank in Macao and made payable to the "University of Macau". An additional handling charge of MOP50 is required for each foreign bank draft or cashier's order. However, the exact amount of handling fees depends on the amount charged by banks. Our University reserves the right to recover the difference.

(For 7.2, applicants must print the application fee payment slip after they have completed the application at the Online Application System and submit it to the Treasury Section at Room 1012, Administration Building for payment.)

#### **8.TUITION FEES**

8.1 Please refer to the Tuition Fees Scheme of postgraduate Programmes (which is available at GRS webpage: https://grs.um.edu.mo/) for further details.

8.2 Tuition Fees are subject to revision annually.

#### 9. NON-REFUNDABLE DEPOSIT

Applicants are required to pay the non-refundable deposit when they receive their admission offer. The non-refundable deposit is non-refundable and will be used to offset part of the tuition fee payable for that academic year when the applicant has completed the registration.

#### **10. DEFERMENT OF STUDY FOR NEW STUDENTS**

- 10.1 New students can apply for deferment of study for not more than one academic year. Application for such deferment should be made before class commencement. New students must fulfil all the conditions stated in their offer letters and submit the required amount of non-refundable deposit before they become eligible to apply for deferment of study. Such applications will only be permitted for medical reasons and exceptional cases with sound justification. For medical reasons, students are required to submit medical certificates issued by hospitals at the time of application. For exceptional cases with sound justification, students are required to specify the reason and submit written certifications at the time of application.
- 10.2 Students who have deferred their studies and wish to return to the University should apply for resumption of study. Resumption is not granted automatically. Besides, new students are not permitted to transfer to another programme when they apply for resumption of study.
- 10.3 If students neither apply for resumption of study nor submit another deferment application before class commencement of the next semester after they have reached the previously approved deferment period, they will be considered having withdrawn from the University, and they have to apply for re-admission of study later if they wish to return to the University.

#### **11. COURSE EXEMPTION**

Students who have completed equivalent or convertible courses in any tertiary education institutions may apply for course exemption to the academic unit concerned on or before the last day of course add/drop period. Applications should be submitted to the respective academic unit and be accompanied by supporting documents, showing that the students have passed equivalent courses elsewhere.

#### **12. CANCELLATION OF PROGRAMMES**

The University reserves the right not to offer any programmes, or to suspend student intake temporarily, if supervening conditions require.

#### 13. TERMINATION OF APPLICATION OR STUDY

- 13.1 Applicants must guarantee that the information given in the application form is TRUE and the University of Macau reserves the right to terminate an application or study at any time if any information given in his/her application form is found later to be untrue, false or incorrect. Should such a case occur, no fees will be refunded.
- 13.2 Students should not enrol/register in any other higher education programme in Macao in the same academic year, including programme offered by the University of Macau. If students are found to be registered for more than one higher education programme, the University of Macau reserves the right to terminate his/her application or study at any time.

#### **14. PERSONAL IDENTIFICATION**

Applicants must hold valid personal identification documents for admission:

- 14.1 Valid Macao identification card for local students;
- 14.2 Valid Hong Kong identification card for Hong Kong students;
- 14.3 Valid Mainland China identification card for Mainland China students;
- 14.4 Valid passport for non-local students.

For Mainland China identification card or passport holders, please refer to the admission guidelines for Master's Degree Programmes for Mainland China applicants at https://grs.um.edu.mo/.

#### **15. SUBMISSION OF DOCUMENTS**

15.1 For Application:

Applicants must scan and upload all required documents to the Online Application System of the University for application. Otherwise, the application will not be considered. (For details, please refer to Point 4.4.)

15.2 Upon Offer of Admission:

Upon offer of admission, candidates will be requested to provide certified true copies of their academic documents or to present the originals before/during registration, otherwise, the offer of admission will be cancelled and the candidate will not be eligible for registration. All submitted documents will not be returned.

All documents submitted must be in A4 size. Applicants who fail to provide the required documents for verification will be disqualified from admission and subsequent enrolment in the University.

#### **16. ADMISSION FOR STUDENTS WITH DISABILITIES**

With the purpose of providing an equal admission opportunity, necessary study environment and facilities for students with disabilities, the University has devised the "Admission Policy for Students with Disabilities".

Please visit the website at https://grs.um.edu.mo/ for details.

# ADMISSION RULES Bachelor's Degree Programmes (Approved by the Rector on 13 December 2021)

List of Bachelor's programmes to be offered in 2022/2023 (Columns of "Joint Admission Examination subjects" and "UM Admission 1. Examination subject" applicable to admission channel by "Admission Examination" only)

Faculty	Programme code	Programme	Language of instruction	Stream requirement	Joint Admission Examination subjects	UM Admission Examination subject	Remarks
	FAHCLL	Bachelor of Arts - Chinese Language and Literature	Chinese (Cantonese and Mandarin)				
	FAHENS	Bachelor of Arts - English Studies	English				_
Faculty of Arts and Humanities	FAHHST	Bachelor of Arts - History	English but supplemented with Chinese (Cantonese and Mandarin)		<ol> <li>Chinese</li> <li>English</li> <li>Mathematics Standard Paper</li> </ol>		
	FAHJAP	Bachelor of Arts - Japanese Studies	Japanese				No basic knowledge of Japanese is required.
	FAHPTS	Bachelor of Arts - Portuguese Studies	Portuguese				No basic knowledge of Portuguese is required.
	FBAACC	Bachelor of Science - Accounting					
	FBABIA	Bachelor of Science - Business Intelligence and Data Analytics					-
	FBAFNC	Bachelor of Science - Finance					
Faculty of Business Administration	FBAGBS	Bachelor of Business Administration	English		1. Chinese 2. English 3. Mathematics Standard Paper		Students will have the common curriculum for the first two academic years while they can declare one of the following five majors: "Business Economics", "Global Business Management", "Human Resources Management", "Marketing" or "Financial Controllership" during the 2 <sup>ue</sup> academic year. Those who do not declare a major or do not follow a prescribed set of courses for a major will be conferred the degree of Bachelor of Business Administration with no designation of major of study upon graduation.
	FBAIIR	Bachelor of Science - International Integrated Resort Management					Students should declare one of the following two specializations: "Gaming Management" or "Convention and Hospitality Management" during the 2 <sup>nd</sup> academic year.
Faculty of Education	FEDCHN	Bachelor of Education - Education (Chinese)	Chinese (Cantonese and Mandarin)		<ol> <li>Chinese</li> <li>English</li> <li>Mathematics</li> </ol>		An interview is required as admission criteria for eligible Admission Examination
Lucaion	FEDENG	Bachelor of Education - Education (English)	English		<ol> <li>Mathematics Standard Paper</li> </ol>		applicants. Interview will be arranged during 08-09 April 2022.

Faculty	Programme code	Programme	Language of instruction	Stream requirement		loint Admission Examination subjects	UM Admission Examination subject	Remarks							
		Bachelor of Education - Education (Integrated Science)●	Chinese (Cantonese and Mandarin) and English	Science; applicants must have studied Physics, Chemistry and Biology in senior secondary school	1. 2. 3. 4.	Chinese English Mathematics Standard Paper Mathematics Supplementary Paper	5. Physics								
Faculty of	FEDMAS	Bachelor of Education - Education (Mathematics)	English and Chinese (Cantonese and Mandarin)	Applicants must have good basic knowledge of Mathemati cs	1. 2. 3. 4.	Chinese English Mathematics Standard Paper Mathematics Supplementary Paper	5. Physics	An interview is required as admission criteria for eligible Admission Dramination							
Education	FEDPPE	Bachelor of Education - Pre-Primary Education	Chinese (Cantonese and Mandarin) but		2.	Chinese English Mathematics	-	applicants. Interview will be arranged during 08-09 April 2022.							
	FEDPYE	Bachelor of Education - Primary Education	supplemented with English	supplemented		Standard Paper									
	FHSBIF	Bachelor of Science - Bioinformatics		Science; applicants											
Faculty of Health Sciences	FHSBIO	Bachelor of Science - Biomedical Sciences <b>e</b>	English English Bideau in Studied 1. Chemistry 2. and 3. Bideau in Studied 1.	English S	English	English	English	English	English	English	lish studied Chemistry and	3. Mathemat	English Mathematics	-	-
odences	FHSPHA	Bachelor of Science – Pharmaceutical Sciences and Technology <b>€</b>		Standard Paper											
	FLLBLD	Bachelor of Law in Chinese Language (Daytime)	Chinese (Cantonese												
	FLLBLE	Bachelor of Law in Chinese Language (Evening)	and Mandarin)	-	-					1.	Chinese English /		The target students of these		
Faculty of Law	FLLBLL	Bachelor of Law (Conducted in Chinese and Portuguese)	Chinese (Cantonese and Mandarin) and Portuguese												
	FLLWA	Bachelor of Law in Portuguese Language (Evening)	Portuguese		1. 2.	Portuguese A Chinese / English		-							
	FSSCOM	Bachelor of Social Sciences - Communication			1	Chinese		Students should declare one of the following specializations: "Creative Media", "Public Communication" or "Journalism and Mass Communication" during the 1 <sup>st</sup> academic year.							
Faculty of Social Sciences	FSSECN	Bachelor of Social Sciences - Economics	English		1. 2. 3.	English Mathematics Standard Paper	r	-							
	FSSGPA	Bachelor of Social Sciences - Government and Public Administration						Students should declare one of the following two specializations: "Public Administration" or "International and Public Affairs" during the 1 <sup>st</sup> academic year.							

Faculty	Programme code	Programme	Language of instruction	Stream requirement	Joint Admission Examination subjects	UM Admission Examination subject	Remarks					
		Bachelor of Social Sciences - Psychology										
	FSSSOC	Bachelor of Social Sciences - Sociology					-					
Faculty of Science and Technology	FSTAPC	Bachelor of Science - Applied Physics and Chemistry	English	Science; applicants must have studied Physics and Chemistry in senior secondary school	<ol> <li>Chinese</li> <li>English</li> <li>Mathematics Standard Paper</li> <li>Mathematics Supplementary Paper</li> </ol>	5. Physics	-					
	FSTCPS	Bachelor of Science - Computer Science		Science								
	FSTCVE	Bachelor of Science - Civil Engineering		Science;								
	FSTECE	Bachelor of Science - Electrical and Computer Engineering		Seriioi	1. Chinese 2. English 3. Mathematics							
Faculty of Science and Technology	FSTEME	Bachelor of Science - Electromechanical Engineering	English	school	school	school	school	school	school	Standard Paper 4. Mathematics Supplementary	5. Physics	-
	FSTMAA	Bachelor of Science - Mathematics (Mathematics and Applications)		Science	Paper							
	FSTSDS	Bachelor of Science - Mathematics (Statistics and Data Science)										

Remark:

• For Bachelor of Education – Education (Integrated Science), students should declare one of the following three specializations: "Biolgoy", "Chemistry" or "Physics".

The Chinese name of the programme "Bachelor of Science – Biomedical Sciences" is to be revised in 2022/2023 academic year and the revision will come into effect upon publication in Macao SAR Gazette.

• "Bachelor of Science – Pharmaceutical Sciences and Technology" is newly offered in 2022/2023 academic year and will come into operation upon publication in Macao SAR Gazette.

# 2. Application Requirement

- 2.1 Applicants may apply for admission to the bachelor's programme by the following channels, whichever is applicable to them:
  - 2.1.1 Admission Examination

Applicants with any of the following qualifications may apply for bachelor programme by Admission Examination:

- 2.1.1.1 Form 6 graduates or equivalent.
- 2.1.1.2 Candidates currently enrolled in Form 6 or equivalent.
- 2.1.1.3 For applicants aged 23 or above on 1 September 2022.
- 2.1.2 Direct Admission

Applicants obtained with public examination result or qualifications for undergraduate admission may apply by Direct Admission channel. You can refer to Item 4 for details.

## 3. Admission Examination

3.1 Applicants should settle the application fee within the application period. Applications will be regarded as invalid should the applicant fail to pay the application fee by the application deadline. The application fee is non-refundable.

Admission channel	Application period	Application fee
Admission Examination	05 – 19/01/2022	MOP\$250

#### 3.2 Application requirements

Application requirements	Required academic documents
3.2.1 Form 6 graduates or equivalent.	<ul> <li>Copies of certificate(s) and academic transcripts for Form 6 or equivalent in secondary school.</li> </ul>
3.2.2 Candidates currently enrolled in Form 6 or equivalent.	<ul> <li>Copies of academic transcripts for the first semester of Form 6 or equivalent in secondary school.</li> </ul>
	<ul> <li>If the Form 6 transcript is not available during the application period, applicants may submit the Form 5 transcript together with the page stating you are a current Form 6 student extracted from the DSEDJ student card.</li> </ul>
3.2.3 For applicants aged 23 or above on 1 September 2022 with related working experience, the admission requirements stated above may be exempted. However, they must sit for the Admission Examination as required.	

- 3.3 Applicants should take the examination subjects according to the admission requirements of their applied programmes. Admission Examination includes:
  - 3.3.1 Joint Admission Examination for Macao Four Higher Education Institutions (Subjects: Languages and Mathematics) (hereinafter referred to as "JAE") Four higher education institutions of Macao namely the University of Macau, Macao Polytechnic Institute, Macao Institute for Tourism Studies and Macau University of Science and Technology (hereinafter referred to as "the Four Institutions") jointly implement the "Joint Admission Examination for Macao Four Higher Education Institutions (Subjects: Languages and Mathematics)" since 2017. JAE refers to the admission examinations on four subjects, namely Chinese, Portuguese, English and Mathematics jointly organised by the Four Institutions. Any written examination or interview for subjects other than these four subjects shall be arranged and announced by the Four Institutions individually. JAE subjects includes Chinese (JC01), Portuguese Paper A (JP01), Portuguese Paper B (JP02), English (JE01), Mathematics Standard Paper (JM01) and Mathematics Supplementary Paper (JM02).
  - 3.3.2 University of Macau Admission Examination (hereinafter referred to as "UM Admission Examination") Except the JAE subjects, according to the UM programmes' admission

requirement, applicants also need to sit for UM Admission Examination subject in order to meet the admission requirement. UM Admission Examination subject is **Physics (H101)**.

- 3.4 Application for exemption from taking particular Admission Examination subjects
  - 3.4.1 Admission Examination candidates may apply for exemption from taking particular Admission Examination subjects if they meet the below requirement:
    - 3.4.1.1 Chinese (JC01)

Applicants without basic education in Chinese Language and Literature during the last three years of study in secondary education may apply for exemption from the JAE Chinese subject. However, applicants who have applied for the programmes with Chinese as the medium of instruction must sit for the JAE Chinese; otherwise the application will not be processed.

3.4.1.2 English (JE01)

Applicants who have attained any of the following results may apply for exemption from the JAE subject English.

- 3.4.1.2.1 Test of English as a Foreign Language (TOEFL)
  - Internet-based test: a minimum score of 79; or
  - Paper-based test: a minimum score of 550.
- 3.4.1.2.2 International English Language Testing System (IELTS)
  - Band 6.0 or above.
- 3.4.1.3 Mathematics Standard Paper (JM01) and Mathematics Supplementary Paper (JM02)

During the last three years of secondary school study, applicants who have been awarded the "First Class or Second Class Award" in the Individual Category of Inter-School Mathematics Competition organized by the Education and Youth Development Bureau (DSEDJ) may apply for exemption from taking the JAE subject Mathematics Standard Paper and Mathematics Supplementary Paper.

- 3.4.2 Application procedure
  - 3.4.2.1 Applicants must submit below required application documents to the Registry within the period of <u>13/12/2021 07/01/2022</u> (applicants applying to other higher education institutions must abide by the application period and regulations established by the relevant institution(s).):
    - 3.4.2.1.1 Exemption applications should be submitted with a completed application form of "Exemption from Taking Admission Examination Subjects" (REG/Form/050) form. The application form can be downloaded from the Registry's website of "Admission Examination".
    - 3.4.2.1.2 Exemption applications should be submitted with certified true copies of supporting documents (applicants can bring both originals and copies of documents while the copies will be certified by Registry staff on site).

- 3.4.2.2 Applicants have to state their programme choices on their Exemption Application forms. Exemption will be considered based on these choices as well as the documents submitted.
- 3.4.2.3 Exemption applications without supporting documents or late applications will not be processed.
- 3.4.2.4 If the application for exemption of any JAE subject is approved by all the applied institution(s), a remark "Examination Exempted" will be printed for that subject on the candidate's JAE Examination Permit. On the notification of the Admission Examination results, the results for any subject exempted will be represented as "Exempted".
- 3.4.2.5 If the application for exemption of the JAE subject is not approved by all the applied institution(s), the candidate must attend the examination in order to fulfil the admission requirements of the institution(s).
- 3.4.2.6 Candidates who are granted exemption will be pooled together with all the other applicants for admission selection. To be considered eligible for admission, candidates still have to fulfil other admission criteria of the programmes.
- 3.5 Preferential Admission Scheme
  - 3.5.1 The University has introduced the "Preferential Admission Scheme" for the candidates of the Admission Examination who possess documented merits in these fields: academic awards, sports, musicianship, dance, community service or participation in UM Summer Camp. Upon examination and verification by the University, applicants with any of the above talents will be awarded 20 to 50 additional points for all of their Admission Examination results.
  - 3.5.2 Applicants must submit an on-line application together with all required documents within the application period of <u>17/01 11/02/2022</u>.
- 3.6 Admission Policy for Students with Disabilities

When applying for admission to the University, applicants with a disability may choose to disclose their conditions on a voluntary basis and request a special arrangement for admission assessment. For the application procedure of JAE special arrangement, please refer to the appendix "Joint Admission Examination (JAE) for Macao Four Higher Education Institutions (Subjects: Languages and Mathematics)" for detailed information. For application for University of Macau Admission Examination special arrangement, please visit Registry's website of "Admission Policy for Students with disability" for details.

- 3.7 Announcement and Rechecking of Admission Examination results
  - 3.7.1 JAE and UM Admission Examination results will be released via the On-line Application System. Notification on Admission Examination results will be released only within the prescribed period of that current year and the result will not be re-issued.

- 3.7.2 A candidate may apply to recheck his/her Admission Examination results while the request should be made before the prescribed deadline after the release of Admission Examination results.
- 3.7.3 The Chief Examiner of concerned subject will re-check the scores for each section, the total score of the answer sheet and any written scripts completed for the examination.
- 3.7.4 For application procedure of rechecking JAE subjects results, please refer to the appendix "Joint Admission Examination (JAE) for Macao Four Higher Education Institutions (Subjects: Languages and Mathematics)". If candidates request for rechecking UM Admission Examination subject result, please refer to point 3.7.5.
- 3.7.5 Rechecking procedures
  - 3.7.5.1 Candidates should submit an on-line application form for rechecking Admission Examination results to the Registry within the specified period. Late applications will not be processed.
  - 3.7.5.2 MOP\$50 is charged for rechecking the Admission Examination subject.
  - 3.7.5.3 Candidates will be informed by email of their rechecking results within 5 working days after the application deadline.
  - 3.7.5.4 The rechecked results will be served as the final decision. Further request for rechecking will not be accepted.
  - 3.7.5.5 Under no circumstances will the University disclose the examination papers and answers of a candidate.
- 3.8 Offer and Admission process
  - 3.8.1 Selection of qualified Admission Examination candidates will be based on the candidates' priority of choices, Admission Examination results and the admission quotas of each programme. For applicants of Faculty of Education programmes, interview will also be taken into account.
  - 3.8.2 Offer results will be released via the On-line Application System. A notification email and an SMS will be sent to candidates. The admission decision released is the final result of all choices applied, not the result of particular choice(s).
  - 3.8.3 Candidates should follow the admission procedures as stipulated in the Online Application System and the offer letter to confirm acceptance. Offered candidates must settle the non-refundable tuition fee of 1<sup>st</sup> semester listed on the debit note for payment. If candidates fail to confirm acceptance and settle the fees within the prescribed period as printed on the offer letter, the offer of admission will be cancelled. All fees paid are non-refundable.
  - 3.8.4 Offered candidates will be requested to provide certified true copies of documents stated in the "Offer of Admission" for registration. Candidates may choose to submit originals of documents requested, or present the originals and copies for certification by the Registry. Offered candidates who fail to provide the original of the required documents for verification or complete registration within specific period will be disqualified from admission

and subsequent enrolment in the University.

- 3.8.5 All documents submitted will not be returned.
- 3.8.6 Candidates who receive an admission offer cannot change programme of study.
- 3.9 Summer English Programme
  - 3.9.1 Except Bachelor of Arts in Chinese Language and Literature, Bachelor of Education in Chinese and Faculty of Law programmes, offered candidates with the English (JE01) subject score below a specific score must take and pass the Summer English Programme before admission can be confirmed. Classes will be scheduled in July 2022 (exact date will be announced on Registry website).
  - 3.9.2 The programme fee will be announced and settled upon offer of admission. Students who fail to settle the fees within the prescribed period will be disqualified from admission. All fees paid will not be refunded.
- 3.10 University of Macau Lotus Scholarship for Admission Examination
  - 3.10.1 Candidates with outstanding performance in the Admission Examination will be granted the above Scholarship and they do not need to apply therefor. The awardees will first be notified by phone and email. Official letter will be released during the notification of the Admission Examination offer results. Please refer to the Registry's website of "Undergraduate Admissions" for details.
  - 3.10.2 Scholarship selection is based on a candidate's Admission Examination result, not including the bonus marks added through "Preferential Admission Scheme".
  - 3.10.3 Candidates who have been exempted from taking particular Admission Examination subject(s) will not be eligible for selection of University of Macau Lotus Scholarship for Admission Examination.
  - 3.10.4 All eligible candidates must hold a valid Macao I.D. card and will be registered students of the current year. Otherwise, the University reserves the right to disqualify the student's scholarship.

Date	Description		
13/12/2021 ~ 07/01/2022	<ul> <li>Application period for exemption from taking particular Admission Examination subjects (must be submitted by paper application to the Registry)</li> </ul>		
05 ~ 19/01/2022	<ul> <li>Application period for Admission Examination (All applications must be submitted via On-line Application System)</li> </ul>		
17/01 ~ 11/02/2022	<ul> <li>Application period for Preferential Admission Scheme for Admission Examination (All applications must be submitted via On-line Application System)</li> </ul>		
09 ~ 20/03/2022	<ul> <li>Download JAE and UM Admission Examination permit via On-line Application System</li> </ul>		

3.11 Important dates for Admission Examination

Date	Description					
17 ~ 20/03/2022	<ul> <li>JAE and UM Admission Examination</li> </ul>					
08 ~ 09/04/2022	<ul> <li>Interview for eligible applicants (applicable to programme of Faculty of Education only)</li> </ul>					
Early May 2022	<ul> <li>Announcement of JAE and UM Admission Examination results via the On-line Application System</li> <li>Announcement of Admission Examination offer results via On-line Application System</li> <li>Candidates who receive admission offers are required to download "Offer of Admission", debit note for payment and related documents via the On-line Application System</li> <li>Return the signed "Statement of Acceptance" and settle the non-refundable tuition fee for admission confirmation within the specified period</li> </ul>					
Early July 2022	New students are required to download registration information via On-line Application System					
29/06 ~ 19/07/2022	<ul> <li>Summer English Programme</li> </ul>					
14 ~ 26/07/2022	Payment period of Residential college fee and security deposit					
27 ~ 29/07/2022	<ul> <li>New students registration: submit all required documents (originals and copies) and medical examination reports in order to validate the offer</li> </ul>					
10 ~ 11/08/2022 (tentative)	<ul> <li>New students move in Residential Colleges</li> </ul>					
12 ~ 16/08/2022 (tentative)	New Student Orientation					
18/08/2022	Commencement of class for 2022/2023 academic year					

Note: The above schedule is subject to change.

#### 4. Direct Admission

4.1 Applicants must have met the below application requirements and upload all the required documents such as personal identification document and academic documents during the application period; otherwise the application will not be processed.

Admission channel	Application period	Application fee
Direct Admission	24/01 ~ 22/04/2022	MOP\$300

- 4.2 Applicants should settle the application fee within the application period. Applications will be regarded as invalid should the applicant fail to pay the application fee by the application deadline. The application fee is non-refundable.
- 4.3 Applicants with any of the following qualifications may apply to bachelor's programme by. Direct Admission.

	Category	Application requirements	Required academic documents (for potential Form 6 graduates)	Required academic documents ( for Form 6 graduates )
A	General Certificate of Education – Advanced Level (GCE A Level)	<ul> <li>Successfully completed Form 6 or equivalent; or</li> <li>Currently enrolled in Form 6 or equivalent; AND</li> <li>Grade E in 3 Advanced Level subjects (not including English/Chinese subject).</li> <li>For applicants to Faculty of Science and Technology, the above mentioned subjects must include Physics.</li> <li>For applicants to Faculty of Health Sciences, the above</li> </ul>	Academic transcripts for Form 6 or equivalent; and Predicted GCE grade issued by school (final official grade must be submitted to the university via email upon release). Attention: as the class commencement of 2022/2023 will be tentatively scheduled on 18 Aug 2022, applicants who apply with the intended GCE result to be released in Aug 2022 must follow our admission procedure and schedule	,
В	Exames Nacionais do Ensino Secundário (ENES), Portugal	mentioned subjects must include Chemistry. Successfully completed Form 6 or equivalent; or Currently enrolled in Form 6 or equivalent.	so as to ensure smooth course enrolment and class attendance. Academic transcripts for Form 6 or equivalent; and Examination permit of ENES (ENES result must be submitted to the university via email upon release).	<ul> <li>Form 6 completion certifica or equivalent; and</li> <li>Academic transcripts for For 6 or equivalent; and</li> <li>ENES results.</li> </ul>
С	Exame Nacional do Ensino Médio (ENEM), Brazil	<ul> <li>Successfully completed Form 6 or equivalent; or</li> <li>Currently enrolled in Form 6 or equivalent.</li> </ul>	<ul> <li>Academic transcripts for Form 6 or equivalent; and</li> <li>Examination permit of ENEM (ENEM result must be submitted to the university via email upon release).</li> </ul>	<ul> <li>Form 6 completion certification or equivalent; and</li> <li>Academic transcripts for Form 6 or equivalent; and</li> <li>ENEM results.</li> </ul>
D	Hong Kong Diploma of Secondary Education (HKDSE)	<ul> <li>Successfully completed Form 6 or equivalent; or</li> <li>Currently enrolled in Form 6 or equivalent;</li> <li>AND</li> <li>Obtained the following results in HKDSE in one sitting:</li> <li>Level 3 or above in English Language; and</li> <li>Level 3 or above in Chinese Language; and</li> <li>Level 2 or above in Chinese Language; and</li> <li>Level 2 or above in Liberal Studies; and</li> <li>Level 2 or above in Liberal Studies; and</li> <li>Level 3 or above in chinese elective subject</li> <li>For applicants to Faculty of Science and Technology, applicants must have obtained Level 3 or above of Physics.</li> <li>For applicants to Faculty of Health Sciences, applicants must have obtained Level 3 or above in the elective subject of Physics.</li> </ul>	<ul> <li>Academic transcripts for Form 6 or equivalent; and HKDSE examination permit (HKDSE result must be submitted to the university via email upon release).</li> </ul>	<ul> <li>Form 6 completion certifice or equivalent; and</li> <li>Academic transcripts for For 6 or equivalent; and</li> <li>HKDSE results.</li> </ul>
E	International Baccalaureate Diploma (IB)	Successfully completed the International Baccalaureate Diploma Programme Curriculum and awarded the International Baccalaureate Diploma; or Potential graduate of International Baccalaureate Diploma.	Predicted IB grade issued by school. (Final official grade must be submitted to the university via email (with screen-capture of final grade) upon release. Meanwhile, applicant must apply for the official transcript and sent to university).	<ul> <li>IB Diploma; and</li> <li>IB transcripts showing all t courses and grades.</li> </ul>
F	General Scholastic Ability Test (GSAT), Taiwan	<ul> <li>Successfully completed Form 6 or equivalent; or</li> <li>Currently enrolled in Form 6 or equivalent; AND</li> <li>Obtained the following GSAT results in 4 subjects:</li> <li>English subject result at "Good Standard" or above; and</li> <li>Result in the other three subjects at "Average Standard" or above.</li> <li>For applicants to the Faculty of Science and Technology, the Mathematics subject at "Good Standard" or above.</li> </ul>	<ul> <li>Academic transcripts for Form 6 or equivalent; and</li> <li>GSAT result</li> </ul>	<ul> <li>Form 6 completion certifica or equivalent; and</li> <li>Academic transcripts for Fo 6 or equivalent; and</li> <li>GSAT results.</li> </ul>
G	Advanced Subjects Test (AST), Taiwan	<ul> <li>Successfully completed Form 6 or equivalent; or</li> <li>Currently enrolled in Form 6 or equivalent; AND</li> </ul>	<ul> <li>Form 6 completion certificate or ed</li> <li>Academic transcripts for Form 6 o</li> <li>AST results.</li> </ul>	

#### 4.3.1 Public Examinations/Qualifications

	Category	Application requirements	Required academic documents (for potential Form 6 graduates)	Required academic documents ( for Form 6 graduates )
Н	Scholastic Assessment	<ul> <li>Obtained the following AST results:</li> <li>English subject result at "Good Standard" or above; and</li> <li>Four other subjects taken including Chinese and Mathematics at "Average Standard" or above.</li> <li>For applicants to the Faculty of Science and Technology, the Mathematics subject at "Good Standard" or above.</li> <li>Successfully completed Form 6 or equivalent; or</li> </ul>	<ul> <li>Academic transcripts for Form</li> <li>6 or equivalent; and</li> </ul>	<ul> <li>Form 6 completion certificate or equivalent; and</li> </ul>
	Test (SAT)	<ul> <li>equivalent; AND</li> <li>SAT score at 1,190 or above (out of overall total score at 1,600)</li> </ul>	SAT results.	<ul> <li>Academic transcripts for Form 6 or equivalent; and</li> <li>SAT results.</li> </ul>
1	American College Testing (ACT)	<ul> <li>Successfully completed Form 6 or equivalent; or</li> <li>Currently enrolled in Form 6 or equivalent; AND</li> <li>ACT composite score at 24 or above.</li> </ul>	<ul> <li>Academic transcripts for Form 6 or equivalent; and</li> <li>ACT results.</li> </ul>	<ul> <li>Form 6 completion certificate or equivalent; and</li> <li>Academic transcripts for Form 6 or equivalent; and</li> <li>ACT results.</li> </ul>
J	Unified Examination Certificate (UEC) / Sijili Tinggi Persekolahan Malaysia (STPM), Malaysia	<ul> <li>Successfully completed Form 6 or equivalent; AND</li> <li>Passed in Grade C or above in at least 6 subjects in UEC / Passed in Grade C or above in at least 3 subjects, other than language subject in STPM.</li> <li>For applicants to Faculty of Science and Technology, the above mentioned subjects must include Physics.</li> <li>For applicants to Faculty of Health Sciences, the above mentioned subjects must include Chemistry.</li> </ul>	<ul> <li>Certificate for Form 6 or equivalet</li> <li>Academic transcripts for Form 6 or and</li> <li>UEC/STPM results.</li> </ul>	r equivalent in secondary school;
к	Mathayom Suksa 6, including the Ordinary National Education Test (O-NET) Statement of Result, Thailand	<ul> <li>Successfully completed Form 6 or equivalent; or</li> <li>Currently enrolled in Form 6 or equivalent.</li> </ul>	<ul> <li>Certificate for Form 6 or equivalet</li> <li>Academic transcripts for Mathayo</li> </ul>	
L	SMA Ujian Sekolah and SMA Ujian Nasional, Indonesia	<ul> <li>Successfully completed Form 6 or equivalent; or</li> <li>Currently enrolled in Form 6 or equivalent.</li> </ul>	<ul> <li>Academic transcript for SMA Ujian Sekolah (Transcript for SMA Ujian Nasional must be provide to the University via email upon release).</li> </ul>	<ul> <li>Form 6 completion certificate or equivalent; and</li> <li>Academic transcript for SMA Ujian Sekolah; and</li> <li>Academic transcript for SMA Ujian Nasiona.</li> </ul>
М	Canadian Secondary School Qualifications	<ul> <li>Successfully completed Form 6 or equivalent; or</li> <li>Currently enrolled in Form 6 or equivalent; AND</li> <li>Obtained admission to bachelor programme in higher education institutions outside Macao.</li> </ul>	<ul> <li>Academic transcripts for Form 6 or equivalent (Final official grade must be submitted to the university via email upon release); and</li> <li>Official offer letter for bachelor programme of current year issued by a non-local higher education institution (ff conditional offered, must provide supporting for fulfillment of such conditions to the University upon release).</li> </ul>	

Note: If an applicant provides the public examination/qualifications of past years, the University has the right to request for additional information such as study record and transcript of higher education institutions thereafter from the time of examination taken/admission to higher education institutions.

# 4.3.2 Qualifications of admission to bachelor programme/currently enrolled a bachelor programme

	Category	Application requirements	Required academic documents (for potential graduates)	Required academic documents ( for graduates )
A	Bachelor Degree Holder	<ul> <li>Successfully completed a bachelor programme and graduate of a bachelor degree; or</li> <li>Potential graduate of a bachelor degree.</li> </ul>	<ul> <li>Testimonial to show currently working on a bachelor programme.</li> <li>Official transcript of the bachelor programme.</li> </ul>	<ul> <li>Certificate of a bachelor programme; and</li> <li>Official transcript of the bachelor programme.</li> </ul>
В	Associate degree / higher diploma holder	<ul> <li>Successfully completed an associate degree or higher diploma and graduate/ holder of the degree/diploma; or</li> <li>Potential graduate/holder of an associate degree or higher diploma; AND</li> <li>Cumulative GPA must attain 3.0 or above on a 4.0 scale.</li> </ul>	<ul> <li>Testimonial to show currently working on an associate degree/higher diploma.</li> <li>Official transcript of the associate degree/ higher diploma.</li> </ul>	<ul> <li>Certificate of an associate degree/higher diploma; and</li> <li>Official transcript of the associate degree/higher diploma.</li> </ul>
С	Currently enrolled in a bachelor programme in other higher education institution	<ul> <li>Successfully completed Form 6 or equivalent; and</li> <li>Currently enrolled /had registered in a bachelor programme.</li> </ul>	<ul> <li>Certificate for Form 6 or equivale</li> <li>Academic transcripts for Form 6 r</li> <li>Testimonial to show currently en and</li> <li>Official transcript issued by the hi</li> </ul>	or equivalent; and rolled/had registered in a bachelor degree;
D	Possess admission qualification to a bachelor programme	<ul> <li>Successfully completed Form 6 or equivalent; or</li> <li>Currently enrolled in Form 6 or equivalent;</li> <li>AND</li> <li>Qualifications that are acceptable for admission to bachelor's programme in higher education institutions outside Macao.</li> <li>Hold an official offer letter for bachelor programme issued by a recognized higher education nistitution outside Macao. The offer must be of current admission year while all conditions, if any, must be fulfilled; or</li> <li>Hold the public examination result for admission to a bachelor programme. If the result was taken in past years, the University has the right to request for additional information such as study record and transcript of higher education institutions thereafter from the time of examination taken.</li> </ul>	<ul> <li>Academic transcripts for Form 6 or equivalent in secondary school; AND</li> <li>Official offer letter for bachelor programme of current year issued by a non-local higher education institution; or</li> <li>Official public examination result.</li> </ul>	equivalent; AND Academic transcripts for Form 6 or equivalent; and

#### 4.4 English Requirement

- 4.4.1 For applicants applying by Direct Admission, the English requirement stipulated in above-mentioned qualifications can be substituted by other public examination results stated in 4.4.2.
- 4.4.2 Students applying for a programme with English as the main teaching medium have to attend an interview to evaluate the applicant's English proficiency for admission. Applicants who have attained the following results may be exempted from the said interview:

Category	Requirement
Test of English as a Foreign Language (TOEFL)	Paper-based test: a minimum score of 550; or Internet-based test: a minimum score of 79
International English Language Testing System (IELTS)	Band 6.0 or above.

International General Certificate of Secondary Education (IGCSE)	Grade C / 5 or above in English subject.
For Malaysian students	<ul> <li>UEC-Senior English Language Grade B4 or above; or</li> <li>SPM English Language Grade C or above; or</li> <li>STPM English Language Grade C or above; or</li> <li>MUET Band 4 (Aggregated Score: 180-219)</li> </ul>

- 4.5 Offer and Admission process
  - 4.5.1 Assessment of admission will only be made on the academic documents submitted along with the on-line application. Admission selection will be based on the applicant's choices of programmes, admission quotas and interview (when applicable).
  - 4.5.2 Offer results will be released via the On-line Application System. Notification email and SMS will be sent to candidates. The admission result released is the final academic decision of the application, not the result of particular programme(s) applied.
  - 4.5.3 Candidate should follow the admission procedures as stipulated in the On-line Application System and offer letter to confirm acceptance. Offered candidates must settle the non-refundable tuition fee of 1<sup>st</sup> semester listed on the debit note for payment. If candidates fail to confirm acceptance and settle the fees within the prescribed period as printed on the offer letter, the offer of admission will be cancelled. All fees are non-refundable.
  - 4.5.4 Offer candidates will be requested to provide certified true copies of documents stated in the "Offer of Admission" during the registration period. Candidates may choose to submit originals of documents requested, or present the originals and copies for certification by the Registry. Offer candidates who fail to provide the original of the required documents for verification and complete registration within specific period will be disqualified from admission and subsequent enrolment in the University.
  - 4.5.5 All documents submitted will not be returned.
  - 4.5.6 Candidates who receive an admission offer cannot change programme of study.
  - 4.5.7. According to the "Regulations of the Programmes of the University of Macau", students must withdraw from their original universities before transferring to the University of Macau.

#### 4.6 Important Dates

Date	Description
24/01 ~ 22/04/2022	<ul> <li>Application period for Direct Admission (submitted via On- line Application System)</li> </ul>

Mid June 2022	<ul> <li>Candidates who receive admission offers are required to download "Offer of Admission", debit note for payment and related documents via the On-line Application System</li> <li>Return the signed "Statement of Acceptance" for admission confirmation within the specified period</li> </ul>
Early July 2022	<ul> <li>New students are required to download registration information via the On-line Application System</li> </ul>
14 ~ 26/07/2022	<ul> <li>Payment period of Residential College fee and security deposit</li> </ul>
27 ~ 29/07/2022	<ul> <li>New students registration: submit all required documents (originals and copies) and medical examination reports in order to validate the offer</li> </ul>
10 ~ 11/08/2022 (tentative)	<ul> <li>New students move in Residential Colleges</li> </ul>
12 ~ 16/08/2022 (tentative)	<ul> <li>New Student Orientation</li> </ul>
18/08/2022	<ul> <li>Commencement of class for 2022/2023 academic year</li> </ul>
Nata, The above ashedula is subject to show as	

Note: The above schedule is subject to change.

#### 5. Mainland China Students Admission

- 5.1 Mainland China students may apply with two types of qualifications:
  - 5.1.1 College Entrance Examination (Gaokao)

Applicants must take the College Entrance Examination in 2022 for admission to our bachelor's programme while the result needs to attain the admission standard of key universities in China. As for the score of English subject, the minimum requirement is 110 or above (on the base of 150 for English subject whilst score for other scale will be adjusted accordingly).

5.1.2 Non-Gaokao qualification (international curriculum or international public examination result) Applicants must be potential secondary school graduates; currently enrolled in a mainland/ overseas school of international curriculum or have attained any of the public examination results recognized by UM.

Please refer to the Registry website of "Mainland China" for details.

- 5.2 Mainland China students who are currently enrolled in Macao's other higher education institutions may apply by Non-Gaokao qualification. Applicants must meet below requirements:
  - 5.2.1 The candidate must be enrolled in a 4-year bachelor's programme at a local recognized higher education institution; and
  - 5.2.2 The cumulative Grade Point Average (GPA) should be 3.7 or above on a 4.0 scale; and
  - 5.2.3 The applicant's College Entrance Examination score (during his/her admission year to year one of the other local higher education institution) must have achieved at least 10% above the admission standard of key universities in China.

- 5.2.4 English requirement:
  - 5.2.4.1 The English subject result of the College Entrance Examination in the admission year to year one of other local higher education institution must reach 110 or above (based on 150 as the highest mark, the other grading system will be proportionally adjusted); or
  - 5.2.4.2 Test of English as a Foreign Language (TOEFL): Paper-based test: a minimum score of 550; or Internet-based test: a minimum score of 79; or
  - 5.2.4.3 International English Language Testing System (IELTS): Band 6.0 or above.
- 5.3 Required documents
  - 5.3.1 The latest academic transcript showing all courses and grades completed in a bachelor's programme and a testimonial issued by the applicant's current higher education institution; and
  - 5.3.2 The College Entrance Examination result (in the applicant's admission year to year one of the local higher education institution); and
  - 5.3.3 The English result of College Entrance Examination, TOEFL or IELTS.

#### 6. Admission Policy for Students with Disabilities

With the purpose of providing equal education opportunities for students with disabilities, the University has devised the "Admission Policy for Students with Disabilities". When applying for admission to the University, applicants with a disability may choose to disclose their conditions on a voluntary basis and request a special arrangement for admission assessment.

Please visit Student Affairs Office's website of "Disability Support Service" for information on disability support.

#### 7. Personal Identification Documents

7.1 Applicants' identity is subject to the personal identification document held. Applicants must hold below valid personal identification documents during the whole application and admission process:

Identity Category	Personal Identification Document
Macao Student	a valid Macao I.D. card
Hong Kong Student	a valid Hong Kong I.D. card (applicants who apply with a non-permanent Hong Kong I.D. card due to the student visa purpose for entry are not regarded as a Hong Kong student)
Taiwan Student	a valid Taiwan passport
Mainland China Student	a valid Mainland China I.D. card
International Student	a valid foreign passport

- 7.2 Where applicants hold more than one identification document, they can only use one throughout the whole admission process (i.e. application till registration). For instance, if an applicant holds both Macao and Hong Kong identity cards, he/she can only choose to use his/her Macao I.D. card or Hong Kong I.D. card for admission.
- 7.3 Applicants holding a non-permanent Macao I.D. card, a non-permanent Hong Kong I.D. card, or identification from other regions or countries should take responsibility that their identification documents held must comply with the Law of Macao to apply for "Special Authorization to Stay" for study purpose in Macao. For details, please refer to the Immigration Department of Macao Public Security Police Force's website.
- 7.4 University reserves the right to reject admission of students who hold expired or invalid personal identification documents. Students will be responsible for any consequences that might incur should they fail to legally stay and study in Macao due to their personal identification reason.

#### 8. Application Procedures

- 8.1 Create an application account
  - 8.1.1 The University will only accept application via the On-line Application System.
  - 8.1.2 Applicants must have a valid email address and register as a new user before they can submit an application.
  - 8.1.3 Applicants who have successfully registered the new account will receive a login number (e.g. 22xxxxxx) and a password by SMS message and email. For the purpose of observing the privacy of their admission and personal data, it is imperative that the applicants do not disclose their login number and password to anybody else as these will be used to access the On-line Application System for application, the Admission Examination permit, Admission Examination results, offer letter, debit notes for tuition fees and registration information for new students.
  - 8.1.4 If applicants fail to receive the email within 2 days, please contact the Registry.
- 8.2 Change of information
  - 8.2.1 Upon registration as a new user, applicants of Admission Examination can update any information as well as programme choice whether or not the applicant has submitted his/her application or paid the application fee.
  - 8.2.2 No further revision or change of programme choice may be accepted after 23:59 on the date of the application deadline.
  - 8.2.3 No further revision of programme choice or application information/documents can be accepted for Direct Admission applicants after the application fee has been settled.
- 8.3 Application documents
  - 8.3.1 Applicants must scan and upload the following documents to the On-line Application System:
    - 8.3.1.1 Identification document (both sides on one A4 paper in PDF format);

- 8.3.1.2 Photo (only applicable for Direct Admission applicants; passport size photo in JPEG/GIF/PNG format preferably in JPEG file with 300dpi, with no border and white background);
- 8.3.1.3 Required academic documents. Documents to be uploaded in each field can be more than one page. Please scan all pages continuously in black & white colour format and save them in a single PDF file (less than 5MB) before uploading.
- 8.3.1.4 Total size for all uploaded documents should not be greater than 10MB.
- 8.3.2 All application documents must be submitted within the application period. Otherwise, the application will not be processed.
- 8.3.3 The University reserves the right to request the applicant to provide proof and related academic documents for admission. The University also reserves the right to verify the documents submitted.
- 8.3.4 If the academic documents provided are not in Chinese/English/Portuguese, applicants must submit an English version of certificate(s)/testimonial(s) and academic transcript(s) issued by the respective university/institution. Applicants may also submit translated English certified true copies of the documents.
- 8.4 Application number
  - 8.4.1 After the application fee is settled, an acknowledgment email with an application number (format: AP-C2-XXXX-X) will be sent to the applicant by SMS message and email. The on-line application is complete upon receipt of this application number.
  - 8.4.2 If the applicant do not receive any acknowledgment by SMS or email 2 days after fee payment, please contact the Registry.

#### 9. New Student Registration

- 9.1 All new students must complete the registration in person by submitting required academic documents and medical reports to validate qualifications and health condition fit for admission. Students who have not completed registration will not be able to enroll courses or attend class.
- 9.2 Students who cannot complete registration in accordance with assigned schedules may submit a request, supported by proof, to the Registry for late registration. The application result will be notified by email. Students who request for late registration must settle the fees such as Residential College Cost and Security Deposit within the dates specified.
- 9.3 New students must complete registration no later than 2 weeks prior to class commencement. Otherwise, the offer of admission will be cancelled.

#### 10. Fees

Applicants should visit to the website https://reg.um.edu.mo/admissions for details of tuition fee

and residential college cost of 2022/2023.

#### 11. Termination of Application or Study

- 11.1 The University reserves the right to terminate any application, offer, scholarship, registration and study:
  - 11.1.1 that is found to include untrue and/or incorrect information that would affect the qualification requirements stipulated by the University; or
  - 11.1.2 that contains forged academic or related documents; or
  - 11.1.3 where the applicant displays any misconduct or misbehaviour during the admission or examination process.
- 11.2 Should any of the above cases occur, the applicant should take full responsibility for all consequences.
- 11.3 In consideration of adequate utilization of admission quota, if an applicant has accepted our undergraduate admission offer but still accepts another offer by other admission channels, the University reserves the right to terminate his/her admission.
- 11.4 For disqualified applications, all documents submitted and fees paid will not be returned or refunded.
- 11.5 For applicants found to have provided any untrue or incorrect application, the University reserves the right to reject his/her application thereafter.
- 11.6 Students who register for admission cannot concurrently register/enrol in any other higher education programme(s)o, including programme(s) offered by the University of Macau. If students are found to be registered for more than one higher education programme, the University of Macau reserves the right to terminate his/her application or study at any time.

#### 12. Cancellation of Programmes and Fees Refund

- 12.1 The University reserves the right not to offer any programmes, or to suspend student intake temporarily, if supervening conditions require.
- 12.2 In case of programme cancellation, the tuition fees and related fees paid will be refunded.
- 12.3 In the case that a student fails to complete admission procedure, including new student registration or to withdraw study, the tuition fee paid and other fees will not be refunded.
- 12.4 Nevertheless, if an offered student of Admission Examination cannot successfully complete the Form 6 study and fails to meet the University's entrance requirement, the student may apply for refund of tuition fees and related fees in accordance with the university's rules. The student should submit support documents to the Registry for such application.
- 12.5 Application fee is non-refundable in all circumstances.

#### 13. Deferment of Study

- 13.1 Non-registered new students can apply for deferment of study for no more than one academic year. Such applications will only be permitted for medical reasons and students are required to submit latest medical certificates issued by hospitals to prove that he/she is not suitable for admission. Application for deferment should be made before the specified date.
- 13.2 Non-registered new students must fulfil all the conditions stated in their offer letter and settle the non-refundable tuition fee before they can become eligible to apply for deferment of study. The deadline for deferment application will be 2 weeks prior to class commencement.
- 13.3 Non-registered new students are not permitted to transfer to another major/programme when they apply for resumption of study.

#### 14. Credit Transfer and Course Exemption

- 14.1 According to the "Regulations of the Programmes of the University of Macau", credits obtained by completing the courses of degree programmes at other higher education institutions may be transferred through application for course exemption after students have been admitted to University of Macau programmes.
- 14.2 Applications for course exemption must be submitted to the Dean of the faculty or the head of the independent academic unit concerned for approval. Applications must be accompanied by supporting documents to show that equivalent courses have been taken elsewhere.
- 14.3 The limit on the number of credits that can be transferred to a University of Macau programme is one-third of the total credits required to complete the programme of study.

## Appendix

#### Joint Admission Examination (JAE) for Macao Four Higher Education Institutions (Subjects: Languages and Mathematics)

#### 1. Introduction

Four higher education institutions of Macao namely the University of Macau, Macao Polytechnic Institute, Macao Institute for Tourism Studies and Macau University of Science and Technology (hereinafter referred to as "the Four Institutions") jointly implement the "Joint Admission Examination for Macao Four Higher Education Institutions (Subjects: Languages and Mathematics)" (hereinafter referred to as "JAE"). JAE refers to the admission examinations on four subjects, namely Chinese, Portuguese, English and Mathematics jointly organised by the Four Institutions. Any written examination or interview for subjects other than these four subjects shall be arranged and announced by the Four Institutions individually.

The Four Institutions shall admit students according to their own admission criteria. Candidates are advised to check the rules/regulations of relevant institution for the corresponding admission requirements for individual programmes. As JAE is not a unified examination, there is no centralized allocation. Candidates may be admitted by multiple institutions for their higher education choices.

#### 2. JAE Subjects and Timetable

Due to different examination requirements needed for the degree programmes by the Four Institutions, candidates should refer to the relevant institution for the admission requirements of the programme(s) they wish to apply to before the application.

Examination Date	Examination Time	Subject & Code	Scope & Type of Question
17/03/2022 (Thursday)	18:00-20:30 (2.5 hours)	Portuguese Paper A (JP01)	Reading comprehension (35%), Language use (30%), Composition (35%)
18/03/2022 (Friday)	18:00-20:00 (2 hours)	Portuguese Paper B (JP02)	Reading comprehension (40%), Language use (40%), Composition (20%)
19/03/2022 (Saturday)	15:30-17:30 (2 hours)	Chinese (JC01)	Knowledge of language (40%), Reading literacy (20%), Composition (40%)
20/03/2022 (Sunday)	10:00-12:00 (2 hours)	English (JE01)	Language use (40%), Reading comprehension (30%), Composition (30%)
20/03/2022 (Sunday)	15:30-17:30 (2 hours)	Mathematics Standard Paper (JM01)	Multiple choice (60%), Questions (40%)
20/03/2022 (Sunday)	18:00-19:00 (1 hour)	Mathematics Supplementary Paper (JM02)	Questions

## 3. Eligibility of Candidates

JAE candidates must fulfil one of the following criteria:

- 3.1 Completed secondary education (Form 6 graduate) or equivalent, or
- 3.2 Currently attending Form 6 or equivalent, or
- 3.3 Aged 23 or above on 1 September 2022 with special talent but without the above required qualifications.

#### 4. Result Release and Admission Criteria

- 4.1 Candidates can check their examination results from the online application system of the institution they have applied to in early May 2022.
- 4.2 According to the admission requirement and quota of each programme, the Four Institutions will base on JAE results, other necessary admission assessment (if any) and interview (if any) for the selection process.
- 4.3 The admission results of candidates will be individually released by the Four Institutions via their admission webpage.

#### 5. Exemption from Taking Particular Subject of the JAE

- 5.1 Owing to different exemption criteria of each institution, candidates should refer to the applied institution(s) for the respective exemption criteria of each JAE subject.
- 5.2 If candidates wish to apply for exemption of certain JAE subject, they must abide by the application period and regulations established by the relevant institution.

#### 6. Special Examination Arrangements for Students with Disabilities

- 6.1 To provide an equal admission opportunity, students with disabilities can apply for special examination arrangements, e.g. extension of the examination time, arrangement of a separate examination room, using the computers provided for answering the questions, etc. The application of special examination arrangements will be assessed and approved by the Assessment Committee.
- 6.2 Applicants are required to submit the following documents to IFT (Mong-Há Campus) one month prior to the yearly JAE application deadline (i.e. before 31 December in the year preceding the examination):
  - 6.2.1 A completed "Application Form of Special Examination Arrangements for Students with Disabilities" of the JAE;
  - 6.2.2 An assessment report and other relevant diagnosis documents / proof issued by a registered medical practitioner in Macao, such as the "Disability Assessment Registration Card" issued by the Social Welfare Bureau of Macao SAR.
- 6.3 Detailed information on "Special Examination Arrangements for Students with Disabilities for Joint Admission Examination for Macao Four Higher Education Institutions (Subjects: Languages and Mathematics" can be downloaded from the webpages of the Four Institutions.

## 7. 2022 JAE Important Dates

Event	Date
Application Deadline for Special Examination Arrangement of the Students with Disabilities	31 December 2021
2022/2023 Application Period of the Four Institutions	05 – 19 January 2022
Issuance of JAE Examination Permit	09 - 20 March 2022
JAE Examination	17 - 20 March 2022
JAE Result Release	Early May 2022
Application for Rechecking of JAE Results	To be announced upon release of JAE result
Announcement of the Admission Offer by the Four Institutions	From early May 2022

## 8. Enquiries

For enquiries of JAE, please visit Registry website of "Joint Admission Examination For Macao Four Higher Education Institutions (Subjects: Languages and Mathematics)".

# Academic Regulations and Rules

## ACADEMIC REGULATIONS AND RULES

## Regulations of the Programmes of the University of Macau

(Approved by the University Council on 23 April 2019)

#### Article 1 Academic Year

An academic year covers the period from August to July. Each year consists of two semesters, plus an optional intensive summer term.

#### Article 2 Medium of Instruction

The mediums of instruction are English, Chinese and Portuguese, with English as the main medium of instruction.

## Article 3 Programme Operation

- 1. Bachelor's Degree Programmes
  - 1) The normal period of study is four years;
  - 2) The minimum credit requirement for graduation is 120 credits.
- 2. Master's Degree Programmes
  - An applicant of a master's degree programme must possess a bachelor's degree or academic background recognized as equivalent by the University of Macau. An applicant may also be required to possess other knowledge or professional experience.
  - 2) Programme duration:
    - (1) The programme duration is at least 18 months.
    - (2) The minimum period of coursework study is normally 12 months and the maximum period is 24 months.
  - Modes of study:

In accordance with the study plan and relevant regulations, a student must complete the required courses and complete one of the following modes:

- (1) to write an academic thesis and to pass a public oral defence;
- (2) to write a project report

(3) to attend approved professional internship and to submit an intern report.

The period for the completion of the academic thesis, project report or intern report is normally six months.

- 4) An examination committee proposed by the academic unit concerned and approved by the Senate is responsible for the assessment of the thesis and oral defence.
- 3. Doctoral Degree Programmes
  - 1) Doctor of Philosophy (PhD) Programmes
    - An applicant of a PhD programme must possess a master's degree or academic background recognized as equivalent by the University of Macau or a bachelor's degree with outstanding academic results;
    - (2) The programme duration is normally three years;
    - (3) PhD programmes are research-based programmes. A PhD student is required

to write and submit a thesis which makes an original contribution to the knowledge or professional discipline concerned, and to pass a public oral defence;

- (4) The academic unit may require students to complete specific courses as part of the admission requirements;
- (5) An examination committee proposed by the academic unit concerned and approved by the Senate is responsible for the assessment of the thesis and oral defence.
- 2) Other Doctoral Degree Programmes
  - (1) An applicant of other doctoral degree programme must possess a master's degree or academic background recognized as equivalent by the University of Macau or a bachelor's degree with outstanding academic results, as well as, substantial experience at a senior management/business level;
  - (2) The programme duration is normally three years;
  - (3) The programmes involve coursework, a thesis and public oral defence.
- 4. Other Programmes

All academic units of the University of Macau may offer other degree, diploma and certificate programmes. The programme operation must be consistent with the University of Macau rules concerned.

#### Article 4 Students' Application and Registration

- 1. Students must fulfil the admission requirements stated in the rules concerned or pass the related examinations when applying for admission to different programmes of the University.
- 2. All students admitted to the University of Macau will be considered as registered students upon payment of tuition fees and submission of all required documents set by the University of Macau within the specified period. All returning students will be considered as registered students upon payment of tuition fees and other fees set by the University of Macau within the specified period.
- 3. Registration records of undergraduates and postgraduates are managed by the Registry and the Graduate School respectively.

#### Article 5 Student Records

- 1. Student records include status records and academic records.
- 2. Student records of undergraduates and postgraduates are managed by the Registry and the Graduate School respectively.

#### Article 6 Transfer from Other Universities

- 1. Students of other universities transferring to the University of Macau must fulfil the conditions and requirements stated in the Admission Rules before they are admitted to the University of Macau.
- 2. Students must withdraw from their original universities before transferring to the University

of Macau.

#### Article 7 Credit Transfer

- 1. Credits obtained by completing the courses of degree programmes at any tertiary education institutions may be transferred after students have been admitted to programmes of the University of Macau.
- 2. The normal limit on the number of credits that can be transferred to a programme of the University of Macau is one-third of the total credits required to complete the programme of study.

## Article 8 Rules

The University of Macau shall formulate and approve the relevant internal rules in accordance with this Regulations and other applicable legislation.

ACADEMIC REGULATIONS AND RULES

## General Rules Governing PhD and Other Doctoral Degree Programmes

(Approved by the Rector on 17 November 2020)

#### A. ADMISSION

- 1. Admission is governed by the University Admission Rules (GRS.09-4/201602/050). Applicants must satisfy the University admission requirements, and any additional requirements imposed by the academic unit they intend to enter.
- 2. Students should not enrol/register in any other universities upon registration at UM.
- 3. A student of the University is required to observe the General Rules, and those rules and procedures which govern admission requirements, examinations, fees and charges.

#### B. GENERAL

- The University offers full-time programmes of study leading to the degrees of Doctor of Philosophy (PhD) and other doctoral degree including Doctor of Business Administration, Doctor of Education, Doctor of Public Administration or such other degrees approved by the University authority.
- PhD programmes are research-based programmes. Other doctoral degree programmes are professional programmes requiring students with substantial experience at a senior management or business level.
- 3. Students will be awarded a PhD or other doctoral degree provided that they have:
  - a. completed the coursework as stated in the curriculum of the degree;
  - b. passed the prescribed assessments stated in Section O;
  - c. fulfilled other coursework requirements set by the academic unit;
  - d. written a thesis and passed the oral defence;
  - e. paid the prescribed fees;
  - f. fulfilled the requirements of the regulations and rules of the University.
- 4. Each individual academic unit may issue special rules applying to specific PhD and other doctoral degree programmes, within the general framework of the present General Rules. However, any standard for qualification requirements, performance of candidates and/or else, as provided for in the present General Rules, may not be set to a lower or less strict level by the special rules issued for any programme by the relevant academic unit.
- 5. Students must register in a programme of study on the specified dates in any one academic year, with compulsory attendance at classes.
- 6. The maximum period of studies will be 150% of the normative period of the programme. For working students, it will be two times the normative period of studies. Less than 1 academic year will be counted towards 1 academic year. Students who cannot complete the programme within the periods above will be required to discontinue their studies.

#### C. ACADEMIC YEAR

An academic year covers the period from August to July. Each year consists of two semesters. Each semester consists of approximately seventeen weeks of scheduled classes, including examinations.

## D. REGISTRATION

- 1. New students will be considered registered students upon completion and submission of all registration materials to the Graduate School with tuition fees settled, while returning students will be considered registered students upon settlement of tuition fees.
- 2. A student must register in the name which appears in his/her personal identification documents.
- 3. Student Cards
  - a. All students will be issued with student cards (UM Campus Card).
  - b. The student card is a student's personal identification document. It is not transferable.
  - c. In case of loss or damage of a student card, a student should apply for a replacement by submitting an application form to the Graduate School. A card replacement fee will be charged to the student.
  - d. Students may refer to the "Rules & Guidelines Governing the Use of UM Campus Card" for further details.
- 4. Late Registration
  - a. Students may apply for late registration if they cannot complete the process within the scheduled period. Application form for late registration should be submitted to the Graduate School at least three working days before the scheduled registration period.
  - b. Late registration fees will be charged to students who do not apply for late registration three working days before the scheduled registration period. Students who have applied for late registration but failed to complete the process within the approved period will also be charged a late registration fee.
  - c. Late registration can be considered once only.
  - d. Apart from medical reason, registration can only be delayed for at most five calendar days after commencement of classes. If late registration is anticipated for medical reasons, a medical certificate should be attached to the student's application for late registration. Applications for registration later than the above period will not be accepted except for medical reasons and other extraordinary circumstances. In such case, late registration application requires the approval from the Dean/Director of the academic unit concerned.
  - e. In any case, students must also make sure that they will still be able to enrol in either course work or thesis in the semester that they register. Otherwise, they will not be considered as an active student and will have to defer their studies.
  - f. The admission offer for students who fail to complete the required registration procedures by the designated deadline will be invalidated.
  - g. Students will not be entitled to register if the non-refundable deposit has not been settled.
- 5. Students with insufficient academic background may be considered and will be given provisional status. Students admitted under provisional status have to complete the additional courses required when they were admitted. Students passing their provisional status should be endorsed by the Dean/Director of the academic unit concerned and approved by the Dean of Graduate School, before becoming eligible for the qualifying examination for PhD students or thesis proposal assessment for students in other doctoral degree programmes.

## E. CREDIT AND COURSE LOAD

A credit unit is equal to one lecture hour per week for one semester. One session (2 to 3 hours) per week of laboratory or practice work for one semester can also be counted as one credit unit.

## F. COURSE RETAKE

Students may apply for retaking a course. The student should obtain the consent of the Dean/Director of the academic unit concerned by securing required signatures. All applications must be approved and the courses to be retaken must be enrolled before the deadline of the add/drop period. The fees for retaking any courses are calculated based on the number of credits of the retake course. For non-credit bearing course, the retake fees shall be one credit.

If a student retakes a course, only the course grade for the latest attempt will appear on the student's transcript.

#### G. COURSEWORK AND COURSE ENROLMENT

- 1. All students should complete the required coursework. All courses should be completed before the oral defence. A student who does not pass a compulsory course in a second attempt may be required to discontinue his or her studies.
- Except under special circumstances as approved by the Dean/Director of the academic unit concerned, students are advised to follow the study plan specified by the programme in which they have enrolled. It should be noted that no substitutions are allowed under any circumstances for compulsory courses.
- 3. The courses offered by any academic unit are normally open to students enrolled in that unit and to students enrolled in other academic units either as electives permitted by, or as requirements set by, those academic units.
- 4. A student shall not be allowed to take courses with conflicting time schedules.
- 5. Students will not be entitled for enrolment or course add/drop if there is any outstanding tuition fee.
- 6. On-line Enrolment

During the enrolment period, students of specified programmes of studies will enrol course on-line. Students who are not able to enrol on-line during the specified period may complete the process manually.

- 7. Course Add/Drop
  - a. Students may make changes to their enrolment records during the course add/drop period. Requests for adding or dropping courses other than the add/drop period due to late registration should be approved by the Dean/Director of the academic unit concerned.
  - b. Adding a new course depends on the availability of section quota.
  - c. A student who drops a course without going through the prescribed procedure will be given a failing grade, "F" or "NP" for that course.
- 8. Withdrawal from Individual Courses
  - Students may withdraw from an individual course after the course add/drop period on condition that he/she still has at least one course (including doctoral thesis) enrolled after the course is withdrawn. When students wish to withdraw from a course after the add/drop period, they should complete and submit an application form to the Graduate School at least 5 working days before the final examination. A "W" grade will be given to the withdrawn course and the tuition fee for the withdrawn course will not be refunded. Any application submitted after the aforementioned deadline will not be considered.
- Students should always look carefully at their enrolment records. If they are not sure if their enrolment records are correct, they may seek advice from the academic unit concerned. Students are responsible for following up any updates, errors or omissions.

#### 10. Study Plan

A study plan is a guide to what students have to accomplish in order to complete their programme of studies. Students are advised to consult their study plans during selection of courses for enrolment. They should keep their study plans and any subsequent adjustments for future reference during course enrolment and for graduation purposes.

#### 11. Course Designations

- a. Courses specified in the postgraduate programmes are designated as Compulsory Major course, Required Elective or Free Elective.
- b. Compulsory Major courses must be taken in the semester indicated. A student who fails a Compulsory Major course is required to retake that course.
- c. Required Electives are courses chosen by the student but within a group of courses designed for this purpose by the programme. Required Electives may be taken at other times. A student who fails a Required Elective will be required to either retake the same course or take another course within the same group.
- d. Free Electives are selected by the student in areas inside or outside the major as designated in the curriculum, subject to the academic unit's approval. A student who fails a Free Elective will not be required to retake the course. Such students may take another course to fulfill graduation requirements. Within individual programmes, some courses may not be considered Free Electives.

#### H. COURSE EXEMPTION

 Students who have completed equivalent or convertible courses in any tertiary education institutions may apply for course exemption to the academic unit concerned on or before the last day of course add/drop period. In the case of course exemption, credits will be granted to replace the original UM course. Exempted courses will be assigned a grade "X" and will be shown in the transcript of academic record, but will not be counted towards the GPA.

Applications should be submitted to the respective academic unit and be accompanied by supporting documents, e.g. course outlines, official course descriptions, lecture hours, study plans, course grades etc., showing that the students have passed equivalent courses elsewhere.

- 2. Students may apply for course exemption for any courses.
- Course exemptions are considered valid only after they are endorsed by the head of department or programme coordinator of the course offering units and approved by the Dean/Director of the academic unit concerned.
- 4. The upper limit on the number of credits that can be transferred to a programme is onethird of the total credits required.

#### I. COURSE WAIVER

1. Students who have not completed equivalent courses in other tertiary education institutions but have attained the knowledge and skills of specific UM courses may apply for a course waiver to the academic unit concerned before the last day of course add/drop period. In the case of course waiver, no credits will be granted, and students will be required to take a related course approved by the head of department or programme coordinator to fulfill the credit requirement. Waived courses will be assigned a grade "CW" and will be shown in the transcript of academic record, but will not be counted towards the GPA.

Applications must be submitted to the respective academic unit and be accompanied by

an explanation for the waiver request and supporting documents (if any). Proof of the acquired competence is required.

- 2. Students may apply for course waiver for any courses.
- 3. Course waivers are considered valid only after they are endorsed by the head of department or programme coordinator and approved by the Dean/Director of the academic unit concerned.
- 4. All exceptional cases are subject to the endorsement from the Dean/Director of the academic unit concerned and the approval from the Vice Rector (Academic Affairs) via the Graduate School.

#### J. ATTENDANCE REQUIREMENTS

- 1. According to item 2 of article 27 of the Higher Education Law (Law no. 10/2017), all the course instructors are required to take class attendance.
- 2. A student who cannot attend classes can apply for leave of absence to the course instructor. Permission for the leave of absence cannot be more than 50% of its scheduled teaching periods in the aggregate.
- 3. A student who is absent without applying for leave of absence from a course for more than 20% of its scheduled teaching periods in the aggregate will not be allowed to take the final examination and will receive a failing grade for that course.

Letter Grades	Grade Points	Percentage
A	4.0	93-100
A-	3.7	88-92
B+	3.3	83-87
В	3.0	78-82
В-	2.7	73-77
C+	2.3	68-72
C	2.0	63-67
C-	1.7	58-62
D+	1.3	53-57
D	1.0	50-52
F	0	Below 50

#### K. GRADING SYSTEM

1. The below grading system is applicable to all academic units except the Faculty of Law:

Letter grades are official grades. Grades other than F are passing grades.

2. For the Faculty of Law, 20-point scales are official grades. Scales at 10 or above are passing grades.

#### 3. Other Grades

Grades	Definition	Remark
CW	Course Waiver	Assigned to a course that has been waived.
DX	Deferred Result	A temporary grade assigned to the students who ask for a supplementary examination

Grades	Definition	Remark
		with justifiable reasons.
I	Incomplete	Used when work is necessarily delayed through no fault of the student, such as a medical problem.
NP	Fail	Given to a course where the results are not
Р	Pass	counted towards the GPA.
т	Audit	Assigned when an auditing student has completed, to the satisfaction of the instructor, the conditions established at registration as an auditing student.
w	Withdrawal	Assigned when a student has withdrawn from a course. The result will not be counted towards the GPA.
Х	Course Exempted	Assigned in the case of a course exemption.

## L. PERIOD OF STUDY

The normative study period of all PhD programmes is 4 years while the normative study period of other doctoral degree programmes is 3 years.

## M. RESIDENCE REQUIREMENT

Except students admitted in the joint programmes, the normal residence period of a student is 3 years while the minimum residence period is 12 months. The residence requirement is part of the graduation requirement. Exceptional case is subject to the endorsement from the Dean/Director of the academic unit concerned and the approval from the Vice Rector (Academic Affairs) via the Graduate School.

#### N. RESEARCH SUPERVISION

- The Faculty/Institute Graduate Studies Committee will administer the appointments of supervisor(s), temporary supervisor, mentor and Advisory Committee of a student in PhD or other doctoral degree programmes.
  - a. The supervisor has the primary responsibility for directing and advising a student throughout his/her study period, especially during the preparation of the thesis.
    - i. Supervisor(s) of a PhD student should be appointed at the admission of a student.
    - Mentor of a student in other doctoral degree programmes should be appointed before the student can identify the supervisor. Once the supervisor is appointed, the mentor is not required.
    - Supervisor or mentor must evaluate the progress report of the student required by the Rules on the Progress Report of the Postgraduates of the University of Macau.
  - b. The temporary supervisor has the primary responsibility for directing and advising a student during his/her supervision period.
    - i. The temporary supervisor of a PhD student should be appointed at the admission of a student if the student cannot identify the supervisor or the supervisor can no longer serve. The admission of PhD students with temporary supervisor should be considered as exceptional cases only. The temporary supervisor of a student in other doctoral degree programmes should be appointed if the supervisor can no longer serve.
    - ii. The temporary supervisor must evaluate the progress report of the student as

required by the Rules on the Progress Report of the Postgraduates of the University of Macau.

- iii. The temporary supervisor can only supervise the student for at most one year. If the student cannot identify the supervisor within one year after his/her initial registration, he/she will be discontinued from the programme.
- c. The Advisory Committee of PhD or other doctoral degree programmes is intended to provide additional academic advice to the student during the coursework period, for the qualifying examination, and for the preparation of the thesis proposal.
  - i. Each newly admitted student will be assigned an Advisory Committee to provide guidance after his/her initial registration.
  - ii. Student should take additional course(s) advised by the supervisor.
  - iii. The Committee will also provide advice about the qualifying examination and the thesis proposal, the acceptability of the proposed thesis topic, the appropriateness of the proposed methodology, and the adequacy of the literature search. Upon approval of the student's thesis proposal, the Committee will advise the candidate about the preparation of the thesis and assist the supervisor, in monitoring the candidate's progress.
  - iv. The membership of the Advisory Committee should include the thesis supervisor(s) plus at least two members. The member(s), appointed by the Faculty/Institute Graduate Studies Committee, should represent academic disciplines relevant to the thesis topic. When appropriate, the member(s) may be selected from more than one faculty/institute. In addition, the member(s) may be appointed from outside UM if necessary.
- 2. The appointments of the supervisor(s), mentor and Advisory Committee of a student in PhD or other doctoral degree programmes are officially approved by the Faculty/Institute Graduate Studies Committee.
- 3. Changes of the supervisor(s), mentor and/or the membership of the Advisory Committee of a student in PhD or other doctoral degree programmes can be made upon the approval from the Faculty/Institute Graduate Studies Committee.

#### O. ASSESSMENTS

- 1. Each PhD student must pass three assessments during his/her study. The three assessments include a qualifying examination, a thesis proposal assessment and a final thesis oral defence examination.
- 2. Each student in other doctoral degree programmes must pass a thesis proposal assessment and a final thesis oral defence examination during his/her study.
- 3. The qualifying examination and thesis proposal assessment are administrated by the Faculty/Institute Graduate Studies Committee.

#### P. QUALIFYING EXAMINATION

- 1. The qualifying examination will assess the ability and background of the student for the enrolled PhD programme.
- 2. Each faculty/institute will define the form and operation procedures of the qualifying examination according to its own needs.
- A PhD student must pass the qualifying examination within 2 years after his/her initial registration. Academic units should inform the Graduate School on the following day a student passes the qualifying examination. Unless special approval of an extension of this

period from Vice Rector (Academic Affairs) is granted, a student failing to pass the qualifying examination will be discontinued from the enrolled PhD programme. An application related to extension beyond the stipulated period to pass the qualifying examination is subject to the consideration of Faculty/Institute Graduate Studies Committee, the endorsement from the Dean/Director of the academic unit concerned and the approval from the Vice Rector (Academic Affairs).

4. A PhD student who fails the qualifying examination on the first attempt may take the examination again. If the student fails the examination a second time, his/her study will be discontinued from the relevant PhD programme.

#### Q. THESIS PROPOSAL ASSESSMENT

- 1. The thesis proposal assessment will examine the quality of the planned research, ensuring that it meets UM standards.
- 2. The thesis proposal assessment may be carried out simultaneously with the qualifying examination or afterwards.
- 3. The thesis proposal assessment will include submission of a written proposal from the student and its presentation to an assessment panel. The assessment panel will include a chairperson appointed by the Faculty/Institute Graduate Studies Committee (this chairperson should not be a member of the Advisory Committee), along with the Advisory Committee members. A student who fails the thesis proposal assessment the first time may take the assessment again. If the student fails the assessment a second time, his/her study will be discontinued from the enrolled programme.
- 4. A PhD student who passes the thesis proposal assessment will be considered as a PhD candidate at the University of Macau.
- 5. The Faculty/Institute Graduate Studies Committee will administer the thesis proposal assessment. For PhD student, academic unit will submit the passed and fully revised thesis proposal together with the names of the student, supervisor(s) and the assessment panel to the Graduate School for official approval of PhD candidacy. For student in other doctoral degree programmes, academic unit should inform the Graduate School once a student passes the thesis proposal assessment.
- 6. A PhD student must achieve PhD candidacy within 3 years after his/her initial registration at the University of Macau by passing the qualifying examination and thesis proposal assessment. A student in other doctoral degree programmes must pass the thesis proposal assessment within 2.5 years after his/her initial registration at the University of Macau. The maximum period for achieving the PhD candidacy or passing the thesis proposal assessment will not be extended in general. A student who cannot achieve PhD candidacy or pass the thesis proposal assessment as governed by the above term will be discontinued from the enrolled programme.
- 7. A student who would like to extend his/her study period to achieve PhD candidacy or pass the thesis proposal assessment should submit the application form with the justified reason(s) endorsed by the supervisor before the end of the study period to the academic unit concerned. The application is subject to the consideration of Faculty/Institute Graduate Studies Committee, the endorsement from the Dean/Director of the academic unit concerned and the approval from the Vice Rector (Academic Affairs).

## R. THESIS FORMAT, SUBMISSION AND PUBLICATION

1. Candidates are advised to study thoroughly and follow strictly the Guidelines Governing

the Format of Theses of PhD and Other Doctoral Degree Programmes when writing their thesis. Candidates may refer to the Graduate School's homepage (https://grs.um.edu.mo/) for details of the said Guidelines.

- 2. Before a candidate submits a thesis for examination, he/she shall pass one copy of the thesis to the supervisor(s) for assessment. If the supervisor(s) confirm(s) that the thesis is ready for submission, a "thesis submission" form should be completed as endorsement.
- 3. A candidate shall submit five copies of his/her thesis, together with the "thesis submission" form, to the academic unit concerned. The thesis shall conform in layout, binding and presentation as required by the academic unit concerned.
- 4. The examination committee shall declare in writing to accept/reject the thesis.
- 5. If a thesis is rejected by the examination committee, the candidate shall re-submit the thesis following the above mentioned thesis submission procedures within the period as decided by the examination committee. The re-submission deadline shall not exceed the maximum period of study. A candidate shall only re-submit the thesis once only.
- A candidate must submit properly bound copies of the final version of the thesis approved by the examination committee upon successful completion of the oral defence examination. The exact number of copies of thesis and the submission deadline will be specified by the academic unit concerned.
- 7. To ensure a uniform appearance of the theses of the PhD and other doctoral degree programmes, the bound Library copy must be first sent to the Graduate School for checking before it will be finally housed in the Library.
- 8. A candidate must also submit a soft copy of the said thesis to the academic unit concerned for onward transmission to the University Library, in ways and format as determined by the University Library.
- 9. All theses will be published with the ProQuest UMI Dissertation Publishing. Exceptions would be allowed for special cases with sound justification and proper approval. The University Library will process the thesis publication procedures with the UMI.

#### S. FORMATION OF ORAL DEFENCE EXAMINATION COMMITTEE

- 1. After the candidate has submitted the thesis to the academic unit concerned, the Academic Council of the academic unit shall decide whether to submit a proposal for the examination committee to the Rector for approval.
- 2. The candidate shall normally be informed of the official composition of the examination committee after the official appointment.
- The examination committee shall be chaired by the Rector, or his/her delegated Vice Rector, Full Professors, Distinguished Professors or Chair Professors who have been the supervisor of at least three PhD students who have successfully graduated.
- 4. The examination committee shall be composed of the supervisor and at least three examiners, one of whom must be from other academic institution.
- 5. The examination committee shall be composed of at least three members who have completed a graduate degree at doctoral level in the relevant discipline.
- 6. The oral defence examination should take place in accordance with the Procedures for

Formation of the Oral Defence Examination Committees of PhD and Other Doctoral Degree Programmes.

- 7. Within 60 days after the announcement of the composition of the examination committee, the examination committee shall declare in writing to accept the thesis or recommend its revision to the candidate with supporting reasons.
- 8. In the case of thesis revision, the candidate shall revise the thesis or declare to maintain it unchanged as presented within 120 days. The period cannot be extended.
- 9. If the candidate does not submit the revised thesis nor declare waiving the revision within the said period, he/she shall be considered to have given up the oral defence examination. The examination committee is dismissed.

## T. ORAL DEFENCE EXAMINATION

- 1. The oral defence examination shall be held normally within 60 days after:
  - a. The day on which the thesis is officially accepted by the examination committee for oral defence examination.
  - b. The day on which the thesis revision or the declaration waiving the revisions is submitted.
- 2. The academic unit concerned shall give the candidate at least one week's notice of the date of oral defence examination.
- 3. The oral defence examination is an open examination. The candidate shall present the thesis and defend it in front of an examination committee.
- 4. Prior to the oral defence examination, the examination committee shall decide the speaking order and method of its members.
- 5. After the thesis presentation and the question and answer session, the examination committee shall discuss and evaluate the candidate's performance. By open ballot voting, the committee shall decide to go into the final resolution deliberation session.
- 6. Final Resolution Deliberation Session:
  - a. A resolution must be decided by majority vote and open ballot voting with supporting statements. No committee voting member can abstain from voting.
  - b. The final resolution of the oral defence examination shall be delivered as pass (P), conditional pass (CP) or fail (NP).
    - i. Pass with no revision: The candidate has to submit the final copy to academic unit within one week.
    - ii. Pass with minor revisions: Revised version to be assessed by supervisor(s) only / all Examination Committee Members. The candidate should complete the thesis revision as requested by the Examination Committee and submit the revised thesis with the Thesis Revision Form to the academic unit within 3 months from the date of the oral defence examination. The above stated period can be extended with dean's recommendation and Vice Rector (Academic Affairs)'s approval.
    - iii. Conditional pass, subject to major revisions: The candidate has to take the oral defence examination again within a year.
    - iv. Fail: The candidate has to be discontinued from the PhD or other doctoral degree programme.
- 7. The academic unit concerned shall submit the graduation proposal to the Graduate School for graduation check within one month after the final thesis is submitted to the academic

unit.

 The oral defence examination and the resolution-deliberation discussions must be put on record. A proposal for the award of degrees shall be submitted to the Senate for approval. The minutes of the oral defence examination shall record the voting results and comments on the oral defence.

#### U. APPEAL AGAINST RESULTS

No appeal against the final academic decision of an examination committee is permitted.

#### V. TUITION FEE

All students shall pay the tuition fees according to the tuition fee scheme of the admitted/resuming academic year and settle their tuition fees before the deadline set by the University.

#### W. GRADUATION

Graduation and Issue of Graduation Certificates

Upon successful completion of studies, thesis writing and oral defence and with the approval from the Senate, academic awards are conferred on students at a congregation.

Students eligible for academic awards for that particular year will be notified in writing of the details regarding the congregation, the collection of academic dress, and the award certificate.

The graduation certificate will be issued once only, as there will be no second printing. Students are therefore strongly advised to ensure the safe-keeping of this important document.

The University reserves the right to withhold conferment of an award on a student who has outstanding fees owed to the University, or who has otherwise failed to discharge all obligations towards the University.

#### X. DISCONTINUATION OF STUDIES

- 1. A student shall be required to discontinue studies under the following circumstances:
  - a. A student who has failed a compulsory course more than once.
  - b. A student who has failed a second qualifying examination.
  - c. A student who has failed a second thesis proposal assessment.
  - d. A student (under the temporary supervisor's supervision) who cannot identify the supervisor within 1 year.
  - e. A PhD student who cannot pass the qualifying examination within 2 years or achieve PhD candidacy within 3 years.
  - f. For other doctoral degree programmes, a student who cannot pass the thesis proposal assessment within 2.5 years.
  - g. A student who cannot complete his/her study within the maximum period of studies.
  - h. A student who has failed the oral defence examination.
  - i. A student who is graded "Unsatisfactory" twice in the progress report.
- 2. Students whose studies have been discontinued due to unsatisfactory academic performance or who have exceeded their maximum study period cannot register as a student of the University within the subsequent year (two semesters).

Discontinued students returning after one year (two semesters)

For students who have been discontinued from their studies due to unsatisfactory

academic performance, they should apply for re-admission and such application must be approved by the Vice Rector (Academic Affairs) with the recommendation from the Dean/Director of the academic unit concerned.

For students who have been discontinued from their studies by exceeding the maximum study duration, they should apply for regular admission as new students following all the procedures and rules for new students.

#### Y. TRANSFER OF PROGRAMME

- Students cannot change programme/major. However, any special request is approved by the Dean/Director of the academic unit concerned of the programme/major transferred to.
- 2. A student who cannot manage to accomplish the PhD or other doctoral degree programmes can transfer to Master's degree programme. The application must be recommended by the principal supervisor, endorsed by the Faculty/Institute Graduate Studies Committee and approved by the Graduate School. The Master's degree will be awarded provided that he/she has successfully completed all the graduation requirements of the relevant Master's degree programme.

#### Z. DEFERMENT OF STUDY

- 1. Application for deferment of study from a withdrawn or inactive student will not be considered. For definitions of withdrawn and inactive students, please refer to item AA and AC respectively.
- 2. Students who wish to postpone their studies should apply for deferment of study by submitting an application form to the Graduate School and securing the required signatures from the Dean/Director of the academic unit concerned before leaving the University. The University does not guarantee such students that the degree programme/courses will remain constant after they return to the University.
- 3. Withdrawal grades will be recorded for each course at the time the student receives permission to defer. The grades are either "W", meaning that the student defers the study before the examination period, or "F", meaning that the student does not take the examinations but defers during or after the examination period. However, if a student defers the study after completing all the courses and examinations of a semester, all academic credits/grades are given for the courses taken in that semester.
- 4. Students can apply for deferment of study for not more than 2 semesters at one time. If students wish to prolong their deferment period, they should submit another application before class commencement of the next semester after they have reached the previously approved deferment period. The total approved period of deferment of study cannot accumulate to more than 6 semesters. Any exceptional cases are subject to the endorsement from the Dean/Director of the academic unit concerned and the approval from the Vice Rector (Academic Affairs) via the Graduate School.
- 5. New students can apply for deferment of study for not more than one academic year. Application for such deferment should be made before class commencement. New students must fulfill all the conditions stated in their offer letters and submit the required amount of non-refundable deposit before they become eligible to apply for deferment of study. Such applications will only be permitted for medical reasons and exceptional cases with sound justification. For medical reasons, students are required to submit medical certificates issued by hospitals at the time of application. For exceptional cases with sound justification, students are required to specify the reason and submit written certification at the time of application.

- 6. Students who have deferred their studies and wish to return to the University should apply for resumption of study. Resumption is not granted automatically (See the item AD Resumption/Re-admission of Study for details). Besides, new students are not permitted to transfer to another research area when they apply for resumption of study.
- 7. If students neither resume nor defer the studies before class commencement of the next semester after they have reached the previously approved deferment period, they will be considered having withdrawn from the University, and they have to apply for re-admission of study later if they wish to return to the University (See the item AD Resumption/Re-admission of Study for details).

#### AA. WITHDRAWAL FROM THE UNIVERSITY

- 1. Students who wish to terminate their studies at the University prior to graduation should apply for withdrawal of study by submitting an application form to the Graduate School.
- 2. Withdrawal grades will be recorded for each course at the time the student receives permission to withdraw. The grades are either "W", meaning that the student withdraws from the University before the examination period, or "F", meaning that the student does not take the examinations but withdraws during or after the examination period. However, if a student withdraws from the University after completing all the courses and examinations of a semester, all academic credits/grades are given for the courses taken in that semester.
- 3. Students who withdraw from the University and later wish to return must apply for readmission of study. Re-admission of study is not granted automatically and is with lower priority than resumption of study during application consideration subject to quota availability (See the item AD - Resumption/Re-admission of Study for details).

#### AB. CHECK-OUT

- All withdrawn, suspended or discontinued students and those applying for deferment of study are required to complete and submit the check-out forms to the Graduate School before leaving the University. Students are required to clear all outstanding matters with the department concerned.
- All graduates are not required to come in person to the University to complete the checkout procedures. However, students who have any outstanding records must clear their records with the department concerned. Otherwise, certificates of graduation and other official documents will not be issued.
- 3. A student may authorise another person to process the check-out procedures by filling in Graduate School's official authorisation letter. I.D. copies of both parties must be submitted.
- 4. Students who withdraw voluntarily from the University sever their connection with the University.
- 5. If students leave the University in the course of study without going through the check-out procedures, no official document (such as testimonial, transcript or graduation certificate) will be issued.

#### AC. INACTIVE STUDENTS

1. Students admitted or resuming in academic year 2013/2014 or before who do not settle their tuition fees (including continuation fee) ten calendar days after the commencement

of classes in any semester will be considered inactive students.

- 2. Students admitted or resuming in academic year 2014/2015 onwards who do not enrol in any courses or do not settle their tuition fees ten calendar days after the payment deadline in any semester will be considered inactive students.
- 3. Students admitted in academic year 2016/2017 onwards who do not maintain at least 3 credits of enrolment per semester prior to the stage of extended thesis supervision will be considered inactive students.
- 4. Inactive students will be prohibited from attending classes, using any services or facilities of the University, and applying for any official documents. For students who become inactive from academic year 2015/2016 onwards, the maximum inactive duration is two semesters cumulatively. If inactive students wish to return to the University within the inactive duration, they must make up the check-out procedures and apply for re-admission of study. An administration fee will be charged for the late check-out procedures, and a re-admission fee based on the number of inactive semesters will be charged upon approval of re-admission. Please refer to "Fees and Other Charges" for the relevant fees. Re-admission of study is not granted automatically and is with lower priority than resumption of study during application consideration subject to quota availability. Also, inactive students are with lower priority than withdrawn students for re-admission (See the item AD Resumption/Re-admission of Study for details).

#### AD. RESUMPTION/RE-ADMISSION OF STUDY

- 1. Students who have deferred their studies and wish to return to the University should apply for resumption of study, while withdrawn, discontinued or inactive students should apply for re-admission of study.
- 2. Students returning to the University either through resumption or re-admission can continue their study with all the previous academic records. However, the procedures for resumption and re-admission are different from each other and re-admission is with lower priority than resumption of study during application consideration subject to quota availability. Also, discontinued and inactive students are with lower priority than withdrawn students for re-admission.
- 3. It should be noted that the total duration for deferment of study, withdrawal of study, and inactive period should not exceed six semesters altogether, and the inactive period should not exceed two semesters independently. No resumption or re-admission of study will be considered if students cannot fulfill this duration requirement. Any exceptional cases are subject to the endorsement from the Dean/Director of the academic unit concerned and the approval from the Vice Rector (Academic Affairs) via the Graduate School.

Students who cannot return to the University through resumption or re-admission have to apply for regular admission if they wish to study at the University afterwards and all the previous academic records will be expired.

4. Procedures for Resumption of Study

When students apply for resumption of study, they should submit written applications to the Graduate School before class commencement of a certain semester for the approval from the Dean/Director of the academic unit concerned. Any applications submitted on/after the first day of classes will be directly rejected by the Graduate School. The applicants must meet all the admission requirements prevailing at the time of resumption and successful applications will be effective in the specific semester required by the students.

In addition, all resuming students who have deferred their studies due to health issues are required to submit a Medical Examination Report to the Graduate School during the resumption process. This report is to prove that the student has recovered from the health issues and is capable of pursuing his/her studies at the University. If a student has already had a medical check-up within three months prior to resumption, he/she may submit a certified true copy of that medical report.

5. Procedures for Re-admission of Study

When withdrawn and inactive students apply for re-admission of study, they should submit written requests to the Graduate School for the approval from the Dean/Director of the academic unit concerned. For inactive students, they must make up the check-out procedures before applying for re-admission; however, they are not required to obtain approval from the Dean/Director of the academic unit concerned for the check-out. Also, an administration fee will be charged for the late check-out procedures, and a re-admission fee based on the number of inactive semesters will be charged upon approval of re-admission (Please refer to "Fees and Other Charges" for the relevant fees).

When discontinued students apply for re-admission of study, they should submit written requests to the Graduate School for the approval from the Vice Rector (Academic Affairs) with the recommendation from the Dean/Director of the academic unit concerned. All re-admission applications should be submitted to the Graduate School before class commencement of a certain semester and any applications submitted on/after the first day of classes will be directly rejected by the Graduate School. The applicants must meet all the admission requirements prevailing at the time of re-admission and successful applications will be effective in the following semester.

6. All resuming and re-admitted students should pay their tuition fees according to the tuition schemes of the resuming/re-admitted year and are required to check the study plan with the general office of the academic unit concerned.

## AE. CHANGE OF PERSONAL INFORMATION

- 1. Students should inform the Graduate School immediately of any change of personal particulars entered in the students' registration records.
- For changes of address (such as home address, postal address and email address) and contact numbers, requests may be sent through email. All current students can also directly change their addresses and contact numbers through the myUM (https://myum.um.edu.mo).
- 3. For changes of other personal particulars not mentioned above, students must submit an application form to the Graduate School in person with personal identification documents presented. Such application will not be accepted after graduation or withdrawal from the University.

## AF. CERTIFICATION

- 1. Academic Transcripts and Testimonials
  - a. An academic transcript is a certification of a student's record of academic performance at the University and it shows the student's grades obtained in a programme up to the latest final examination taken. Students can apply for transcripts after the academic reports have been released. A testimonial is a certification of the student's present registration status with regard to his/her studies at the University.
  - b. Students can apply for academic transcript or testimonial by submitting an application from to the Graduate School. The charge per copy may be found in "Fees and Other

Charges". If students submit their applications by post in Macao, a cheque or cashier's order for the amount due should be enclosed. For overseas applicants, payment must be paid by either cashier's order or bank draft; an additional handling fee will be charged. Please refer to "Fees and Other Charges" for further details.

- c. To avoid delay, please remember that requests for transcripts by other parties must bear the student's authorisation before the Graduate School can process the requests. During examination and assessment periods, the issuing of transcripts may be suspended or delayed.
- d. The University reserves the right to withhold an academic transcript or a testimonial from a student who has outstanding fees owing to the University, or who has otherwise failed to discharge all obligations towards to the University.
- 2. Certified True Copy of Academic Documents Students may apply for certified true copies of academic documents issued by the University, such as graduation certificates and academic transcripts, by submitting an application form to the Graduate School. Please refer to "Fees and Other Charges" for the relevant charges. However, the Graduate School will provide a free service to students who apply for admission to the programmes offered by the University.

## AG. ACADEMIC HONESTY

Students should uphold the principle of academic integrity and pursue their studies with passion and honesty. They should avoid committing any act of academic dishonesty, including but not limited to cheating, fabrication, collusion and plagiarism. Plagiarism is a serious academic offence and the University shall penalize the student who is proved to have incorporated others' works as his/her own work according to the <u>"Student Disciplinary Regulations of the University of Macau" (SAO.03/201406/100)</u>. Regarding the types and handling procedures of academic dishonesty, please refer to the <u>"Rules on Handling Student Academic Dishonesty" (AAO-REG.04/201112/068)</u>.

#### Annex

#### FEES AND CHARGES

For details about fees and charges, please refer to the "Fees and Charges" section of the UM Academic Calendar or the homepage of the Treasury Section of the Finance Office (<u>https://fo.um.edu.mo/</u>).

#### IMPORTANT ANNOUNCEMENTS

Notices such as important announcements, examination schedules or university activities will be posted on notice boards. There are also electronic bulletin boards, which display messages campus-wide and can be easily accessed through the campus computer network. In addition, the University sends important notices to students through SMS (short message service) or emails (university's accounts only). Students should check the campus notice-boards, electronic bulletin boards and university's email accounts to learn about University news and events.

ACADEMIC REGULATIONS AND RULES

## General Rules Governing Master's Degree & Postgraduate Certificate/Diploma Programmes

(Approved by the Rector on 17 November 2020)

Items marked with an asterisk \* are applicable to master's degree programmes only.

## A. ADMISSION

- 1. Admission is governed by the <u>University Admission Rules (GRS.09-4/201602/000)</u>. Applicants must satisfy the University admission requirements, and any additional requirements imposed by the academic unit they intend to enter.
- 2. Students are normally admitted as "first-year students".
- 3. Students should not enrol/register in any other universities upon registration at UM.
- 4. A student of the University is required to observe the General Rules, and those rules and procedures which govern admission requirements, examinations, fees and charges.

#### B. GENERAL

- The University offers full-time programmes of study leading to the degrees of Master of Arts (MA), Master of Business Administration (MBA), Executive Master of Business Administration (EMBA), Master of Education (MEd), Master of Law (LLM), Master of Science (MSc), Master of Engineering (MEng), Master of Social Sciences (MSocSc), Master in Public Administration (MPA), Master of Philosophy (MPhil) or such other degrees approved by the University authority.
- 2. Students will be awarded a master's degree provided that they have:
  - a. completed the coursework as stated in the curriculum of the degree;
  - b. passed the required courses and one of the following options:
    - (1) to write a thesis and to pass a public oral defence;
    - (2) to write a project report;
    - (3) to attend approved professional internship and to submit a report;
  - c. paid the prescribed fees;
  - d. fulfilled the requirements of the regulations and rules of the University.
- 3. Each individual academic unit may issue special rules applying to specific master's degree and/or postgraduate certificate/diploma programmes, within the general framework of present General Rules. However, any standard for qualification requirements, performance of candidates and/or else, as provided for in present General Rules, may not be set to a lower or less strict level by the special rules issued for any programme by the relevant academic unit.
- 4. Students must register in a programme of study on the specified dates in any one academic year, with compulsory attendance at classes.
- 5. The maximum period of studies will be 150% of the normative period of the programme. For working students, it will be two times the normative period of studies. Less than 1 academic year will be counted towards 1 academic year. Students who cannot complete the programme within the periods above will be required to discontinue their studies.
- 6. Auditing students may study courses at any level subject to acceptance by the appropriate academic authority. An auditing student can attend a course and participate in activities up

to and including writing the final examination, but will receive a "T" grade. These courses may not lead to a degree but may be submitted to the academic unit concerned for consideration if the student wishes to convert to a degree-awarding programme.

## C. ACADEMIC YEAR

An academic year covers the period from August to July. Each year consists of two semesters. Each semester consists of approximately seventeen weeks of scheduled classes, including examinations.

## D. REGISTRATION

- 1. New students will be considered registered students upon completion and submission of all registration materials to the Graduate School with tuition fees settled, while returning students will be considered registered students upon settlement of tuition fees.
- 2. A student must register in the name which appears in his/her personal identification documents.
- 3. Student Cards
  - a. All students will be issued with student cards (UM Campus Card).
  - b. The student card is a student's personal identification document. It is not transferable.
  - c. In case of loss or damage of a student card, a student should apply for a replacement by submitting an application form to the Graduate School. A card replacement fee will be charged to the student.
  - d. Students may refer to the "Rules & Guidelines Governing the Use of UM Campus Card" for further details.
- 4. Late Registration
  - a. Students may apply for late registration if they cannot complete the process within the scheduled period. Application form for late registration should be submitted to the Graduate School at least three working days before the scheduled registration period.
  - b. Late registration fees will be charged to students who do not apply for late registration three working days before the scheduled registration period. Students who have applied for late registration but failed to complete the process within the approved period will also be charged a late registration fee.
  - c. Late registration can be considered once only.
  - d. Apart from medical reason, registration can only be delayed for at most five calendar days after commencement of classes. If late registration is anticipated for medical reasons, a medical certificate should be attached to the student's application for late registration. Applications for registration later than the above period will not be accepted except for medical reasons and other extraordinary circumstances. In such case, late registration application requires the approval from the Dean/Director of the academic unit concerned.
  - e. In any case, students must also make sure that they will still be able to enrol in either course work or thesis in the semester that they register. Otherwise, they will not be considered as an active student and will have to defer their studies.
  - f. The admission offer for students who fail to complete the required registration procedures by the designated deadline will be invalidated.
  - g. Students will not be entitled to register if the non-refundable deposit has not been settled.

#### E. CREDIT AND COURSE LOAD

The minimum number of credits for Master's degree programmes is 30. A credit unit is equal to one lecture hour per week for one semester. One session (2 to 3 hours) per week of laboratory

or practice work for one semester can also be counted as one credit unit.

#### F. COURSE RETAKE

Students may apply for retaking a course. The student should obtain the consent of the Dean/Director of the academic unit concerned by securing required signatures. All applications must be approved and the courses to be retaken must be enrolled before the deadline of the add/drop period. The fees for retaking any courses are calculated based on the number of credits of the retake course. For non-credit bearing course, the retake fees shall be one credit.

If a student retakes a course, only the course grade for the latest attempt will appear on the student's transcript and will be included in the calculation of the GPA.

#### G. COURSE ENROLMENT

- 1. Except under special circumstances as approved by the Dean/Director of the academic unit concerned, students are advised to follow the study plan specified by the programme in which they have enrolled. It should be noted that no substitutions are allowed under any circumstances for compulsory courses.
- 2. The courses offered by any academic unit are normally open to students enrolled in that unit and to students enrolled in other academic units either as electives permitted by, or as requirements set by, those academic units.
- 3. A student shall not be allowed to take courses with conflicting time schedules.
- 4. Students will not be entitled for enrolment or course add/drop if there is any outstanding tuition fee.
- 5. On-line Enrolment

During the enrolment period, students of specified programmes of studies will enrol course on-line. Students who are not able to enrol on-line during the specified period may complete the process manually.

- 6. Course Add/Drop
  - a. Students may make changes to their enrolment records during the course add/drop period. Requests for adding or dropping courses other than the add/drop period due to late registration should be approved by the Dean/Director of the academic unit concerned.
  - b. Adding a new course depends on the availability of section quota.
  - c. A student who drops a course without going through the prescribed procedure will be given a failing grade, "F" or "NP" for that course.
- 7. Withdrawal from Individual Courses
  - Students may withdraw from an individual course after the course add/drop period on condition that he/she still has at least one course (including thesis) enrolled after the course is withdrawn. When students wish to withdraw from a course after the add/drop period, they should complete and submit an application form to the Graduate School at least 5 working days before the final examination. A "W" grade will be given to the withdrawn course and the tuition fee for the withdrawn course will not be refunded. Any application submitted after the aforementioned deadline will not be considered.
- 8. Students should always look carefully at their enrolment records. If they are not sure if their enrolment records are correct, they may seek advice from the academic unit concerned. Students are responsible for following up any updates, errors or omissions.

#### 9. Study Plan

A study plan is a guide to what students have to accomplish in order to complete their programme of studies. Students are advised to consult their study plans during selection of courses for enrolment. They should keep their study plans and any subsequent adjustments for future reference during course enrolment and for graduation purposes.

#### 10. Course Designations

- a. Courses specified in the postgraduate programmes are designated as Compulsory Major course, Required Elective or Free Elective.
- b. Compulsory Major courses must be taken in the semester indicated. A student who fails a Compulsory Major course is required to retake that course.
- c. Required Electives are courses chosen by the student but within a group of courses designed for this purpose by the programme. Required Electives may be taken at other times. A student who fails a Required Elective will be required to either retake the same course or take another course within the same group.
- d. Free Electives are selected by the student in areas inside or outside the major as designated in the curriculum, subject to the academic unit's approval. A student who fails a Free Elective will not be required to retake the course. Such students may take another course to fulfill graduation requirements. Within individual programmes, some courses may not be considered Free Electives.

#### \*H. THESIS REGISTRATION

A student who chooses the thesis option must submit a thesis proposal endorsed by his/her thesis supervisor with the approval of the Dean/Director of the academic unit concerned. The supervisor or mentor must evaluate the progress report of the student required by the Rules on the Progress Report of the Postgraduates of the University of Macau.

#### I. TUITION FEE

All students shall pay the tuition fees according to the tuition fee scheme of the admitted/resuming academic year and settle their tuition fees before the deadline set by the University.

#### J. COURSE EXEMPTION

 Students who have completed equivalent or convertible courses in any tertiary education institutions may apply for course exemption to the academic unit concerned on or before the last day of course add/drop period. In the case of course exemption, credits will be granted to replace the original UM course. Exempted courses will be assigned a grade "X" and will be shown in the transcript of academic record, but will not be counted towards the GPA.

Applications should be submitted to the respective academic unit and be accompanied by supporting documents, e.g. course outlines, official course descriptions, lecture hours, study plans, course grades etc., showing that the students have passed equivalent courses elsewhere.

- 2. Students may apply for course exemption for any courses.
- 3. Course exemptions are considered valid only after they are endorsed by the head of department or programme coordinator of the course offering units and approved by the Dean/Director of the academic unit concerned.
- 4. The upper limit on the number of credits that can be transferred to a programme is onethird of the total credits required.

## K. COURSE WAIVER

1. Students who have not completed equivalent courses in other tertiary education institutions but have attained the knowledge and skills of specific UM courses may apply for a course waiver to the academic unit concerned before the last day of course add/drop period. In the case of course waiver, no credits will be granted, and students will be required to take a related course approved by the head of department or programme coordinator to fulfill the credit requirement. Waived courses will be assigned a grade "CW" and will be shown in the transcript of academic record, but will not be counted towards the GPA.

Applications must be submitted to the respective academic unit and be accompanied by an explanation for the waiver request and supporting documents (if any). Proof of the acquired competence is required.

- 2. Students may apply for course waiver for any courses.
- 3. Course waivers are considered valid only after they are endorsed by the head of department or programme coordinator and approved by the Dean/Director of the academic unit concerned.
- 4. All exceptional cases are subject to the endorsement from the Dean/Director of the academic unit concerned and the approval from the Vice Rector (Academic Affairs) via the Graduate School.

#### L. ATTENDANCE REQUIREMENTS

- 1. According to item 2 of article 27 of the Higher Education Law (Law no. 10/2017), all the course instructors are required to take class attendance.
- 2. A student who cannot attend classes can apply for leave of absence to the course instructor. Permission for the leave of absence cannot be more than 50% of its scheduled teaching periods in the aggregate.
- 3. A student who is absent without applying for leave of absence from a course for more than 20% of its scheduled teaching periods in the aggregate will not be allowed to take the final examination and will receive a failing grade for that course.

#### M. EXAMINATION AND ASSESSMENT

#### 1. Coursework

- a. A student will take course examinations, where each course will be examined or otherwise assessed at the end of the semester in which it is offered.
- b. For medical or other compelling reasons, a student who is unable to sit for any course examination must apply in writing with a certificate signed by a registered medical practitioner at the earliest possible moment (but not later than seven calendar days after the examination concerned) to the academic unit for leave of absence.
- c. A student who is absent from any examination without permission will be given a failing grade for that examination.
- d. In some courses, assessment may be made otherwise than by examination when the programme of study so specifies.
- e. A student will be examined or assessed for every course he/she has registered for on the basis of his/her performance in that course. Criteria for examination or assessment may include one or any combination of the following: attendance, class-work, written assignments, laboratory work, field work, research papers, tests or examinations.

\* 2. Thesis Writing

All courses should be completed before the oral defence. A student shall be examined by examiners at an oral defence on the subject of the thesis and/or approved course of study and research.

## **\*N. EXAMINATION COMMITTEE**

For student who chooses the project report / internship and report option:

- 1. The examination committee shall be composed of:
  - a. The supervisor;
  - b. One academic staff.
- 2. The approval of the formation of the examination committee for project report / internship and report shall be obtained from the Dean/Director of the academic unit concerned or his/her delegate.

For student who chooses the thesis option:

- 1. After the candidate has submitted the thesis to the academic unit concerned, the Academic Council of the academic unit shall decide whether to submit a proposal for the examination committee to the Rector for approval.
- 2. The candidate shall be informed of the official composition of the examination committee.
- 3. The examination committee shall be composed of:
  - a. Two suitably qualified members of academic staff from the specific area of the master's degree programme;
  - b. The thesis supervisor.
- 4. Within 30 days after notifying the candidate of the composition of the examination committee, the examination committee shall declare in writing to accept the thesis or recommend its revision to the candidate with supporting reasons.
- 5. In the case of thesis revision, the candidate shall revise the thesis or declare to maintain it unchanged as presented within 90 days.
- 6. If the candidate does not submit the revised thesis nor declare waiving the revision within the said period, he/she shall be considered to have given up the oral defence examination. The examination committee is dismissed.
- 7. A candidate must submit properly bound copies of the final version of the thesis approved by the examination committee upon successful completion of the oral defence examination. The exact number of copies of thesis and the submission deadline will be specified by the academic unit concerned. In addition, a candidate must also submit a soft copy of the said thesis to the academic unit concerned for onward transmission to the University Library, in ways and format as determined by the University Library.

#### \*O. ORAL DEFENCE EXAMINATION

- 1. The oral defence examination shall take place within 60 days after:
  - a. The day on which the thesis is officially accepted; or
  - b. The day on which the thesis revision or the declaration waiving the revision is submitted.
- 2. The oral defence examination shall be held with the presence of at least three members of the examination committee, one of whom must be the thesis supervisor.

- 3. The oral defence examination shall not exceed 90 minutes, during which the examination committee members can join in discussion.
- 4. When the oral defence examination is completed, the examination committee members shall meet to assess the examination and set out a deliberation on the candidate's final classification by open ballot, with supporting reasons. No abstention is permitted.
- 5. A resolution must be decided by majority vote. The chairperson of the examination committee has the deciding vote when there is a tie.
- 6. The final resolution shall be delivered in the form of pass "P" or fail "NP".
- 7. The proposal for the award of degrees shall be submitted to the Senate for approval. The minutes of the oral defence examination shall be submitted together with the proposal and shall record the voting results and comments on the oral defence.

#### P. GRADING SYSTEM

1. The below grading system is applicable to all academic units except the Faculty of Law:

Letter Grades	Grade Points	Percentage
A	4.0	93-100
A-	3.7	88-92
B+	3.3	83-87
В	3.0	78-82
B-	2.7	73-77
C+	2.3	68-72
С	2.0	63-67
C-	1.7	58-62
D+	1.3	53-57
D	1.0	50-52
F	0	Below 50

Letter grades are official grades. Grade points are used for the purpose of calculating the GPA. Grades other than F are passing grades.

- 2. For the Faculty of Law, 20-point scales are official grades. Scales at 10 or above are passing grades.
- 3. Other Grades

Grades	Definition	Remark	
CW	Course Waiver	Assigned to a course that has been waived.	
DX	Deferred Result	A temporary grade assigned to the students who ask for a supplementary examination with justifiable reasons.	
I	Incomplete	Used when work is necessarily delayed through no fault of the student, such as a medical problem.	
NP	Fail	Given to a course where the results are not counted	
Р	Pass	towards the GPA.	

Grades	Definition	Remark
т	Audit	Assigned when an auditing student has completed, to the satisfaction of the instructor, the conditions established at registration as an auditing student.
w	Withdrawal	Assigned when a student has withdrawn from a course. The result will not be counted towards the GPA.
х	Course Exempted	Assigned in the case of a course exemption.

## Q. GRADE POINT AVERAGE (GPA)

- 1. Semester GPA This is a figure ranging from 0 to 4.0 (A=4.0) used to indicate the average performance of a student in the semester concerned.
  - a. Semester GPA: <u>Total weighted points of all courses taken in the semester concerned</u> Total number of credits enrolled in the semester concerned
  - b. Weighted points: Grade points x the number of credits of the course concerned
- 2. Cumulative GPA This is a figure ranging from 0 to 4.0 (A=4.0) used to indicate the overall performance of a student in all the semesters of the specified years of studies.

Cumulative GPA: <u>Total weighted points for all courses taken</u> Total number of credits enrolled in all semesters

#### R. GRADUATION HONOURS

- 1. For Master's degree programmes, honours upon graduation are awarded as follows:
  - Excellent
    - Very Good
    - Good
- 2. For postgraduate certificate/diploma programmes, a graduation certificate will be awarded upon graduation, with no classification of honours.
- 3. Graduation and Issue of Graduation Certificates

\*A student must complete all the required course work and obtain a minimum overall result of Grade B- (GPA 2.7) or 14 in 20-point scale for FLL and fulfill any other requirements as specified by the academic unit concerned as the graduation requirement.

Upon successful fulfillment of all graduation requirements and with the approval from the University's Senate, academic awards are conferred on students at a congregation.

Students eligible for academic awards for that particular year will be notified in writing of the details regarding the congregation, the collection of academic dress, and the award certificate.

The graduation certificate will be issued once only, as there will be no second printing. Students are therefore strongly advised to ensure the safe-keeping of this important document.

The University reserves the right to withhold conferment of an award on a student who

has outstanding fees owed to the University, or who has otherwise failed to discharge all obligations towards the University.

#### S. DISCONTINUATION OF STUDIES

- 1. A student shall be required to discontinue studies under the following circumstances:
  - a. A student who has failed a Compulsory Major course more than once.
  - b. A student who has enrolled in more than 1 course and has failed two-thirds of the credit units for courses taken in one semester.
  - c. A student who cannot complete his/her study within the maximum period of studies.
- 2. Students whose studies have been discontinued due to unsatisfactory academic performance or who have exceeded their maximum study period cannot register as a student of the University within the subsequent year (two semesters).

#### Discontinued students returning after one year (two semesters)

For students who have been discontinued from their studies due to unsatisfactory academic performance, they should apply for re-admission and such application must be approved by the Vice Rector (Academic Affairs) with the recommendation from the Dean/Director of the academic unit concerned.

For students who have been discontinued from their studies by exceeding the maximum study duration, they should apply for regular admission as new students following all the procedures and rules for new students.

#### T. CHANGE OF MAJORS

Students cannot change programme/major. However, any special request is approved by the Dean/Director of the academic unit concerned of the programme/major transferred to.

#### U. DEFERMENT OF STUDY

- 1. Application for deferment of study from a withdrawn or inactive student will not be considered. For definitions of withdrawn and inactive students, please refer to item V and X respectively.
- 2. Students who wish to postpone their studies should apply for deferment of study by submitting an application form to the Graduate School and securing the required signatures from the Dean/Director of the academic unit concerned before leaving the University. The University does not guarantee such students that the degree programme/courses will remain constant after they return to the University.
- 3. Withdrawal grades will be recorded for each course at the time the student receives permission to defer. The grades are either "W", meaning that the student defers the study before the examination period, or "F", meaning that the student does not take the examinations but defers during or after the examination period. However, if a student defers the study after completing all the courses and examinations of a semester, all academic credits/grades are given for the courses taken in that semester.
- 4. Students can apply for deferment of study for not more than 2 semesters at one time. If students wish to prolong their deferment period, they should submit another application before class commencement of the next semester after they have reached the previously approved deferment period. The total approved period of deferment of study cannot accumulate to more than 6 semesters. Any exceptional cases are subject to the endorsement from the Dean/Director of the academic unit concerned and the approval from the Vice Rector (Academic Affairs) via the Graduate School.

- 5. New students can apply for deferment of study for not more than one academic year. Application for such deferment should be made before class commencement. New students must fulfill all the conditions stated in their offer letters and submit the required amount of non-refundable deposit before they become eligible to apply for deferment of study. Such applications will only be permitted for medical reasons and exceptional cases with sound justification. For medical reasons, students are required to submit medical certificates issued by hospitals at the time of application. For exceptional cases with sound justification, students are required to specify the reason and submit written certification at the time of application.
- 6. Students who have deferred their studies and wish to return to the University should apply for resumption of study. Resumption is not granted automatically (See the item Y Resumption/Re-admission of Study for details). Besides, new students are not permitted to transfer to another programme when they apply for resumption of study.
- 7. If students neither resume nor defer the studies before class commencement of the next semester after they have reached the previously approved deferment period, they will be considered having withdrawn from the University, and they have to apply for re-admission of study later if they wish to return to the University (See the item Y Resumption/Re-admission of Study for details).

#### V. WITHDRAWAL FROM THE UNIVERSITY

- 1. Students who wish to terminate their studies at the University prior to graduation should apply for withdrawal of study by submitting an application form to the Graduate School.
- 2. Withdrawal grades will be recorded for each course at the time the student receives permission to withdraw. The grades are either "W", meaning that the student withdraws from the University before the examination period, or "F", meaning that the student does not take the examinations but withdraws during or after the examination period. However, if a student withdraws from the University after completing all the courses and examinations of a semester, all academic credits/grades are given for the courses taken in that semester.
- 3. Students who withdraw from the University and later wish to return must apply for readmission of study. Re-admission of study is not granted automatically and is with lower priority than resumption of study during application consideration subject to quota availability (See the item Y - Resumption/Re-admission of Study for details).

## W. CHECK-OUT

- 1. All withdrawn, suspended or discontinued students and those applying for deferment of study are required to complete and submit the check-out forms to the Graduate School before leaving the University. Students are required to clear all outstanding matters with the department concerned.
- All graduates are not required to come in person to the University to complete the checkout procedures. However, students who have any outstanding records must clear their records with the department concerned. Otherwise, certificates of graduation and other official documents will not be issued.
- 3. A student may authorise another person to process the check-out procedures by filling in Graduate School's official authorisation letter. I.D. copies of both parties must be submitted.
- 4. Students who withdraw voluntarily from the University sever their connection with the University.

5. If students leave the University in the course of study without going through the check-out procedures, no official document (such as testimonial, transcript or graduation certificate) will be issued.

## X. INACTIVE STUDENTS

- 1. Students admitted or resuming in academic year 2013/2014 or before who do not settle their tuition fees (including continuation fee) ten calendar days after the commencement of classes in any semester will be considered inactive students.
- 2. Students admitted or resuming in academic year 2014/2015 onwards who do not enrol in any courses or do not settle their tuition fees ten calendar days after the payment deadline in any semester will be considered inactive students.
- 3. Inactive students will be prohibited from attending classes, using any services or facilities of the University, and applying for any official documents. For students who become inactive from academic year 2015/2016 onwards, the maximum inactive duration is two semesters cumulatively. If inactive students wish to return to the University within the inactive duration, they must make up the check-out procedures and apply for re-admission of study. An administration fee will be charged for the late check-out procedures, and a re-admission fee based on the number of inactive semesters will be charged upon approval of re-admission. Please refer to "Fees and Other Charges" for the relevant fees. Re-admission of study is not granted automatically and is with lower priority than resumption of study during application consideration subject to quota availability. Also, inactive students are with lower priority than withdrawn students for re-admission (See the item Y Resumption/Re-admission of Study for details).

#### Y. RESUMPTION/RE-ADMISSION OF STUDY

- 1. Students who have deferred their studies and wish to return to the University should apply for resumption of study, while withdrawn, discontinued or inactive students should apply for re-admission of study.
- 2. Students returning to the University either through resumption or re-admission can continue their study with all the previous academic records. However, the procedures for resumption and re-admission are different from each other and re-admission is with lower priority than resumption of study during application consideration subject to quota availability. Also, discontinued and inactive students are with lower priority than withdrawn students for re-admission.
- 3. It should be noted that the total duration for deferment of study, withdrawal of study, and inactive period should not exceed six semesters altogether, and the inactive period should not exceed two semesters independently. No resumption or re-admission of study will be considered if students cannot fulfill this duration requirement. Any exceptional cases are subject to the endorsement from the Dean/Director of the academic unit concerned and the approval from the Vice Rector (Academic Affairs) via the Graduate School.

Students who cannot return to the University through resumption or re-admission have to apply for regular admission if they wish to study at the University afterwards and all the previous academic records will be expired.

4. Procedures for Resumption of Study When students apply for resumption of study, they should submit written applications to the Graduate School before class commencement of a certain semester for the approval from the Dean/Director of the academic unit concerned. Any applications submitted on/after the first day of classes will be directly rejected by the Graduate School. The applicants must meet all the admission requirements prevailing at the time of resumption and successful applications will be effective in the specific semester required by the students.

In addition, all resuming students who have deferred their studies due to health issues are required to submit a Medical Examination Report to the Graduate School during the resumption process. This report is to prove that the student has recovered from the health issues and is capable of pursuing his/her studies at the University. If a student has already had a medical check-up within three months prior to resumption, he/she may submit a certified true copy of that medical report.

5. Procedures for Re-admission of Study

When withdrawn and inactive students apply for re-admission of study, they should submit written requests to the Graduate School for the approval from the Dean/Director of the academic unit concerned. For inactive students, they must make up the check-out procedures before applying for re-admission; however, they are not required to obtain approval from the Dean/Director of the academic unit concerned for the check-out. Also, an administration fee will be charged for the late check-out procedures, and a re-admission fee based on the number of inactive semesters will be charged upon approval of re-admission (Please refer to "Fees and Other Charges" for the relevant fees).

When discontinued students apply for re-admission of study, they should submit written requests to the Graduate School for the approval from the Vice Rector (Academic Affairs) with the recommendation from the Dean/Director of the academic unit concerned. All re-admission application should be submitted to the Graduate School before class commencement of a certain semester and any applications submitted on/after the first day of classes will be directly rejected by the Graduate School. The applicants must meet all the admission requirements prevailing at the time of re-admission and successful applications will be effective in the following semester.

6. All resuming and re-admitted students should pay their tuition fees according to the tuition schemes of the resuming/re-admitted year and are required to check the study plan with the general office of the academic unit concerned.

#### Z. CHANGE OF PERSONAL INFORMATION

- 1. Students should inform the Graduate School immediately of any change of personal particulars entered in the students' registration records.
- For changes of address (such as home address, postal address and email address) and contact numbers, requests may be sent through email. All current students can also directly change their addresses and contact numbers through the myUM (https://myum.um.edu.mo).
- 3. For changes of other personal particulars not mentioned above, students must submit an application form to the Graduate School in person with personal identification documents presented. Such application will not be accepted after graduation or withdrawal from the University.

## AA. CERTIFICATION

- 1. Academic Transcripts and Testimonials
  - a. An academic transcript is a certification of a student's record of academic performance at the University and it shows the student's grades obtained in a programme up to the latest final examination taken. Students can apply for transcripts after the academic

reports have been released. A testimonial is a certification of the student's present registration status with regard to his/her studies at the University.

- b. Students can apply for academic transcript or testimonial by submitting an application from to the Graduate School. The charge per copy may be found in "Fees and Other Charges". If students submit their applications by post in Macao, a cheque or cashier's order for the amount due should be enclosed. For overseas applicants, payment must be paid by either cashier's order or bank draft; an additional handling fee will be charged. Please refer to "Fees and Other Charges" for further details.
- c. To avoid delay, please remember that requests for transcripts by other parties must bear the student's authorisation before the Graduate School can process the requests. During examination and assessment periods, the issuing of transcripts may be suspended or delayed.
- d. The University reserves the right to withhold an academic transcript or a testimonial from a student who has outstanding fees owing to the University, or who has otherwise failed to discharge all obligations towards to the University.

## 2. Certified True Copy of Academic Documents

Students may apply for certified true copies of academic documents issued by the University, such as graduation certificates and academic transcripts, by submitting an application form to the Graduate School. Please refer to "Fees and Other Charges" for the relevant charges. However, the Graduate School will provide a free service to students who apply for admission to the programmes offered by the University.

## AB. ACADEMIC HONESTY

Students should uphold the principle of academic integrity and pursue their studies with passion and honesty. They should avoid committing any act of academic dishonesty, including but not limited to cheating, fabrication, collusion and plagiarism. Plagiarism is a serious academic offence and the University shall penalize the student who is proved to have incorporated others' works as his/her own work according to the <u>"Student Disciplinary Regulations of the University of Macau" (SAO.03/201406/100)</u>. Regarding the types and handling procedures of academic dishonesty, please refer to the <u>"Rules on Handling Student Academic Dishonesty" (AAO-REG.04/201112/068)</u>.

#### Annex

### FEES AND CHARGES

For details about fees and charges, please refer to the "Fees and Charges" section of the UM Academic Calendar or the homepage of the Treasury Section of the Finance Office (<u>https://fo.um.edu.mo/</u>).

## IMPORTANT ANNOUNCEMENTS

Notices such as important announcements, examination schedules or university activities will be posted on notice boards. There are also electronic bulletin boards, which display messages campus-wide and can be easily accessed through the campus computer network. In addition, the University sends important notices to students through SMS (short message service) or emails (university's accounts only). Students should check the campus notice-boards, electronic bulletin boards and university's email accounts to learn about University news and events.

## ACADEMIC REGULATIONS AND RULES

## General Rules Governing Bachelor's Degree Programmes

(Approved by the Rector on 25 January 2021)

## A. ADMISSION

- Admission is governed by the University Admission Rules (<u>Admission Rules Governing</u> <u>Bachelor's Degree Programmes</u>; <u>Admission Rules Governing Master's Degrees &</u> <u>Postgraduate Certificates / Diploma Programmes</u>; <u>Admission Rules Governing PhD</u> <u>Programmes</u>). Applicants must satisfy the University admission requirements, and any additional requirements imposed by the academic unit they intend to enter.
- 2. Students should not enrol/register in any other universities upon registration at UM.
- 3. A student of the University is required to observe the General Rules, and those rules and procedures which govern admission requirements, examinations, fees and charges.

## **B. GENERAL**

- The University offers programmes of study leading to the degrees of Bachelor of Arts (BA), Bachelor of Business Administration (BBA), Bachelor of Education (BEd), Bachelor of Law (LLB), Bachelor of Science (BSc), Bachelor of Social Sciences (BSocSc) or such other degrees as approved by the University authority.
- 2. Students will be awarded the appropriate bachelor's degree provided that they have:
  - a. undertaken a programme of study for a period normally of not less than four years for bachelor programmes; and
  - b. completed the prescribed courses; and
  - c. passed the prescribed examinations; and
  - d. paid the prescribed fees; and
  - e. fulfilled the requirements of the rules of the University.
- 3. Students must register in a programme of study on the specified dates in any one academic year, with compulsory attendance at classes.
- 4. The maximum duration of studies will be 175% of the normal duration of the programme.

## C. ACADEMIC YEAR

An academic year covers the period from August to July. Each year consists of two semesters, plus an optional intensive summer term. Each semester consists of approximately seventeen weeks of scheduled classes, including examinations.

## D. REGISTRATION

- New students are normally admitted as "first-year students" and will be considered registered students upon proper completion and submission of all registration materials to the Registry with tuition fees settled, while returning students will be considered registered students upon settlement of tuition fees.
- Students are normally categorised as first, second, third, fourth or fifth year based on the number of credits gained. In special cases, such as transferring from one programme to another, or falling behind in studies because of failure in many courses, categorisation will be based on the advice of the academic unit.

- 3. A student must register in the name which appears in his/her personal identification documents.
- 4. Student Cards
  - a. All students will be issued with student cards (UM Campus Card).
  - b. A student card cannot be used by anybody other than the holder.
  - c. In case of loss or damage of a student card, a student should apply for a replacement by submitting an <u>application form</u> to the Registry. A card replacement fee will be charged to the student.
  - d. Students may refer to the "Rules Governing the Use of UM Campus Card" for further details.

## E. CREDIT AND COURSE LOAD

- 1. The number of teaching hours of a credit is at least 15. Teaching hours include all kinds of face-to-face contact hours, such as lecture hours, laboratory hours, tutorial hours and legal practice, etc.
- 2. The number of study hours of a credit is 45. Study hours include the time required for any forms of teaching modes. Besides the ones mentioned in the above point, they also include internship, project, field work or practical training, laboratory or experimental work, participation in seminars, conference or assessment, etc.
- 3. Course Load for Students
  - a. In addition to the Community and Peer Education courses, a student is normally allowed to take a maximum of 21 credits in a semester (an academic unit may allow less as the maximum).
  - b. A student may take up to 24 credits in a semester if he/she achieves a cumulative GPA of 2.0 or better. Student who wishes to increase the course load should submit a written application with strong justification to his/her home academic unit. Endorsement from the head of the department or programme coordinator and approval from the Dean of student's home academic unit must be sought.

## F. COURSE ENROLMENT

- 1. Course Enrolment includes two processes, pre-enrolment and course add/drop. Students may refer to the <u>Course Enrolment Handbook</u> for further details.
- 2. Except under very special circumstances as approved by the Dean of the academic unit concerned, students are advised to follow the study plan specified by the programme in which they have enrolled. The number of credits/courses taken is restricted to the requirements of the academic unit for the semester. It should be noted that no substitutions are allowed under any circumstances for compulsory courses.
- 3. The courses offered by any academic unit are normally open to students enrolled in that unit, and to students enrolled in other academic units either as electives permitted by, or as requirements set by, those academic units.
- 4. A student shall not be allowed to take courses where lecture-time schedules conflict.
- 5. Students will not be entitled to proceed to pre-enrolment or course add/drop if there is any outstanding tuition fee.
- 6. Course Add/Drop
  - a. Students may make changes to their enrolment records during the course add/drop period. Requests for adding or dropping courses other than the add/drop period will

not be considered.

- b. Adding a new course depends on the availability of section quota.
- c. A student who drops a course without going through the prescribed procedures will be given a failing grade, "F" or "NP" for that course.
- 7. Withdrawal from Individual Courses

Students may withdraw from an individual course after the course add/drop period on condition that he/she still has at least three credits enrolled after the course is withdrawn. When students wish to withdraw from a course after the add/drop period, they should complete and submit an <u>application form</u> to the Registry by the end of the 11<sup>th</sup> week of a semester. For Summer Term, students who wish to withdraw from a course should submit an <u>application form</u> to the Registry days before the last class of the course concerned. A "W" grade will be given to the withdrawn course and the tuition fee for the withdrawn course will not be refunded. Any application submitted after the aforementioned deadline will not be considered.

- 8. Students should always look carefully at their enrolment records. If they are not sure if their enrolment records are correct, they may seek advice from the academic unit concerned. Students are responsible for following up any updates, errors or omissions.
- 9. Study Plan

A study plan is a guide to what students have to accomplish in order to complete their programme of studies. Students are advised to consult their study plans during selection of courses for enrolment. They should keep their study plans and any subsequent adjustments for future reference during course enrolment and for graduation purposes.

## 10. Course Designations

Courses specified in the undergraduate programmes are designated as Compulsory Major course (CM), Required Elective (RE), Community and Peer Education course (CPE), Languages and Skills course (L&S), General Education course (GE), Free Elective (FE) or Minor course (MI).

- a. Compulsory Major courses must be taken in the semester indicated. A student who fails a Compulsory Major course is required to retake that course.
- b. Required Electives are courses chosen by the student but within a group of courses designed for this purpose by the programme. Required Electives may be taken at other times. A student who fails a Required Elective will be required to either retake the same course or take another course within the same group.
- c. Community and Peer Education courses focus on experiential learning and are run jointly by the Faculties and the Residential Colleges. A student who fails a Community and Peer Education course will be required to retake that course.
- d. Languages and Skills courses include English language courses, Chinese language course, Portuguese language course and Information Technology course. A student who fails an English language course or Information Technology course will be required to retake that course. A student who fails a Chinse or Portuguese language course will be required to either retake the same course or take the other course.
- e. General Education courses are courses listed in the General Education Programme. A student who fails a General Education course will be required to either retake the same course or take another course within the same area. Within individual major programmes, some restrictions on the selection of General Education courses may be prescribed.
- f. Free Electives are selected by the student in areas inside or outside the major as designated in the curriculum, subject to the academic unit's approval. A student who fails a Free Elective will be required to either retake the same course or take another course to fulfil graduation requirements. Within individual programmes, some courses may not be considered Free Electives.
- g. Minor courses are courses designated by the Minor Programme.

## G. UNDERGRADUATE CURRICULUM MODEL

The following undergraduate curriculum model is implemented in academic year 2020/2021 onwards:

Course Types		No. of Credits
1.	Major (CM + RE)	40 – 66
2.	Community and Peer Education (CPE)	3
3.	Languages and Skills <sup>^</sup> (L&S)	3 – 15
4.	General Education (GE)	24 – 27
5.	Free Elective (FE)	9 – 50
Minimum Credit Requirement		120

Students who test out of the Languages and Skills course(s) are required to make up the credits by taking additional Free Elective(s).

## H. COURSE RETAKE

- 1. A student can retake a course only if the course result is below Grade C (2.0).
- 2. There is no limit to the number of times a student retakes a course. The results of all attempts will be recorded and shown on the transcript. Only the highest grade among all attempts will be considered in GPA calculation: if this grade is Grade C (2.0) or below, it will be counted towards the GPA; if this grade is above Grade C, only Grade C (2.0) will be counted towards the GPA.

## I. COURSE EXEMPTION

 Students who have completed equivalent courses in any tertiary education institutions may apply for course exemption to the academic unit concerned before the first day of the semester. In the case of course exemption, credits will be granted to replace the original UM course. Exempted courses will be assigned a grade "X" and will be shown in the transcript of academic record, but will not be counted towards the GPA.

Applications should be submitted to student's home academic unit and be accompanied by supporting documents, e.g. course outlines, official course descriptions, lecture hours, study plans, course grades etc, showing that the students have passed equivalent courses elsewhere.

- 2. Course exemptions are considered valid only after they are endorsed by the head of department or programme coordinator of the course offering units and approved by the Dean of student's home academic unit.
- 3. A course can be exempted only if it meets the following three requirements:
  - a. The course applied for course exemption must be deemed at degree level.
  - b. Course Content The course applied for course exemption must have at least 80% content similarity. The head of department or programme coordinator/head of GE Programme/GE course area coordinator can judge the course content.
  - c. Lecture Hour The lecture hours of the course applied for course exemption must have at least 80%

as the course offered by UM. One UM credit is equal to one lecture hour per week for one semester and the total number of teaching weeks of a semester is at least 15.

Study Hour

For courses completed under the European Credit Transfer System (ECTS) without having 80% lecture hours as the UM-offered course, the study hours of the course applied for course exemption must have at least 80% as the course offered by UM. One UM credit is equal to 45 study hours for one semester.

- 4. The normal limit on the number of credits that can be transferred to a programme is onethird of the total credits required.
- 5. For courses completed in UM-initiated outbound programmes without comparable courses offered by UM, students can still transfer them to UM as free electives with a maximum of six credits. Endorsement from the head of department or programme coordinator and approval from the Dean of student's home academic unit are required.
- 6. All exceptional cases are subject to the recommendation of the Dean of student's home academic unit and the approval of Vice Rector (Academic Affairs) via the Registry.

## J. COURSE WAIVER

1. Students who have not completed equivalent courses in any tertiary education institutions but have attained the knowledge and skills of specific UM courses may apply for a course waiver to the academic unit concerned before the first day of the semester. In the case of course waiver, no credits will be granted, and students will be required to take a related course approved by the head of department or programme coordinator to fulfil the credit requirement. Waived courses will be assigned a grade "CW" and will be shown in the transcript of academic record, but will not be counted towards the GPA.

Applications must be submitted to student's home academic unit and be accompanied by an explanation for the waiver request and supporting documents (if any). Proof of the acquired competence is required.

- 2. Students may apply for course waiver for any courses. For the course in Community and Peer Education "Residential College Experiential Learning", students may apply for course waiver on the condition that they have possessed a degree from a comparable tertiary educational institution.
- 3. Course waivers are considered valid only after they are endorsed by the head of department or programme coordinator of the course offering units and approved by the Dean of student's home academic unit.
- 4. All exceptional cases are subject to the recommendation of the Dean of the student's home academic unit and the approval of Vice Rector (Academic Affairs) via the Registry.

## K. ATTENDANCE AND ABSENCE

## 1. Attendance

- a. Participation in the work of a course is a precondition for a student's achievement of credits in that course.
- b. A student whose studies are discontinued will not be permitted to attend classes during the period of suspension.

### 2. Absence

a. A student who cannot attend classes because of illness must inform the teacher

concerned in writing at the earliest opportunity. When longer absence is necessary (over three days) or when absence from examinations is in question, a student must submit in writing an application for leave of absence to the Dean or Director of the course offering unit concerned, together with a certificate signed by a registered medical practitioner.

- b. A student who, during his studies, desires leave of absence for more than two full consecutive days for non-medical reasons must apply to the Dean or Director of the course offering unit concerned in writing at the earliest opportunity, stating the reasons for which the leave of absence is sought. Permission for such leave will only be granted in exceptional circumstances and on a case-by-case basis.
- c. A student who is absent without applying for leave of absence from a course for more than 20% of its scheduled teaching periods in the aggregate will not be allowed to take the final examination and will receive a failing grade for that course.
- d. If the expected period of leave is of a significant duration, students should apply for deferment of studies.

## L. EXAMINATION AND ASSESSMENT

- 1. A student will take course examinations, where each course will be examined or otherwise assessed at the end of the semester in which it is offered.
- For medical or other compelling reasons, a student who is unable to sit for any course examination must apply in writing with a certificate signed by a registered medical practitioner at the earliest possible moment (but not later than seven calendar days after the examination concerned) to the Dean or Director of the course offering unit for leave of absence.
- 3. A student who is absent from any examination without permission will be given a failing grade for that examination.
- 4. In some courses, assessment may be made otherwise than by examination when the programme of study so specifies.
- 5. A student will be examined or assessed for every course he/she has registered for on the basis of his/her performance in that course. Criteria for examination or assessment may include one or any combination of the following: attendance, class-work, written assignments, laboratory work, field work, research papers, tests or examinations.

## **M. GRADING SYSTEM**

1. <u>The below grading system is applicable to all academic units except the Faculty of Law:</u>

Letter Grades	Grade Points	Percentage
A	4.0	93-100
A-	3.7	88-92
B+	3.3	83-87
В	3.0	78-82
B-	2.7	73-77
C+	2.3	68-72
С	2.0	63-67
C-	1.7	58-62
D+	1.3	53-57
D	1.0	50-52
F	0	Below 50

Letter grades are official grades. Grade points are used for the purpose of calculating the GPA. Grades other than F are passing grades.

- 2. For the Faculty of Law, 20-point scales are official grades. Scales at 10 or above are passing grades.
- 3. Other Grades

Definition	Remark			
Course Waiver	Assigned to a course that has been waived.			
Deferred Result	A temporary grade assigned to the students who ask for a supplementary examination with justifiable reasons.			
Incomplete	Used when work is necessarily delayed through no fault of the student, such as a medical problem. This grade must be converted to a regular grade by the commencement of the following semester; otherwise it will be converted to "F".			
Fail	Given to a course where the results are not			
Pass	counted towards the GPA.			
Withdrawal	Assigned when a student has withdrawn from a course. The result will not be counted towards the GPA.			
Course Exempted	Assigned in the case of a course exemption.			
	Course Waiver Deferred Result Incomplete Fail Pass Withdrawal			

## N. GRADE POINT AVERAGE (GPA)

- 1. Semester GPA This is a figure ranging from 0 to 4.0 (A=4.0) used to indicate the average performance of a student in the semester concerned.
  - a. Semester GPA:

Total weighted points of all courses taken in the semester concerned

Total number of credits enrolled in the semester concerned

- b. Weighted points: Grade points x the number of credits of the course concerned
- 2. Cumulative GPA This is a figure ranging from 0 to 4.0 (A=4.0) used to indicate the overall performance of a student in all the semesters of the specified years of studies.

Cumulative GPA:

Total weighted points of all courses taken in all semesters Total number of credits enrolled in all semesters

3. The presentation of GPA is truncated, not rounded, to two decimal places.

## O. SCALE AVERAGE (SA)

- 1. Semester SA This is a figure ranging from 0 to 20 used to indicate the average performance of a student in the semester concerned.
  - a. Semester SA:

Total weighted points of all courses taken in the semester concerned

Total number of credits enrolled in the semester concerned

- b. Weighted points: 20-point scale x the number of credits of the course concerned
- 2. Cumulative SA This is a figure ranging from 0 to 20 used to indicate the overall performance of a student in all the semesters of the specified years of studies.

Cumulative SA:

Total weighted points of all courses taken in all semesters Total number of credits enrolled in all semesters

3. The presentation of SA is truncated, not rounded, to two decimal places.

## P. ACADEMIC HONOURS

Dean's and Rector's Honour Lists

Students in bachelor's degree programmes will be placed on the Dean's and Rector's Honour List at the end of the first or second semester if they meet the following criteria:

## For Dean's Honour List:

An eligible student should be a registered student in the relevant semester who completes at least 15 credits or the number of credits required by the designated study plan of the semester at the University and achieves a semester GPA of 3.3 / semester SA of 14 or better in that semester.

## For Rector's Honour List:

The Rector's Honour List is compiled on the Dean's recommendation. Only the best registered student in each academic unit will be selected, and the candidates must complete at least 15 credits or the number of credits required by the designated study plan of the semester at the University and achieve a semester GPA of 3.5 / semester SA of 16 or better in both semesters of that academic year.

Students going out for study, research, exchange, or other relevant academic activities or on leave for one semester or one academic year would not be included in the Dean's or Rector's Honour Lists in that semester or academic year.

## **Q. GRADUATION**

- 1. Students are required to fulfil the following requirements in order to graduate:
  - a. GPA Requirement For programmes using GPA system, students are required to achieve a cumulative
    - GPA of 2.0 or above.
      b. Residential College (RC) Requirement Mandatory residence of two semesters is normally required for the 1<sup>st</sup> year students. All students are required to fulfil the requirements specified by the RC system and the affiliated RC.

The University will **NOT** issue any certificates to those students who pass all the required courses but do not fulfil both the minimum GPA requirement and the RC requirement for graduation. However, transcripts will be issued to the students.

2. Graduation and Issue of Graduation Certificates

Upon successful completion of studies, fulfillment of both the GPA requirement and the RC requirement at the University, and with the approval of the University's Senate, academic awards are conferred on students at a congregation.

Students eligible for academic awards for that particular year, including those graduating

after semester 1 and semester 2, will be notified in writing of the details regarding the congregation, the collection of academic dress, and the award certificate.

The graduation certificate will be issued once only, as there will be no second printing. Students are therefore strongly advised to ensure the safe-keeping of this important document.

The University reserves the right to withhold conferment of an award on a student who has outstanding fees owed to the University, or who has otherwise failed to discharge all obligations towards the University.

## R. ACADEMIC WARNING, PROBATION AND DISCONTINUATION OF STUDIES

### 1. Academic Warning

A student shall be placed on Academic Warning if he/she has obtained a semester GPA or cumulative GPA below 1.70 in any registered semester.

A student on Academic Warning will receive a written warning about his/her unsatisfactory academic performance and the required academic advising from the concerned academic unit.

2. Academic Probation

A student shall be placed on Academic Probation for one semester if he/she has obtained a semester GPA or cumulative GPA below 1.70 in any two consecutive registered semesters.

A student on Academic Probation will receive a written warning about his/her unsatisfactory academic performance. The study load of the student shall be restricted to a maximum of 12 credits. Such student shall be required to seek academic advice from his/her home academic unit on a regular basis (usually at least once a month) during the probation semester. His/Her performance shall be reviewed at the end of the probation semester:

- a. If a student obtains both semester GPA and cumulative GPA of 1.70 or above in the probation semester, his/her Academic Probation will be lifted.
- b. If a student obtains either a semester GPA or cumulative GPA below 1.70 in the probation semester, his/her Academic Probation will be extended for one more semester.
- c. If a student obtains both semester GPA and cumulative GPA below 1.70 in the probation semester, he/she will be required to discontinue his/her studies.

The Registry will send the list of students to be discontinued of studies to the concerned academic units for confirmation. For special cases, the Dean of the academic unit concerned may extend the probation period for one more semester with strong justifications. In any case, a student shall be placed on Academic Probation for not more than three registered semesters.

- Students whose studies have been discontinued due to unsatisfactory academic performance or exceeding the maximum study duration cannot be re-admitted to the *same programme* in the following periods, unless special approval has been granted by the Vice Rector (Academic Affairs):
  - a. within the following year (two semesters) after discontinuation; or
  - b. three years (six semesters) after discontinuation.

Discontinued students who wish to be re-admitted to the same programme other than the periods mentioned above should apply for re-admission, and such application shall be considered and approved by the Dean of the academic unit concerned (See the item Y –

Resumption/Re-admission of Study for details).

## S. TRANSFER OF PROGRAMME

- Students may apply for transfer of programme within the scheduled period in each semester and may apply to a maximum of two programme choices according to the order of preferences. Students are not eligible to apply for transfer of programme in their first registered semester at UM.
- 2. All applications must be approved by the Dean of the academic unit of the programme transferred to.
- 3. The approved applications for transfer of programme will be effective in the following semester.
- 4. Any student can have only one approved transfer of programme during his/her undergraduate study at UM.
- 5. For students transferring between programmes not offered by the Faculty of Law, the results of courses taken previously will all be included in the GPA calculation for graduation.
- 6. For students transferring between the programmes offered by the Faculty of Law and other programmes, the results of courses taken previously will not be counted towards the final results for graduation, but the credits gained will all be counted.

## T. PURSUING MINOR PROGRAMMES

- 1. A minor programme requires 30-35 credits of courses.
- 2. A student who wishes to apply for enrolling in a minor programme should achieve a cumulative GPA of 2.0 or above (Grade C or better).
- 3. Students may apply for minor programme within the scheduled period in each semester and can pursue a maximum of two minor programmes but they are not eligible to apply for it in their first registered semester at UM. Students having prior approval for pursuing minor programme will be given priority in course enrolment. However, students without prior approval may also apply for qualification of a minor programme in the 2<sup>nd</sup> semester of the final year of study if they have successfully enrolled in all the courses required by the minor programme.
- 4. Changing minor programme is subject to approval of the academic unit of the minor programme changed to. Any student can have only one approved change of minor programme during his/her undergraduate study at UM.
- 5. In order to graduate with a minor qualification, a student must complete all requirements of the enrolled minor programme, as well as all the requirements of the major programme of study. The courses taken for minor programme cannot be counted towards students' major programme and vice versa. The results achieved from the minor courses will not be calculated towards the GPA calculation for graduation.
- 6. Students who graduate with a minor qualification will have a certificate awarded together with a separate transcript indicating all the courses taken for the minor programme.
- 7. A student who wishes not to continue their enrolled minor programme should apply for withdrawal from minor programme by submitting an <u>application form</u> to the Registry. The courses taken previously for the withdrawn minor programme will all be counted towards

students' major programme and included in the GPA calculation for graduation.

## U. DEFERMENT OF STUDY

- Application for deferment of study from a withdrawn or inactive student will not be considered. For definitions of withdrawn and inactive students, please refer to item V and X respectively.
- Students who wish to postpone their studies should apply for deferment of study by submitting an <u>application form</u> to the Registry and securing the required signatures from the Dean of home academic unit before leaving the University. The University does not guarantee such students that the degree programme/courses will remain constant after they return to the University.
- 3. Students can apply for deferment of study for not more than two semesters at one time. If students wish to prolong their deferment period, they should submit another application before the first day of the next semester after they have reached the previously approved deferment period. The total approved period of deferment of study cannot accumulate to more than six semesters.
- 4. First-year registered students can apply for deferment of study for not more than one academic year. Such applications will only be permitted for medical reasons and exceptional cases with sound justification. For medical reasons, students are required to submit medical certificates issued by hospitals at the time of application. For exceptional cases with sound justification, students are required to specify the reason and submit written certification at the time of application.
- 5. Students who have deferred their studies and wish to return to the University should apply for resumption of study. Resumption is not granted automatically (See the item Y Resumption/Re-admission of Study for details). Besides, students are not permitted to transfer to another programme when they apply for resumption of study.
- 6. If students neither apply for resumption of study nor submit another deferment application before the first day of the next semester after they have reached the previously approved deferment period, they will be considered having withdrawn from the University, and they have to apply for re-admission of study later if they wish to return to the University (See the item Y Resumption/Re-admission of Study for details).

## V. WITHDRAWAL FROM THE UNIVERSITY

- 1. Students who wish to terminate their studies at the University prior to graduation should apply for withdrawal from studies by submitting an <u>application form</u> to the Registry.
- 2. Withdrawal grades will be recorded for each course at the time the student receives permission to withdraw. The grades are either "W", meaning that the student withdraws from the University before the examination period, or "F", meaning that the student does not take the examinations but withdraws during or after the examination period. However, if a student withdraws from the University after completing all the courses and examinations of a semester, all academic credits/grades are given for the courses taken in that semester.
- Students who withdraw from the University and later wish to return must apply for readmission of study. Re-admission of study is not granted automatically. It is with lower priority than resumption of study during application consideration and is subject to quota availability (See the item Y - Resumption/Re-admission of Study for details).

## W. CHECK-OUT

- 1. All withdrawn, discontinued students and those applying for deferment of study are required to complete and submit the <u>check-out forms</u> to the Registry before leaving the University. Students are required to clear all outstanding matters with the department concerned.
- 2. If students leave the University in the course of study without going through the check-out procedures, no official document (such as testimonial, transcript or graduation certificate) will be issued.

## X. INACTIVE STUDENTS

- 1. Students who fail to enrol in at least three credits of course(s) or do not fully settle their tuition fees in any semester will be considered inactive students.
- 2. Students are required to settle their tuition fees before the payment deadline. When students fail to settle their tuition fees by the due date, they may settle their overdue payment with an overdue administrative charges within 10 calendar days after the payment deadline (Please refer to Fees and Other Charges for details). Any requests for late payment after 10 calendar days of the payment deadline will not be considered and any students who do not have their tuition fees fully settled by the said time will be considered inactive students.
- 3. Inactive students will be prohibited from attending classes, using any services or facilities of the University, and applying for any official documents. For students who become inactive from academic year 2015/2016 onwards, the maximum inactive duration is two semesters cumulatively. If inactive students wish to return to the University within the inactive duration, they must apply for re-admission of study. Re-admission of study using application consideration and is subject to quota availability. Also, inactive students are with lower priority than withdrawn students for re-admission (See the item Y Resumption/Re-admission of Study for details).

## Y. RESUMPTION/RE-ADMISSION OF STUDY

- 1. Students who have deferred their studies and wish to return to the University should apply for resumption of study, while withdrawn, discontinued or inactive students should apply for re-admission of study.
- 2. Students returning to the University either through resumption or re-admission can continue their study with all the previous academic records. However, the procedures for resumption and re-admission are different from each other. Re-admission is with lower priority than resumption of study during application consideration and is subject to quota availability. Also, discontinued and inactive students are with lower priority than withdrawn students for re-admission.
- 3. It should be noted that the total duration for deferment of study, withdrawal of study, and inactive period should not exceed six semesters altogether, and the inactive period should not exceed two semesters independently. No resumption or re-admission of study will be considered if students cannot fulfil this duration requirement. In this case, all academic records will be expired and students have to apply for admission if they wish to study at the University afterwards.
- 4. Procedures for Resumption of Study When students apply for resumption of study, they should submit written applications to the Registry before the first day of a certain semester for the approval from the Dean of student's home academic unit. Any applications submitted on/after the first day of classes

will be directly rejected by the Registry. The applicants must meet all the admission requirements prevailing at the time of resumption and successful applications will be effective in the specific semester required by the students.

In addition, all resuming students who have deferred their studies due to health issues are required to submit a <u>Medical Examination Report</u> to the Registry during the resumption process. This report is to prove that the student has recovered from the health issues and is capable of pursuing his/her studies at the University. If a student has already had a medical check-up within three months prior to resumption, he/she may submit a certified true copy of that medical report.

5. Procedures for Re-admission of Study

When withdrawn, discontinued and inactive students apply for re-admission of study, they should submit written requests to the Registry for the approval from the Dean of student's home academic unit. For inactive students, they must make up the check-out procedures before applying for re-admission, however, they are not required to obtain approval from the Dean of student's home academic unit for the check-out. Also, an administration fee will be charged for the late check-out procedures, and a re-admission (Please refer to "Fees and Other Charges" for the relevant fees). All re-admission application should be submitted to the Registry before the first day of a certain semester and any applications submitted on/after the first day of classes will be directly rejected by the Registry. The applicants must meet all the admission requirements prevailing at the time of re-admission and successful applications will be effective in the following semester.

6. All resuming and re-admitted students should pay their tuition fees according to the tuition schemes of the resuming/re-admitted year and are required to check the study plan with the general office of the academic unit concerned.

## Z. CHANGE OF PERSONAL INFORMATION

- 1. Students should inform the Registry immediately of any change of personal particulars entered in the students' registration records.
- For changes of address (such as home address, postal address and email address) and contact numbers, requests may be sent through email. All current students can also directly change their addresses and contact numbers through the myUM (<u>https://myum.um.edu.mo</u>).
- For changes of other personal particulars not mentioned above, students must submit an application form to the Registry in person with personal identification documents presented. Such application will not be accepted after graduation or withdrawal from the University.

## AA. CERTIFICATION

- 1. Academic Transcripts and Testimonials
  - a. An academic transcript is a certification of a student's record of academic performance at the University and it shows the student's grades obtained in a programme up to the latest final examination taken. Students can apply for transcripts after the eacademic reports have been released. A testimonial is a certification of the student's present registration status with regard to his/her studies at the University.
  - b. Students can apply for academic transcript or testimonial by submitting an <u>application</u> form to the Registry. The charge per copy may be found in "Fees and Other Charges". If students submit their applications by post in Macao, a cheque or cashier's order for the amount due should be enclosed. For overseas applicants, payment must be paid by either cashier's order or bank draft; an additional handling fee will be charged.

Please refer to "Fees and Other Charges" for further details.

- c. To avoid delay, please remember that requests for transcripts by other parties must bear the student's authorisation before the Registry can process the requests.
- d. The University reserves the right to withhold an academic transcript or a testimonial from a student who has outstanding fees owing to the University, or who has otherwise failed to discharge all obligations towards to the University.
- Certified True Copy of Academic Documents Students may apply for certified true copies of academic documents issued by the University, such as graduation certificates and academic transcripts, by submitting an <u>application form</u> to the Registry. Please refer to "Fees and Other Charges" for the relevant charges.

## **AB. ACADEMIC HONESTY**

Students should uphold the principle of academic integrity and pursue their studies with passion and honesty. They should avoid committing any act of academic dishonesty, including but not limited to cheating, fabrication, collusion and plagiarism. Plagiarism is a serious academic offence and the University shall penalize the student who is proved to have incorporated others' works as his/her own work according to the <u>Student Disciplinary Regulations of the University of Macau</u>. Regarding the types and handling procedures of academic dishonesty, please refer to the <u>Rules on Handling Student Academic Dishonesty</u>.

ACADEMIC REGULATIONS AND RULES

## **Examination Rules**

(Approved by the Rector on 20 November 2018)

## **General Instructions**

## 1. Responsibility to Attend Examinations

- a. Candidates are responsible for checking the dates, times and locations of their examinations from the examination schedules, and for presenting themselves for examination at the appointed place and time. Examination schedules will be announced by the Registry or academic unit at least one month prior to the examination period.
- b. Where all or part of the assessment for an examination is by means other than of a formally invigilated written examination, the instructor will announce details of the appropriate arrangements, and it is the candidate's responsibility to acquaint themselves with these details.
- c. A candidate who is unable to attend an examination under normal conditions because of illness, misadventure, or other extenuating circumstances, or who would be significantly disadvantaged if required to do so, may be permitted to sit the examination under special conditions. Such special arrangements, which may include (if necessary) additional time, a re-scheduling of the examination, the use of dictating or other assistance, and/or the use of premises outside the University, will be approved in advance by the Dean/Director of the academic unit concerned. In all other respects, the University regulations governing examinations will apply. Candidates requesting special arrangements on medical grounds will be required to substantiate their requests with a medical certificate or other documentary evidence. Candidates requesting special arrangements on other grounds may be required to reimburse the University for expenses incurred in such arrangements.
- d. A candidate is required to inform the academic unit concerned in writing immediately if for any reason he/she is unable to sit for an examination because of illness, accident or other causes, or if there is any factor arising immediately prior to or during the examination which the candidate believes could adversely affect his/her performance and which he/she wishes to be taken into account when assessing that performance. The candidate's letter must state clearly the examination in question, the cause of the absence or the manner in which the performance was affected, and must enclose the relevant supporting documentary evidence, e.g., medical certificates.
- e. Any candidate failing to give notice as specified in Examination Rule (1.d) above within seven working days after the examination to the academic unit concerned may lose the opportunity to have these circumstances taken into account or to appeal on these grounds against the decision of the Academic Council/Pedagogic Committee.
- f. A candidate who asks for rearrangement of final examinations with mere justification that he/she has to attend external examinations, e.g., TOEFL, CET4/6, etc., will not be accepted.

## 2. Use of Materials and Aids

- a. No stationery will be provided at the examination venue. Candidates should provide themselves with the necessary writing and drawing tools.
- b. All questions in a written examination must be answered using only answer booklets, supplementary sheets and other materials provided by the University for that examination. Candidates at any examination, either written or practical, will not be permitted to make use of any paper, books, notes, dictionaries, instruments, aids or other materials unless

expressly authorized in the rubric of the examination paper. Details of any such materials and aids which may be permitted in the examination will be provided to candidates in advance by the examiners. Authorized materials and aids will be subject to inspection by the invigilators.

- c. Where electronic calculators are permitted for use in an examination, these instruments should be non-programmable unless expressly allowed, hand-held, self-powered, and silent in operation. These should not possess any graphic or word-display facilities, e.g., electronic dictionaries, smart watches, etc. Candidates may not use any external media associated with an electronic calculator, such as instruction booklets, magnetic cards or memory modules. Candidates are responsible for ensuring that their calculators are in working order, and have a sufficient power supply, and that alternative means of calculating are available in the event that their electronic calculators fail during an examination.
- d. Except authorized materials and aids, candidates are prohibited from using any other electronic devices, e.g., smart phones and watches, electronic dictionaries, etc., during an examination
- e. Mathematical tables and all other materials provided by the University for use in examinations must not be removed by candidates from the examination venue.

## 3. Before the Examination

- a. Candidates are required to bring along their personal I.D. cards and student campus cards whenever they have an examination for verification purposes. Candidates who are unable to present their cards will not be allowed to write the examination.
- b. Invigilator should ensure that only examination candidates are allowed to enter the examination venue.
- c. Students should check their seat numbers, if any of them cannot find his/her name on the attendance list, he/she should inform the invigilator once admitted into the examination venue.
- d. Candidates will be admitted into the examination venue at least 5 minutes before the commencement of an examination. Candidates who arrive late and are admitted will not be given extra time. No candidate will be admitted into an examination venue 45 minutes after the commencement of an examination.

## 4. Entry to Examination Venue

- a. Candidates shall not enter the examination venue until permitted to do so by an invigilator. Upon entering the examination venue, candidates become subject to the authority of the invigilators and must act according to any instructions given by an invigilator.
- b. Candidates are advised not to leave their study materials and personal property outside the entrance of the examination venue because of the risk having such items stolen. Such property should be deposited in a place well away from the candidates, as directed by the invigilator.
- c. Candidates with watch alarms or other apparatus which could create noise, e.g., calculators, smart phones etc., should switch them off and disconnect them from the internet before entering the examination venue, and place them under their seats in a position clearly visible to invigilators. These electronic devices must not be switched on or used during the examination or before the candidates leave the examination venue.
- d. No food or drink is allowed inside the examination venue.
- e. No photo taking/recording is allowed inside the examination venue.
- f. Candidates shall observe silence within the examination venue except when it is necessary to communicate with an invigilator and that it will not cause any unnecessary distraction to other candidates. A candidate who persists in causing disturbance to other candidates after a warning may be required to discontinue the examination and leave the

examination venue.

## 5. During the Examination

- a. Candidates shall not start writing until given permission to do so by the invigilator.
- b. Candidates should first read through the whole question paper when an examination begins. If a wrong question paper was being handed out, or if the questions indicate that other materials should have been given out, but have not been, candidates should inform the invigilator immediately.
- c. Candidates should pay attention to any general directions which may be stated either on the cover page of the examination paper or at the beginning of each question. They should also listen carefully to the presiding invigilator's announcements.
- d. Invigilators shall make announcement for instructions of the examination and remind candidates of the consequences of cheating before an examination starts.
- e. Candidates must write the subject title, subject code and their student number clearly on the front page of each answer booklet and on the cover page of the examination paper.
- f. Candidates must read the instruction printed on the examination question paper before doing the examination.
- g. No candidate will be permitted to leave the examination venue during the first 45 and last 15 minutes of the examination.
- h. Candidates wishing to leave the examination venue temporarily will be permitted to do so under the supervision of an invigilator. Under such circumstance, candidates shall not bring any unauthorized electronic devices with them when leaving the examination venue, nor shall they use any unauthorized electronic devices when they are away from the examination venue. In addition, before leaving the examination venue during an examination, candidates shall sign a declaration stating that they do not bring any electronic devices with them.
- i) If circumstances arise during an examination which, in the opinion of the invigilator, render it necessary for the examination to be cancelled or postponed, the invigilator will stop the examination and, as soon as possible, arrange for the written scripts to be collected and report the matter to the respective academic unit.
  - ii) When a report is made under such circumstances, the academic unit concerned will investigate the matter reported and take action if necessary. In the event another examination is ordered to be held, the new examination will be deemed to be the prescribed examination, and a report will be made to the Dean/Director of the academic unit concerned.

## 6. Collection of Scripts

- a. During the last 15 minutes of each examination period, candidates must remain in their seats until told to leave by the invigilator.
- b. It is the responsibility of the candidate to ensure that all loose pages are securely fastened into the answer booklet and that all work which is to be considered by the examiners is handed in. No work that is removed by the candidate from the examination venue will be accepted for consideration by the examiners.

## 7. Conduct of Candidates

- a. Candidates shall comply with the Examination Rules and all instructions given by an invigilator.
- b. Candidates shall observe silence within the examination venue except when it is necessary to communicate with an invigilator, and that it will not cause any unnecessary distraction to other candidates. A candidate who persists in causing disturbance to other

candidates after a warning may be required to discontinue the examination and leave the examination venue.

- c. No person may impersonate a candidate, nor may any candidate permit himself/herself to be impersonated at any examination.
- d. During an examination, candidates shall not communicate in any way with other candidates, nor give or receive any information, materials or aids to or from other candidates, nor make use of any material or aid not specifically authorized for that examination.
- e. i) Candidate who is found cheating or misconduct will be informed by the invigilator, who is empowered with the authority, of the academic unit concerned, to discontinue the examination. Expulsion from the examination venues should occur only when it is felt that such disciplinary action is essential.
  - ii) The academic unit concerned reserves the right to withhold issuing the results of examinations within the investigation period.

## 8. Disqualification

If any of the following circumstances arises during the examination, such behavior will be considered as cheating or misconduct. The candidate will be disqualified and a failing grade (i.e. F/NP) will be given for the course together with a verbal or written warning. In severe cases, a disciplinary panel may be called to handle the case. A record of such proceedings will be kept in the student's file:

- i) A candidate disobeys the instructions given by the invigilator.
- ii) A candidate impersonates a candidate, or a candidate permits himself/herself to be impersonated.
- iii) A candidate improperly obtains knowledge of examination papers prior to the examination.
- iv) A candidate starts to write any notes or answer any question without permission or announcement before the examination starts, or a candidate who continues to write after the invigilator has announced the completion of the examination.
- A candidate is found to have any unauthorized article(s)/material(s) on/in the examination desk or on his/her person.
- vi) A candidate communicates or attempts to communicate improperly with any person inside or outside the examination venue.
- vii) A candidate uses any unauthorized notes, books or electronic devices, e.g., smart phones and watches, electronic dictionaries, etc.
- viii) A candidate copies from the work of another candidate.
- ix) A candidate leaves and enters the examination venue without permission.
- A candidate persists in causing noise/disturbance to other candidates after a warning.

## 9. Disturbance

In the case of disturbance during an examination, e.g., very loud external noise, the invigilator may authorize additional time after the scheduled time given.

## 10. Supplementary/Re-Sit Examination

- a. Supplementary Examination
  - i) A candidate who is not able to attend an examination due to sickness or any other special reason as approved by the Dean/Director of his/her academic unit may apply for a supplementary examination. If medical set up is required in the examination venue, he/she will have to submit medical certificate(s) or other supporting document(s) issued by a hospital recognized by the Government. All charges will

be born by the candidate.

- ii) A student who is absent from an examination will be requested to submit a written request with valid reasons, under normal circumstances, to the academic unit concerned within seven working days from the date on which the examination is held.
- iii) A candidate will lose his/her right to apply for a supplementary examination if (10.a.ii)) is not fulfilled.
- b. Re-Sit Examination

A re-sit examination will only be given to a student admitted or resuming in academic year 2015/2016 or before who fails a required course which is examined mainly for content and not mainly for skills, e.g., language skills, according to the following guidelines:

- A student whose course semester average is below 40% is required to repeat the course and cannot register for a re-sit examination except in very special circumstances approved by the Dean/Director of his/her academic unit.
- ii) When a re-sit examination is given, the weight given to the examination in the course grading will be the same as the weight given to the original scheduled examination, as specified by the instructor in the course weightings approved by the Academic Council/Pedagogic Committee.
- iii) The grade of a student who takes a re-sit examination can be raised no higher than "D" (pass) regardless of the score achieved in the re-sit examination.
- iv) Students taking FBA courses are not allowed to apply for re-sit examination.
- v) For students taking FAH or FSS courses, a re-sit examination will be permitted in FAH or FSS courses only if the student's class work average is 50% or above and course semester average is above 40%.
- vi) A student may take a re-sit examination for a failed course only once.
- vii) A student is not allowed to take re-sit examination for more than two failed courses per semester.

Resit examinations are not applicable to students admitted or resuming in academic year 2016/2017 onwards.

- c. Supplementary/re-sit examinations are normally held two weeks after the end of the final examination period.
- d. Fee for Supplementary Examination/Re-Sit Examination Administrative fee will be charged for the supplementary examination/re-sit examination and no action will be taken to update the student record if payment is not settled. Please refer to the Table of Fees for the relevant charges.

## 11. Appeal

- a. A candidate requesting a review of his/her examination performance will commence his/her appeal by sending to the office of his/her academic unit a letter stating the grounds of the review and presenting relevant evidence within three weeks of the issue of the academic reports.
- b. A complaint about the academic judgment of an examiner or an Academic Council/Pedagogic Committee cannot be considered as valid grounds for an application for review.
- c. Every appeal case will be reviewed through the Academic Council/Pedagogic Committee only once and their conclusion will be the final decision of the case.
- d. The academic unit concerned will inform the student in writing of the decision in each case.
- e. Under no circumstances will the examination script be released.

## 12. Cognizance of Examination Rules

Every candidate will be deemed to have both understood and accepted these examination rules.

## ACADEMIC REGULATIONS AND RULES

## Student Disciplinary Regulations of the University of Macau

(Approved by the University Council on 25 June 2014)

## Article 1 Competence

- 1. These Internal Regulations are established by the University Senate in accordance with the provisions of Article 37 of the Charter of the University of Macau approved by the Executive Order No. 14/2006.
- 2. For the efficient performance of the power conferred by Sub-item (17) of Item 1 of Article 36 of the Charter of the University of Macau, approved by the Executive Order No. 14/2006, by virtue of the circumstances of any student disciplinary offence, the University Senate delegates the relevant power to the following authorities for disciplinary actions: Dean of Faculties, Head of Independent Academic Units, Dean of Students, Master of Residential Colleges, or the Student Disciplinary Committee.

## Article 2 Scope of Application

These regulations apply to all students of the University of Macau.

## Article 3 Offences

- 1. Any one of the following acts is considered as a disciplinary offence:
  - any conduct seriously disturbing teaching, study, research, other academic activities, or operations of the University;
  - any misuse of the facilities of the University, or unauthorized entry into or occupation of the reserved facilities of the University;
  - any conduct detrimental to the reputation, liberty, safety or privacy of any member of the University (faculty, staff, students);
  - 4) any conduct detrimental to the reputation of the University;
  - 5) theft of or voluntary damage to the property of the University and its members;
  - 6) falsification or misuse of documents or records of the University;
  - any form of cheating in assignments, tests, examinations, or violation of any of the regulations governing the conduct of examinations;
  - 8) any form of plagiarism in academic work;
  - any misrepresentations or false statements made in any application or documents submitted to the University;
  - 10) failure to comply with directions of the University.
- 2. The nature, circumstances and consequences of the offences and the attitude of the offender shall be taken into consideration in imposing penalties.

### Article 4 Disciplinary Authorities and Proceedings

- 1. The disciplinary authorities include: Dean of Faculties, Head of Independent Academic Units, Dean of Students, Master of Residential Colleges and the Student Disciplinary Committee.
- 2. Offences directly related to pedagogic issues shall be addressed to the Dean of the Faculty or Head of the Independent Academic Unit to which the student belongs.
- 3. Other offences shall be referred to the Dean of Students or Master of Residential Colleges, who shall handle the case or decide to refer it to the Student Disciplinary Committee.
- 4. The disciplinary authorities shall appoint a panel to investigate the offence or the complaint.
- 5. The panel shall have a minimum of three members, including representatives of Faculty, Independent Academic Unit or Residential College, Student Affairs Office and students.
- 6. The panel shall prepare a report not only to present the findings of its investigation but also to recommend related penalties.
- 7. The report shall be submitted within 10 working days after the appointment to this effect. The disciplinary authority concerned may decide to extend the time limit for the submission of the report for another 10 working days.
- 8. The related authority shall notify the student concerned in writing about the alleged offence in due course. The student may defend himself/herself within 10 working days after receiving the notification.
- 9. The disciplinary authority may require the student concerned to attend a hearing, or the student is entitled to request a hearing in his/her written defence. The disciplinary authority may also require other persons related to the offence to attend a hearing.
- 10. Default of the student shall not affect the decision made by the disciplinary authorities.
- 11. The disciplinary authority shall decide the case within 10 working days after hearing or receiving the student's defence. If additional proceedings are justified, the said period may be extended for another 10 working days.
- 12. All decisions made by disciplinary authorities shall be communicated in writing to the student concerned and recorded by the University.
- 13. The time limit for initiating disciplinary proceedings is one year after the offence was committed.

## Article 5 Decision on Penalties Imposed by Disciplinary Authorities

- 1. The disciplinary authorities shall impose one or a combination of the following penalties on a student who has committed the offences defined in Article 3:
- 2. Penalties:
  - 1) attend educational or community programmes as deemed appropriate;
  - 2) receive verbal or written warning;

- 3) make restitution or compensation, where applicable;
- 4) receive suspension from class, any academic or other student rights, benefits, privileges and/or rights of using facilities for a specified period of time;
- 5) record demerit(s);
- 6) result in expulsion.
- 3. A total of three written warnings will result in one demerit.
- 4. A total of three demerits may result in expulsion from the University.
- 5. Any case which may result in expulsion shall be reviewed by the Student Disciplinary Committee. Case of expulsion from the University shall be approved by the Rector.

### Article 6 Accessory Penalties

The relevant authorities may impose accessorily the suspension or the loss of scholarship, prizes or other academic rights or benefits of the student.

## Article 7 Student Disciplinary Committee

- 1. The Student Disciplinary Committee is a standing committee of the University Senate and the members shall be appointed by the University Senate.
- 2. The Student Disciplinary Committee is a disciplinary authority which shall review and comment on any expulsion cases and review cases handled by Dean of Faculties, Head of Independent Academic Units, Dean of Students, or Master of Residential Colleges.
- 3. The Student Disciplinary Committee may advise and make recommendations on student disciplinary matters of the University.
- 4. The Student Disciplinary Committee shall reach its decision by a simple majority, meaning more than half of the valid votes cast.
- 5. The Student Disciplinary Committee shall consist of the following members:
  - 1) The Dean of Students, who shall be the Chair;
  - 2) The Registrar or his/ her representative;
  - 3) Two full or associate professors, recommended by the Rector;
  - 4) One administrative unit head, recommended by the Rector;
  - 5) One representative of the University of Macau Students' Union.
  - 6) One representative of the University of Macau Postgraduate Association.
- 6. The Student Affairs Office shall provide the Student Disciplinary Committee with the necessary technical and administrative support.
- 7. Conflict of interest with the student under investigation shall be avoided in the formation of the Student Disciplinary Committee:
  - 1) All members shall have no conflict of interest with the student;
  - Members listed in Sub-items 1), 2), 5) and 6) above shall be represented by their delegate should they have any conflict of interest with the student, the delegate shall be appointed by the Rector.

## Article 8 Appeal Process

- 1. An appeal against the decision that results in penalty imposed by the disciplinary authorities may be submitted to the Student Disciplinary Committee within 10 working days. Appeals must be in writing.
- 2. The Student Disciplinary Committee shall appoint an appeal panel of three members representing faculty, staff and students to handle the appeal case. The panel shall have no previous intervention in that specific case.
- 3. An appeal against the decision that results in penalty imposed by the Student Disciplinary Committee may be submitted to the Vice Rector (Student Affairs) within 10 working days. Appeal must be made in writing.
- 4. The Vice Rector (Student Affairs) shall appoint an appeal panel of three members, representing faculty, staff, and students to handle the appeal case. The panel shall have no previous intervention in that specific case.
- 5. The appeal panel shall review the case and make its recommendation.
- 6. The decision made by the Vice Rector (Student Affairs) is final.
- 7. When the decision involves expulsion penalty, the case shall be approved by the Rector.

### Article 9 Report to the Academic Unit and Other Authorities

- 1. Any penalty imposed on a student shall be reported to the faculty or the Independent Academic Unit concerned and the Student Affairs Office or the Residential College. The record of the student will be taken into consideration before the award of any scholarship, prize and/or privilege.
- 2. Any penalty imposed on a student may be shared with the parents or guardians of the student depending on the nature of the case.
- 3. According to the law, any criminal or serious case shall be reported to the Rector and the authorities of justice of the Macao Special Administrative Region.

## Article 10 Confidentiality

All the information of student disciplinary cases is strictly confidential. Disclosure of such information must be duly justified and approved by the Student Disciplinary Committee or the Vice Rector (Student Affairs) in writing.

## Article 11 Revision

These regulations are subject to revision by the University Senate.

## Article 12 Other Specific Regulations and Rules

These Student Disciplinary Regulations do not prejudice the application of other specific regulations and rules and the penalties of academic and administrative units that are approved according to the regulations of the University.

ACADEMIC REGULATIONS AND RULES

## **Rules on Handling Student Academic Dishonesty**

(Approved by the Rector on 06 December 2011)

## I. Types of Academic Dishonesty

This section aims to provide UM students an understanding of the most common types of academic dishonesty, with a focus on plagiarism.

Academic dishonesty may be broadly defined as any fraudulent actions or attempts by a person to use unauthorised or unacceptable means in any academic work. It is any type of cheating that occurs in relation to an academic exercise and can come in many different forms including cheating, fabrication, collusion, and plagiarism.

The following are some examples of academic dishonesty. These examples, however, are by no means exhaustive:

- 1. **Cheating** is intentionally using or attempting to use unauthorised materials, information, or study aids in any academic exercise. It includes but is not limited to:
  - Copying from another student during an exam or on an assignment;
  - Giving or receiving information during an exam;
  - Using unauthorised material during an exam;
  - Obtaining exam questions and/or answers from a student who has already taken the exam;
  - Asking someone to take an exam or write a paper on his/her behalf;
  - Collaborating on homework assignments, take-home tests and quizzes without authorisation from the instructor;
  - Submitting the same paper/thesis, or substantial portions of the same paper/thesis, for credit or degree more than once.
- 2. **Fabrication** is the invention or falsification of sources, citations, data, or results and recording or reporting them in an academic exercise. Examples include:
  - Citing a source that does not exist;
  - Making up or falsifying evidence or data or other source materials;
  - Falsifying research papers or reports by selectively omitting or altering data that do not support one's conclusions or claimed experimental precision.
- Collusion is facilitation of dishonesty by helping other students engage in academic dishonesty. Though the facilitator may not benefit personally from providing assistance to another, the facilitator's act similarly violates academic integrity. Examples of collusion include:
  - Knowingly or negligently allowing one's work to be used by other students without prior approval from the instructor;
  - Knowingly allowing others to copy answers in exams, tests and other assignments;
  - Taking an exam or writing a paper for another student.
- 4. Plagiarism is defined as the appropriation of another person's ideas, processes, results or words without permission and/or due acknowledgment. It covers all forms of work submitted to the University for assessment (assignments, essays, take-home examinations, projects, theses and all other forms of coursework). Plagiarism is intellectual theft. When using another person's words, ideas or results, whether such words, ideas or results have been published or not, one must obtain permission and/or give that person appropriate credit, or else one will be stealing the intellectual property belonging to another.

## II. Plagiarism

Plagiarism has become more serious with the relative ease of reproducing information that is readily available from the Internet. Students have been discovered to have 'cut and pasted' materials from various electronic sources and passed them off as their own. In academia, plagiarism is regarded as academic dishonesty and a serious offence. Like other forms of academic dishonesty, students who have committed plagiarism will face disciplinary measures ranging from an F grade to expulsion from the University. Students are expected to read the Regulations of the Student Discipline of the University of Macau for the mechanism for handling student disciplinary cases.

Some students have claimed that they were not aware of committing plagiarism. Inadvertent plagiarism is nonetheless considered an offence. Lack of awareness is no excuse, and plagiarism, whether intentional or inadvertent due to ignorance or carelessness, is still a violation of academic integrity. After all, plagiarism is a simple concept of copying without proper acknowledgement. The University has made the Rules easily accessible and all students are expected to read and follow it. If any student has any questions about plagiarism or other issues pertaining to academic integrity, he/she should consult the instructor.

We must be careful to recognise the people from whom we borrow ideas, just as we expect others to acknowledge the ideas that we ourselves have worked hard to develop. To avoid plagiarism, every direct quotation must be identified by quotation marks or appropriate indentation and both direct quotation and paraphrasing must be cited properly according to the accepted format for the particular discipline or as required by the instructor in a course.

Obviously, if you make a copy of an assignment done by a classmate and submit it as your own, you are guilty of plagiarism but there are many other forms of plagiarism. Some common examples of plagiarism are:

1. Verbatim plagiarism or word-for-word plagiarism

The most common type of plagiarism is copying word for word from a source (e.g. the published works, the essays or theses of other persons, etc.) without using quotation marks and without citing the source. Even if you add some words of your own around the text that you copied directly from a source, you must identify the quote by placing quotation marks around it in order to distinguish it from your own words, and you must also acknowledge the source by providing a citation.

2. Substantial copying with minor modifications

If you reproduce another person's text with only minor changes, such as adding/deleting a few words, rearranging the order of words or phrases, and changing the sentence structure (e.g. using passive voice to replace active voice in the original), and do not give proper attribution, you are committing plagiarism.

3. Mosaic plagiarism

If you copy phrases or sentences from a source or a variety of sources or merely change a few words here and there, and then join those bits and pieces together without carefully identifying the quotes with quotation marks and citing the sources, the result is a mosaic of other people's ideas and words. You are responsible for making clear distinctions between your ideas and the ideas of the others who have informed your work and for following the correct citation style to avoid plagiarism.

4. Apt phrase

If you use an author's distinctive term or phrase without proper attribution, it is plagiarism. If you want to use the author's original words, you must put those words in quotation marks and provide a citation.

## 5. Paraphrase

Paraphrasing means taking another person's ideas and putting those ideas in your own words. Paraphrasing does not mean replacing a word or two in someone else's sentence with synonyms. When you paraphrase, your task is to distill the source's ideas in your own words and restate the ideas in your own words. It is a fine way to use another person's ideas to support your own argument as long as you attribute the material to the author and cite the source. However, if you rephrase someone else's ideas as your own words without attribution, you will be representing someone else's ideas as your own and that is plagiarism.

The rule of thumb here is simple: Whenever you use published ideas that are not your own, you need to give credit to the source and cite properly according to the accepted format for the particular discipline or as required by the instructor in a course (For unpublished ideas, on top of the above, you need to obtain permission from the author(s).). Make sure that the sources are properly referenced. Plagiarism occurs when you present as your own work, without due acknowledgment, any material that was obtained from another source, regardless of how or where you acquired it, and regardless of whether you committed plagiarism intentionally or unintentionally.

It is every student's duty to find out what plagiarism is. The University has set out these rules to provide more information but the above illustrations may not cover every situation. There are books explaining plagiarism and guides to referencing in the UM Library. If you feel uncertain about what constitute plagiarism and how to avoid it, consult your instructor or the Librarian.

Advanced technology has made plagiarism easier. At the same time, advanced technology has also made detection of plagiarism easier for instructors. It is highly likely that your fellow classmates are also referring to the same texts, and your instructor has probably read the sources before reading your paper. When you copy, the shift in writing style will also be obvious to your experienced instructor. Avoid plagiarism by all means. The University would like to remind all students that plagiarism is theft of someone else's work and it ruins the purpose of education. If you resort to copying due to pressure to meet assignment deadlines or insufficient understanding of the subject, or if you have difficulty in writing your paper and citing your sources properly, consult your instructor.

Submission of assignments, papers and theses electronically via UM's e-learning management system, namely UMMoodle, or another software system as prescribed by the University, is strongly advised across the entire University. With the integration of UMMoodle and the plagiarism prevention tool, Turnitin, made available to all UM teachers, instructors can now more easily evaluate the originality of students' works by comparing them with online sources and Turnitin-owned sources. For postgraduate theses, supervisors and examination committees at UM are strongly advised to check the submitted theses using the designated plagiarism detection software before proceeding with an examination even if the theses have not been submitted via UMMoodle. Should any student feel uncertain about how to submit assignments and theses via UMMoodle, please consult one of the UM staff members at the helpdesk of the Information and Communication Technology Office.

Effective from 1 January 2012, it is a university-wide requirement for students to submit a signed statement together with their theses (and other assignments as requested by individual teachers) to declare that they have not committed any type of academic dishonesty in their works and that they have included proper citations for all those materials extracted from other sources (see below a template for such a self-declaration). It is students' responsibility to ensure that they have not committed any type of academic dishonesty, instead of waiting for their instructors to check and 'police' them.

Self-declaration template:

I declare that the thesis/assignment here submitted is original except for the source materials explicitly acknowledged and that this thesis/assignment, or parts of this thesis/assignment have not been previously submitted for the same degree/course or for a different degree/course.		
I also acknowledge that I am aware of the Rules on Handling Student Academic Dishonesty and the Regulations of the Student Discipline of the University of Macau.		
Signature	Date	
Name	Student ID Number	
Programme/Course Code		

## III. Procedures for Handling Student Academic Dishonesty

- 1. If the instructor suspects a student of committing an act of academic dishonesty in any academic exercise submitted for assessment, he/she can meet with the student individually and impose sanction(s) as appropriate except those as prescribed by the relevant regulations, if he/she believes that the nature of such act is not serious.
- 2. If the instructor suspects that a student has committed an act of academic dishonesty in any academic exercise submitted for assessment and considers the case more serious or complicated to be handled by himself/herself:
  - a. The instructor should report the matter as soon as possible, together with any relevant evidence, to his/her Department Head concerned or Programme Coordinator concerned in the absence of a Department Head;
  - b. The Department Head/Programme Coordinator should attach his/her comments, if any, and forward the case to the Dean/Director for handling.
- 3. The Dean/Director or his/her delegate should meet with the student and any other relevant parties to investigate.
- 4. After the meeting with the student and any other relevant parties, if the Dean/Director or his/her delegate is satisfied that no act of academic dishonesty has been committed, no further action will be taken and the case will be closed. A written report of the case should be kept by the academic unit concerned for record purpose.
- 5. If the student is proven guilty of the alleged offence, the Dean/Director may impose the following sanction, according to Item 1 of Article 5 of the Regulations of the Student Discipline of the University of Macau, either singly or in combination as deemed appropriate, and the result will be reported in writing to the Student Disciplinary Committee for record:
  - a. Verbal or written warming;

- b. Reprimand;
- c. Restitution or compensation, where applicable;
- d. Suspension of any academic or other student rights, benefits, privileges and/or rights of using facilities for a specified period of time;
- e. Recording a demerit.
- 6. The Dean/Director should inform the student in writing of the judgment and the sanction(s) and send the notification to the student by registered mail. The Dean/Director should also inform the Department Head/Programme Coordinator concerned of the disciplinary decision in writing. The case will then be closed at the academic unit level.
- 7. If more severe sanctions are deemed necessary, the case will be sent to the Student Disciplinary Committee via the Dean/Director in accordance with Item 2 of Article 5 of the Regulations of the Student Discipline of the University of Macau, for the Committee to decide on the appropriate sanction. The composition of such Committee shall be defined by Item 1 of Article 9 of the Regulations of the Student Discipline of the University of Macau.
- 8. Under the following circumstances, the academic unit may consider bringing the case to the Student Disciplinary Committee for further investigation and decision:
  - a. The Dean/Director or his/her delegate believes that he/she is not able to make a decision based on the available evidence;
  - b. The case is too severe or complicated to be handled by the academic unit concerned;
  - c. The case involves persons who are not members of the university community.
- If the Student Disciplinary Committee finds the student not guilty after an investigation, the case will be closed. A written report of the case should be kept by the Student Disciplinary Committee and a copy shall be sent to academic unit concerned for information and record.
- 10. If the Student Disciplinary Committee finds the student guilty of academic dishonesty after an investigation, it may impose, apart from the sanctions in 5 (b)-(e) above, the following sanction in accordance with Item 1 of Article 6 of the Regulations of the Student Discipline of the University of Macau, either singly or in combination as deemed appropriate:
  - a. Suspension from the University for a specified period of time;
  - b. Expulsion from the University.
- 11. Under special circumstances and subject to approval by the relevant authority, the Rector may impose on students/graduates sanctions which are not stipulated in the internal regulations and rules of the University of Macau, including but not limited to:
  - a. An F grade for the course taken;
  - b. Removal of course credits;
  - c. Retraction of a qualification granted by the University.
- 12. In deciding on the sanction, the nature and gravity of the offence should be taken into account (such as the amount of work plagiarized, whether the offence is premeditated, etc.). The number of previous offences also needs to be taken into account. More serious punishments should be imposed for repeated offences.
- 13. The Student Disciplinary Committee should inform the student in writing of the judgment and the sanction(s) and send the notification to the student by registered mail. The Student Disciplinary Committee should also inform the Dean/Director concerned, the Registrar and the Dean of Students of the disciplinary decision in writing.
- 14. Any sanction imposed on a student according to the Regulations of the Student Discipline of the University of Macau should be filed with the academic unit concerned and kept as

part of the student's file.

- 15. To denote that the student has committed an academic offence in the course, a notation of academic dishonesty can be included on the student's transcript, at the discretion of the Student Disciplinary Committee. At the discretion of the academic unit concerned or the Student Disciplinary Committee, the student may be informed that the notation will be removed at graduation if he does not commit more than one offence. However, if he commits two or more offences, during the same term or in different terms, the notation will appear on the official transcript permanently.
- 16. An appeal against any fact finding or any sanction imposed by the Dean/Director may be made within 10 working days to the Student Disciplinary Committee according to Item 1 of Article 10 of the Regulations of the Student Discipline of the University of Macau. Appeals must be in writing and the proceeding and final decision with respect to the appeal should follow the stipulations in Items 5 to 8 of Article 4 of the Regulations of the Student Affairs of the University of Macau.
- 17. An appeal against any fact finding or any sanction imposed by the Student Disciplinary Committee may be made within 10 working days to the Rector according to Item 1 of Article 11 of the Regulations of the Student Discipline of the University of Macau. Appeals must be in writing and the composition of the appeal panel, the proceeding and final decision with respect to the appeal shall follow Items 3-5 of Article 11 of the Regulations of the University of Macau.

## Undergraduate Curriculum Model & General Education Programme

# Undergraduate Curriculum Model & General Education Programme

The following undergraduate curriculum model was implemented from academic year 2019/2020 onwards:

Course Types		No. of Credits
1.	Major (CM + RE)	40 – 66
2.	Community and Peer Education (CPE)	3
3.	Languages and Skills^ (L&S)	3 – 15
4.	General Education (GE)	24 – 27
5.	Free Elective (FE)	9 – 50
Minimum Credit Requirement		120

Students who test out of the Languages and Skills course(s) are required to make up the credits by taking additional Free Elective(s).

## **Community and Peer Education**

The Community and Peer Education courses focus on experiential learning. They are run jointly by the Faculties and the Residential Colleges (RC).

Community and Peer Education Courses	No. of Credits	Suggested Year Level
CPED1000 - Residential College Experiential Learning	1	1
CPED1001/1002 - Physical Education I/II	0.5 each	1
CPED2001 - Residential College Community Team Project	1	2

# Languages and Skills

Languages and Skills is one of the components in the undergraduate curriculum model. It includes 0-9 credits of English language courses, 0-3 credits of Chinese and Portuguese language courses, and 3 credits of Information Technology course. Students can test out of some of the language course(s) but will be required to make up the credits by taking additional Free Elective(s).

Languages and Skills Courses	No. of Credits
<sup>1</sup> English Language	
University English	
EELC1011 - University English I	3
EELC1012 - University English II	3
EELC1013 - University English III	3
Academic English	
EELC2008 – Academic English: Speaking	3
EELC2009 – Academic English: Writing	3
EELC2010 – Academic English: Project-based Learning	3
English for Specific Academic Purposes	
EELC2011 – English Speaking for Academic Research	3
EELC2012 – English Writing for Academic Research	3
EELC2013 – English Integrated Skills for Academic Research	3
<sup>2</sup> Chinese or Portuguese Language	
CHLL1000 - University Chinese	3
PORT1000 - Portuguese Language I – Introductory Portuguese	3
<sup>3</sup> Information Technology	
CISC1000 - Information Technology Fundamentals and Practices	3

<sup>1</sup> Please refer to the Registry's website (<u>https://reg.um.edu.mo/current-students/curriculum-model/languages-and-skills/</u>) for details about the course requirements of English language courses.

<sup>2</sup> Students can choose either Chinese or Portuguese language.

<sup>3</sup> Students cannot test out of the Information Technology course.

# **General Education Programme**

Students are required to fulfil the General Education requirement as follows: (Please refer to the Registry's website (<u>https://reg.um.edu.mo/current-students/curriculum-model/ug-curricu</u>

General Education Courses	No. of Credits	Suggested Year Level
Global Awareness		
<sup>1</sup> GEGA1000 - Macao and Chinese Civilization	3	1
GEGA1003 - Global Justice and the Creative Economy	3	1
GEGA1004 - Global History of Medicine	3	1
GEGA1005 - World History through Maps	3	1
GEGA1006 - Green Energy for Global Society	3	1
GEGA1007 - Nutrition in Health and Disease	3	1
GEGA2001 - Greater China and the Global Economy	3	2
GEGA2002 - Education and Globalization	3	2
GEGA2003 - Global Media	3	2
GEGA2010 - Migration and Multicultural Society	3	2
GEGA3001 - Understanding International Politics	3	3
GEGA4000 - Global Politics and Wealth	3	4

<sup>1</sup> Compulsory General Education course for all students.

General Education Courses	No. of Credits	Suggested Year Level
Literature and Humanities		
<sup>1</sup> GELH1000 - Chinese Language and Culture	3	1
GELH1001 - Chinese Languages and Chinese Communities	3	1
GELH1002 - Popular Literature and Life	3	1
GELH1003 - Contemporary Artistic Expressions in the Portuguese-Speaking World	3	1
GELH1008 - Trade, Empire and Globalization	3	1
GELH2000 - Creativity and Writing: English for a Global Readership	3	2
GELH2001 - Sex and the Arts	3	2
GELH2002 - The Holocaust, Genocide and Human Rights	3	2
GELH2003 - Visual and Performing Arts – Drama	3	2
GELH2004 - Visual and Performing Arts – Music	3	2
GELH2005 - Visual and Performing Arts – Visual Art	3	2
GELH2007 - History of Western Civilization	3	2
GELH2008 - Asian Values and Moral Traditions	3	2

<sup>1</sup> Compulsory General Education course for all students.

General Education Courses	No. of Credits	Suggested Year Level
Science and Technology		
<sup>1</sup> GEST1001 - Quantitative Reasoning for Business	3	1
<sup>2</sup> GEST1002 - Quantitative Reasoning for Social Sciences	3	1
<sup>3</sup> GEST1003 - Quantitative Reasoning for Health Sciences	3	1
<sup>4</sup> GEST1004 - Quantitative Reasoning for Science and Technology	3	1
GEST1005 - Internet, Business and Society	3	1
GEST1006 - Logic and Reasoning for Business	3	1
GEST1007 - Fun in Health Science	3	1
GEST1008 - Exploring the Earth	3	1
GEST1009 - Multimedia Technology in Modern Society	3	1
GEST1010 - Chemistry and Modern Society	3	1
GEST1011 - Environmental Science	3	1
GEST1012 - Electricity and Life	3	1
GEST1013 - Mathematics in Modern Society	3	1
GEST1014 - Mysteries of the Universe	3	1
GEST1015 - Physics and Modern Society	3	1
GEST1016 - Mystery of Chemistry	3	1
GEST1017 - Modern Drug Discovery: Drugs and Health	3	1
GEST1018 - Nutrition and Food Safety	3	1
GEST1019 - Microelectronic Chip Technology in Daily Life	3	1
GEST2000 - Active Lifestyles, Wellness and Sports Science	3	2
GEST2001 - Biology in Our Daily Life	3	2
GEST2002 - Psychology and Health	3	2
GEST2003 - Exploring Chinese Medicine	3	2

<sup>1</sup> Compulsory General Education course for FBA students.

<sup>2</sup> Compulsory General Education course for FAH, FED (except for Bachelor of Education in Mathematics) and FSS students.

 Compulsory General Education course for FHS (except for Bachelor of Science in Bioinformatics) students.

<sup>4</sup> Compulsory General Education course for FED (Bachelor of Education in Mathematics), FHS (Bachelor of Science in Bioinformatics) and FST students.

General Education Courses	No. of Credits	Suggested Year Level
Society and Behaviour		
<ul> <li><sup>1</sup> GESB1000 - Ethics, Values, Law and Society</li> <li>GESB1001 - Applied Ethics</li> <li>GESB1002 - Foundations of Moral Values</li> <li>GESB1003 - Law and Society</li> </ul>	3	1
GESB1004 - Development of Games and Gambling	3	1
GESB1005 - Macao Law and its Real-Life Applications	3	1
GESB1006 - Economics of Everyday Life	3	1
GESB1007 - Understanding Macroeconomic Policies	3	1
GESB1008 - Understanding Government	3	1
GESB1009 - Personal Growth	3	1
GESB1010 - Psychology of Everyday Life	3	1
GESB1011 - Courtship, Marriage and Family	3	1
GESB1012 - Critical Problems in Contemporary Society	3	1
GESB1013 - Everyday Statistics	3	1
GESB2000 - Personal Finance and Wealth Management	3	2
GESB2001 - Food, Eating and Culture	3	2
GESB2002 - Business, Society and Entrepreneurship	3	2
GESB2003 - Creativity and Marketing	3	2
GESB2004 - Public Speaking	3	2
GESB2005 - Art and Society	3	2
GESB2006 - Understanding Population	3	2
GESB2008 - Psychology of Sexuality	3	2

<sup>1</sup> Compulsory General Education course for all students.

# **Rules Governing General Education Programme**

(Approved by the Rector on 10 February 2017)

- 1. The number of required GE Programme credits is 24 to 27 credits depending on the individual Faculty/Programme. The distribution of GE credits among the four GE areas can be designed by individual Faculty/Programme.
- 2. Students must complete four compulsory GE courses:
  - Macao and Chinese Civilization in area of Global Awareness (3 credits)
  - Chinese Language and Culture in area of Literature and Humanities (3 credits)
  - Quantitative Reasoning in area of Science and Technology (3 credits)
  - Ethics, Values, Law and Society in area of Society and Behaviour (3 credits)
- 3. In addition to the four compulsory courses, students are required to complete the remaining GE credits (12 to 15 credits) among the four areas.
- 4. GE course credits cannot be double counted to satisfy other University or Faculty/Programme credit requirement.
- 5. There are no GE substitution courses in this GE model.
- Students registered in the old programmes (2016/2017 or before) will be allowed to take the new GE courses to fulfil the GE requirement if there is a mapping area for 2011/2012 model.
- 7. Students registered in the new curriculum model will be allowed to take any additional GE courses to fulfil the free elective requirement.
- 8. Students must observe any additional rules on GE courses selection imposed by their Faculties/Programmes.

# **Course Description**

# **Community and Peer Education**

## CPED1000 RESIDENTIAL COLLEGE EXPERIENTIAL LEARNING

This course is designed to enrich first-year students to collegial life, living and learning opportunities, and residential colleges learning goals at the University of Macau. It provides active learning opportunities which enable students to take responsibility for their transition to university and RC life. The course also serves the function of forming student learning communities, which, facilitated by RC faculty, encourage students to explore a wide range of experiential learning activities in RC competency areas (Citizenship with Global Perspective, Cultural Engagement, Healthy Living, Interpersonal Relations and Teamwork, Leadership and Service) while documenting and assessing their personal growth in an e-portfolio.

## CPED1001/1002 PHYSICAL EDUCATION I/II

Physical Education consists of theory of fitness (Part I) and basic sport concepts, knowledge and skill practice in team sport and individual sport (Part II).

Part I covers sport relevant concepts including the function of sports in life, sports injury prevention & treatment and sport knowledge. Students will learn theory, principle and regulation in fitness and know how to do exercise and workout regularly.

Part II focuses on skill-based physical fitness which includes one team sport and one individual sport.

Students will be guided to apply the concept of fitness sport theory and game strategy with skill when they learn sports for participating in sport and sport practice continuously. Pre-requisite: None

#### CPED2001 RESIDENTIAL COLLEGE COMMUNITY TEAM PROJECT

This course offers students practical experience in communication and leadership through experiential learning in a community team project. Students of different majors will complete a creative team project on an assigned topic to promote specific positive values pertaining to RC character education to an identified audience in the society under the supervision of RC academic staff and the support of community partner(s). They need to acquire related knowledge of the positive values and the targeted audience as active learners themselves during the process. The student teams need to document their project outcomes in electronic form and make physical or online presentations reflecting on the learning process of the team project. Pre-requisite: None

# Languages and Skills

## English Language

## EELC1011 UNIVERSITY ENGLISH I

This is a one-semester Academic English course for elementary English language level students. Students have six class hours, one tutorial hour and an e-learning requirement. This course introduces basic academic listening, speaking, reading and writing skills through students' active participation in diverse and intensive academic and discipline-related activities and assessments at an appropriate elementary level. Simple academic texts and discipline-related materials enhance students' accurate use of basic grammar structures, enlarge their vocabulary and facilitate their development of language skills for a variety of academic contexts. The course provides a foundation for students to develop the academic English skills and abilities necessary for studying at the university level in English.

Pre-requisite: None

## EELC1012 UNIVERSITY ENGLISH II

This is a one-semester Academic English course for low-intermediate English language level students. Students have six class hours, one tutorial hour and an e-learning requirement. This course improves and consolidates academic listening, speaking, reading and writing skills through students' active participation in diverse and intensive academic and discipline-related activities and assessments at an appropriate low-intermediate level. Short academic texts and discipline-related materials enhance students' accurate use of more complex grammar and text structures, enlarge their vocabulary and facilitate their development of language skills for a variety of academic contexts. The course provides practice for students to develop the academic English skills and abilities necessary for studying at the university level in English. Pre-requisite: EELC1011 or a required score in a placement test

## EELC1013 UNIVERSITY ENGLISH III

This is a one-semester Academic English course for intermediate English language level students. Students have three class hours. This course develops and reinforces academic listening, speaking, reading and writing skills through students' active participation in diverse and intensive academic and discipline-related activities and assessments at an appropriate intermediate level. Academic texts and discipline-related materials enhance students' confident use of appropriate grammar and text structures, enlarge their vocabulary and facilitate their development of language skills for a variety of academic contexts. The course provides students with the academic English skills and abilities necessary for studying at the university level in English.

Pre-requisite: EELC1012 or a required score in a placement test

#### EELC2008 ACADEMIC ENGLISH: SPEAKING

This is a one-semester Academic English course for students with an intermediate English language level. Students have three class hours every week. The course requires students to apply the skills they have learned in previous University English or Academic English course(s). Additionally, students will learn to use introductory academic speaking skills. These skills include: logical persuasion, information sharing, meeting facilitation, impromptu speaking, and responding to questions. Students are expected to analyze sample academic speaking. Depending on students' disciplines, they will be introduced to different genres in academic speaking (e.g. oral reports, persuasive/informative speeches, poster presentations, discussions, and oral reflections, etc.).

Pre-requisite: EELC1013 or a required score in a placement test

## EELC2009 ACADEMIC ENGLISH: WRITING

This is a one-semester Academic English course for students with an intermediate English language level. Students have three class hours every week. The course requires students to apply the skills they have learned in University English or Academic English course(s). Additionally, students will learn to use introductory academic writing skills. These skills include: writing summaries and responses, conducting secondary research, evaluating sources, documenting the research process, considering the rhetorical situation, making an argument, paraphrasing from sources, using academic language, and writing coherently. Students are expected to analyze sample academic text for discipline-specific academic features in preparation for advanced academic writing. Depending on students' disciplines, they will be introduced to different genres in academic writing (e.g. essays, reports, case studies, research proposals, book reviews, literature reviews, reflective writing, etc.).

Pre-requisite: EELC1013 or a required score in a placement test

#### EELC2010 ACADEMIC ENGLISH: PROJECT-BASED LEARNING

This is a one-semester Academic English course for students with an intermediate English language level. Students have three class hours every week. The course requires students to apply the skills they have learned in University English or Academic English course(s). In groups, students will learn to use introductory academic writing and speaking skills to design and implement their multigenre/multimodal projects. These skills include: primary/secondary research, critical thinking skills, problem-solving skills, writing/presentation skills, teamwork, etc. Through experiential learning, students will be guided to observe, collect information, persuade, and generate a writing/speaking product.

Pre-requisite: EELC1013 or a required score in a placement test

#### EELC2011 ENGLISH SPEAKING FOR ACADEMIC RESEARCH

This is a one-semester academic speaking course for students with an upper-intermediate English language level. Students have three class hours every week. The course also addresses the information literacy and higher-order thinking skills necessary for conducting extensive secondary research, constructing ideas, providing evidential support, and structuring ideas coherently in spoken academic settings. Students develop both verbal and non-verbal communication in small and large group academic settings. Students will critically evaluate their own and others' performances, and will learn how to utilize a variety of technology enhanced communication tools. Other skills addressed in this course include critical thinking and argumentation.

Pre-requisite: EELC2008, EELC2009, EELC2010 or a required score in a placement test

#### EELC2012 ENGLISH WRITING FOR ACADEMIC RESEARCH

This is a one-semester academic writing course for students with an upper-intermediate English language level. Students have three class hours every week. This course addresses the information literacy and higher-order thinking skills necessary for conducting extensive secondary research, providing evidential support, and structuring ideas in coherent written academic texts. Students spend time responding to multiple drafts of peer academic papers to improve precision and clarity in the writing process. Other specific skills addressed in this course are critical thinking and argumentation.

Pre-requisite: EELC2008, EELC2009, EELC2010 or a required score in a placement test

#### EELC2013 ENGLISH INTEGRATED SKILLS FOR ACADEMIC RESEARCH

This is a one-semester integrated academic language course for students with an upperintermediate English language level. Students have three class hours every week. Students will engage in data gathering, analysis and interpretation skills and communicate research results effectively in academic presentation or report formats. Students will critically evaluate their own and others' performances, and will learn to utilize a variety of technology-enhanced tools to aid in preparing and communicating academic concepts and findings. Upon completion, students are expected to have acquired a basic understanding of primary academic research methods and have developed techniques to effectively communicate concepts and research results. Pre-requisite: EELC2008, EELC2009, EELC2010 or a required score in a placement test

## Chinese or Portuguese Language

#### CHLL1000 UNIVERSITY CHINESE

This course covers topics such as characteristics of Chinese language, its significance as one of the global languages, its relationship with Chinese cultures and communities, and its expression in Chinese literature and practical usage. The focus of the last topic may change in accordance with the expertise of individual instructors, possible areas including traditional Chinese poetry, traditional Chinese fiction and drama, modern Chinese literature, contemporary Chinese literature, and Chinese literature in the world. This is a discussion-oriented, student-

centered course in which all students are expected to engage in class discussions and critical analysis of the reading materials. Those reading materials will be focused on the different diversity courses techniques of those students from different majors. Presentation and communication techniques will also be gained.

## Pre-requisite: None

#### PORTUGUESE LANGUAGE I - INTRODUCTORY PORTUGUESE **PORT1000**

Principles of written and oral language. The comprehension and conversation through exercises in the class and language laboratory. The grammar fundamentals obtained through the use of simple pronunciation and reading materials.

Pre-requisite: None

# Information Technology

#### INFORMATION TECHNOLOGY FUNDAMENTALS AND PRACTICES **CISC1000**

This foundational course introduces and explores the impact of information technology (IT) in our modern society. The course is designed to provide the fundamentals and practices for an effective use of IT in our daily lives. The course is divided in three modules:

- Module I introduces the fundamentals of IT, the Internet and the Web, connectivity and mobility. and important issues in computer privacy, security and ethics.
- Module II focuses on application software for computers and mobile devices.
- Module III explores computer hardware and computer software, mobile devices and apps, communication and networking.

Pre-requisite: None

## **General Education Programme**

## Global Awareness

#### MACAO AND CHINESE CIVILIZATION GEGA1000

This GE course will provide an introduction to the history of Macao, focusing on the global processes that impacted the city's development and how this in turn helped shape the course of Chinese history from the sixteenth century (1500s) to the present. The aim is for students to engage with the history of Macao from international and local perspectives to gain an introductory

understanding of the role Macao has played in the intertwined histories of China and Eurasia. Through this, students should gain an appreciation for Macao's role in mediating China's relations with the wider world and how this has impacted China's transformation and development. This

course should help students understand how Macao's unique political, economic, and social position affected China's national development as well as the evolution of the Greater Bay Area. Pre-requisite: None

#### GLOBAL JUSTICE AND THE CREATIVE ECONOMY GEGA1003

Is there and can there be "global justice"? Can someone lie and say the truth, be guilty and innocent, smile and glower, be happy and sad, or happy and poor as well as sad and rich at the same time? What defines and drives the "creative economy"? Is it money and profits, work or satisfaction, or physical or mental labour, efficiency or creativity, or competition or cooperation? And how are global justice and the creative economy intertwined? These are only a few selected questions that point to a deeper problem encountered in the 21st century, which was also referred to as the Age of Paradox (Handy, C., 1995). It is a problem that also connects the two concepts "global justice" and "creative economy". Already each of the two concepts alone currently poses serious challenges to individuals, municipalities, regions, states as well as the world community as a whole. In combination, the complexity of their meaning rises drastically, often leading to a sentiment of confusion, paralysis, or disorientation. Thus, the challenges they pose are reflected in the many thousand decisions that we take on a daily basis, whether consciously or unconsciously, individually or collectively, as well as wisely or foolishly. The two concepts have in common their nature as, what has been called, "essentially oxymoronic concepts all share that, by uniting apparently opposite statements or truths, their meaning contains some varying degree of contradictions, which pose a problem to a classical or binary logic of someone being either right or wrong, but not both at the same time.

In the case of 'global justice', the contradiction can be found in the presumption that "justice" is already difficult to establish within a single country or its legal system and even more so at the global level, with its multitude of different legal systems, cultures and languages. Similarly, the term 'creative economy' has evolved from the oxymoron 'culture industry", i.e. two terms representing cultural activity on the one hand and economic activity on the other, which in the past were widely regarded as not only separate but also incompatible. Together they give rise to many more such concepts, like "glocalisation", "coopetition", or the many "paradoxes of happiness", which, in line with the unique features of a place like the Macao SAR, will be discussed in the course from a both Eastern and Western perspective.

#### GEGA1004 GLOBAL HISTORY OF MEDICINE

Health is a crucial issue in global history. As nobody escapes disease and death, healing traditions have developed in all parts of the world. This course is a fascinating exercise in which we will explore, on the one hand, the development of medical thought, concepts and ideas as well as shifting patterns of medical practices and therapeutic treatments in world history. On the other hand, we will focus on the transmissions, interactions and exchanges of healing traditions, pharmacopeia and related religious worldviews, and this over a space stretching from Europe across Asia, from China and India to West Asia and the Americas. We will reflect on the close relationships between medical thought and the prevailing political, social, economic and cultural conditions that unavoidably shape man's living conditions. Moreover, we will uncover that there are all-encompassing and cross-cultural parallelisms showing that civilizations and cultures are not discrete and unalterable units, but have been subjected time and again to external influences and impacts. With a true interdisciplinary and comparative approach and with due attention paid to primary sources this course aims at promoting an awareness of the historical forces that have moulded, and continue to shape, medicine in the world and that help us to reach a deeper understanding of what defines modernity. This general education course is conceived to be an interactive forum in which for some of the individual sessions a selected number of international Eastern and Western specialists in the history of medicine and medical humanities will present their innovative perspectives.

Pre-requisite: None

#### GEGA1005 WORLD HISTORY THROUGH MAPS

This GE course aims to introduce selected topics in world history through the medium of maps. It will not be a course in the history of cartography. Rather, starting from map analysis, students will explore selected topics, such as world maps, east-west interaction, imperialist cartography and cartography in Macao from the different perspectives of art history, social history, the history of science, etc. The focus will be on the connections between continents and peoples, with a large part of the course devoted to the cultural exchanges between Europe and Asia, one of the department's main areas of research.

Pre-requisite: None

#### GEGA1006 GREEN ENERGY FOR GLOBAL SOCIETY

The course will focus on the challenging issue that our human being is facing – The Energy. The course will talk the importance of energy to our future society, energies in old forms (such as oil and coal) and their detrimental effects, and the solutions to the challenge in the future. The contents will cover all of the green energies, including solar energy, wind energy, hydrogen energy, tidal energy, hydroelectricity, Biomass, Geothermal Power, and others (such as ocean, and hot hydrogen fusion), and energy storage. In addition, topics on air pollution and global warming will be investigated.

Pre-requisite: None

#### GEGA1007 NUTRITION IN HEALTH AND DISEASE

This course aims to provide the understanding of how nutrition advances are made and a view of the relationship between diet, nutrition and disease in detail. It also introduces the role of nutrition in global health. There is now a large body of evidence demonstrating that the satisfaction of nutritional needs is mandatory to human life. This course includes the dietary causes of chronic diseases related to lifestyle, such as hypertension, coronary heart disease, diabetes, obesity, and cancer. The course covers the methodology used to determine dietary, nutritional and health status and how evidence is gathered to determine the links between diet, nutrition and health.

Pre-requisite: None

#### GEGA2001 GREATER CHINA AND THE GLOBAL ECONOMY

Greater China includes Mainland China, Hong Kong, Macao and Taiwan. This course introduces to students the background and features of each region within Greater China. It especially covers the social and economic changes of Mainland China in the pre- and post- reform periods, its economic structure, its 5-year plans, and their implications for Asia and the entire world. The reform & opening-up policy, foreign direct investment, and international trade have transformed Mainland China into a significant global trader. Its social and economic integration with Hong Kong, Macao, and Taiwan is being deepened through CEPA, ECFA, and other agreements. Renminbi as an emerging reserve currency, the One-Road-One-Belt strategy, the Asian Infrastructure Investment Bank, and the new four China Free Trade Zones are the latest events of development important for economies and society in the Asian and European continents. All these topics will be discussed in this course.

Pre-requisite: None

#### GEGA2002 EDUCATION AND GLOBALIZATION

Globalization has become a centerpiece in our times when increasing economic, cultural, and educational interconnections propel nations and citizens to think globally and act locally. Drawing on international scholarship, this course aims to help students make sense of this multi-faceted phenomenon of globalization and examine key themes, issues, and trends that affect education around the world. A variety of topics will be discussed and students will be given opportunities to reflect and analyze their own educational system in relation to these themes and issues. No prior course work on related topics is required.

Pre-requisite: None

#### GEGA2003 GLOBAL MEDIA

The course aims to provide students with a set of literacies specific to the cultural field of the global mass media. Most of the information and knowledge, and also the ideas, opinions and attitudes, which students have about the world are derived from (increasingly digitally linked) media outlets and sources. However, while students utilize the media intensively, they do so with a relatively undeveloped (often merely tacit) understanding of the field's logics, values, discourses, genres and forms of address. Consequently students lack the ability to distinguish between different sources and levels of information, and have little idea how to critically evaluate the representations and presentations provided through the media. In this course students will learn about the mass media as a cultural field, and how to approach and utilize it as informed and literate users. This level of literacy will be demonstrated in a project that they will be required

to complete at the end of the semester, and also in oral presentations that groups will give on selected case studies. The course will also have a strong visual literacy component, whereby students will learn how audio-visual texts utilize combinations of visual, spoken and written language and signs to produce meanings and narratives for, and to hold the attention and influence the ideas and practices of, media audiences. Part of the feedback from the oral presentations will be directed to the kinds of literacies and techniques that help produce effective audio-visual texts: in this way the course will help students to learn both analytical & practical oral, visual and written communication literacies.

Pre-requisite: None

#### GEGA2009 GLOBAL PUBLIC HEALTH

Global public health is concerned with understanding the distribution of illness in diverse cultural and geographic contexts around the world. It also focuses on identifying the underlying determinants that influence health and evaluating programs and policies that can improve health. In this course, students will explore key global health issues including obesity, tobacco, cancer, cardiovascular disease, HIV/AIDS, mental health, and the social, cultural, and economic determinants of health. This course is interdisciplinary in nature and will explore global public health by borrowing perspectives from psychology, anthropology, sociology, economics, health communication, and behavioural health.

Pre-requisite: None

#### GEGA2010 MIGRATION AND MULTICULTURAL SOCIETY

Migration is a fundamental feature of our lives. In Macao, our ancestors and family may have left home, settled and created a migrant society together with other groups. In the era of globalization, technological development facilitates further mobility, but new control mechanisms and borders also increasingly regulate and limit our mobility. This course offers a holistic view of the migration process from multiple perspectives. We will introduce macro factors structuring migration patterns and volume; how problems and crisis such as refugees and human trafficking affect the global politics and international relations. We will discuss migration policies of different countries and how they condition the migrants' entry, exit, settlement and entitlement to citizenship, as well as societal views toward different migrant groups. Students will also learn to look at migrants' identities and social networks through their own migration experiences or their family's migration history.

Pre-requisite: None

### GEGA3000 GLOBAL BUSINESS AND CULTURES

Businesses, especially multinational corporations, play prominent role in the increasingly globalized world.

This course will therefore analyze how the contemporary global business environment and the free market economy has been evolving since the first publication of Adam Smith's "The Wealth of Nations" in 1776 and the world's first stock exchange invented by the Dutch in 1602 (i.e., Amsterdam Stock Exchange). As the contemporary business environment is highly globalized, this course will also adopt a cultural perspective on how to deal with counterparts from different parts of the world. Specifically, how different nations' cultures and the organizational cultures interact and affect the behaviors of employees will be discussed. The aim is to equip students a thorough understanding of how the contemporary business environment has been evolving and the skills to adapt to the latest development of globalization with cultural sensitivity. In addition to exposing to these historical, cultural and managerial dimensions of global business environment, students will also learn what modern business corporations need to adapt in the global business environment and develop individual sensitivity and competence in the global work context.

Pre-requisite: None

#### GEGA3001 UNDERSTANDING INTERNATIONAL POLITICS

The field of world politics presents us with some of humanity's most difficult problems. Why do wars happen? Why are some countries rich and others poor? Why is it so hard to get countries

to cooperate? Is change possible in world politics or is humanity doomed to repeat the same political drama over and over again? This course introduces students to the fundamentals of international relations theory and how to employ theory to analyze important topics in world politics, such as the development of international institutions, the causes of war, transnational norms, and the role of non-state actors.

Pre-requisite: None

#### GLOBAL POLITICS AND WEALTH GEGA4000

This course examines the political process of international economy, and the interaction between state and market, and between power and wealth in international relations. The course will present:

- 1. the history of international political economy;
- 2. basic theories and different schools and approaches;
- 3. analysis of basic issues on trade, investment, development, globalization and regional integration: and
- 4. examination of the interactions between the rising China and the global economy.

Pre-requisite: None

# Literature and Humanities

#### GELH1000 CHINESE LANGUAGE AND CULTURE

This is an introductory course to the key features of Chinese language and culture, with a special focus on the interplay between language and thought. The course will present a couple of case studies on how Chinese language influences the Chinese ways of thinking, how it shapes our understanding of Chinese philosophy, and how it gives rise to the debate regarding the comparison between Chinese and Western philosophy.

Pre-requisite: None

#### GELH1001 CHINESE LANGUAGES AND CHINESE COMMUNITIES

In this course the students expand their knowledge of Chinese languages and Chinese communities and understand language phenomena as an expression of culture and as a function of society. Through readings, discussions and mini-projects the students apply the sociolinguistics knowledge introduced to answer academic and practical questions. Global and local language situations are surveyed in a Chinese perspective and current issues in language matters are analyzed. Through problem-solving exercises, the students hone their skills of critical thinking, communication and collaboration.

Pre-requisite: None

#### GELH1002 POPULAR LITERATURE AND LIFE

Through classroom instruction for students to grasp the knowledge of Chinese Popular Literature such as: fiction, opera, folk song, etc. Topics such as the analysis and interpretation of texts, themes, psychology and sociological studies of selected masterpieces will be covered. Works discussed will focus on the connection with the life and experience of students, and include the different kinds of theme and genre of popular literature.

Pre-requisite: None

#### GELH1003 CONTEMPORARY ARTISTIC EXPRESSIONS IN THE PORTUGUESE-SPEAKING WORLD

In this course students will be introduced to the vibrant diversity of the artistic scene in the Portuguese-speaking countries, addressing the way they dialog with each other and establish multidirectional exchanges among them. The course will explore how the crosscurrents of artistic debate in the twentieth century have been particularly prolific in stressing the tension between tradition and innovation, center and periphery, convergence and divergence, especially in the aftermath to the postcolonial redefinition of these countries. Pre-requisite: None

## GELH1008 TRADE, EMPIRE AND GLOBALIZATION

This course traces the historical origins of globalization, examining the long-distance trade and imperial expansion that increasingly linked regions of the world together from around the year 1500. The course follows these phenomena through the modern period and up to the present. It explores how the lives of people around the world have changed in response to the globalization of society, culture, politics, and the economy.

Pre-requisite: None

### GELH2000 CREATIVITY AND WRITING: ENGLISH FOR A GLOBAL READERSHIP

In this course students learn to express themselves creatively through the medium of English. While the main emphasis is on story making, students experience a range of creative texts (including stories, poems, songs and films), as models for their own imaginative work.

Students will learn to write simple texts in key creative genres: for instance different types of poem, short story and life writing (biography and autobiography). Learning to tell and write stories, individually and in groups, students gain confidence in expressing themselves and in constructing a narrative from different points of view.

Working from lecture to discussion mode, class time is largely devoted to understanding how simple stories work and to practising basic techniques of storytelling. Group work, in-class performance and writing for a global audience are integral to the course. Reading and homework assignments set from week to week challenge the student to create engaging creative texts from memory and imagination. Assessment is by individual portfolio including an agreed combination of individual and group work in different genres.

Pre-requisite: None

#### GELH2001 SEX AND THE ARTS

Physical relationship presents itself one way or another in everyday life and discourse. This course invites students to go beyond the biology and mechanics of human sexual behaviours and think about the aesthetics of eros as featured in the arts. Students will be introduced to an array of historical and contemporary representations, narratives and discussions of sex in visual arts (paintings, sculptures and films), music (from classical art songs and operas to hip hop lyrics and MVs) and literature. 'Sexuality in the Arts' considers how various forms of artistic creation reflect and shape perception and symbolism of sex in a range of historical and cultural domains. Material of discussion will be chosen from both Asian and Western contexts. Pre-requisite: None

### GELH2002 THE HOLOCAUST, GENOCIDE AND HUMAN RIGHTS

This course introduces students to the Holocaust, the systematic murder of the Jews of Europe by the Nazi regime between the years 1939 and 1945. In seeking to understand how the Holocaust happened, students will be introduced first to concepts like racial prejudice and other forms of discrimination, anti-Semitism, and the role of nationalism in creating concepts of the Other. The course will study the rise of the Nazi Party in Weimar Germany, its accession to power in 1933 and the systematic denigration of, and discrimination against, Jews from the years 1933 to 1939. The course will discuss the power of propaganda, the effects of discriminatory laws excluding Jews from all areas of public life and how these lead first to the mass murder of Jews in eastern Europe (Operation Barbarossa) and then the Final Solution, with the establishment of death camps, of which Auschwitz-Birkenau is but the most infamous. This course will also address the issue of genocide, how the Holocaust lead to the concept of genocide, first described as such by Raphael Lemkin in 1943 and subsequent international treaties seeking to prevent further genocides. The course will look at other genocides, including Armenia, Cambodia, Rwanda, and Darfur. Special attention will also be paid to the Japanese invasion of China, the Nanjing Massacre and Unit 731 in Manchuria. Pre-requisite: None

#### GELH2003 VISUAL AND PERFORMING ARTS – DRAMA

This course consists of two major components: art introduction and drama. This course is designed to acquaint students with the vocabularies and concepts for critiquing and analyzing

performing arts. It examines the functions of dramatic art from social and global perspectives, and it encourages students to develop judgment in analysis and criticism of drama as a performing art form. Students will gain an overview of the generic concepts and historical movements in different forms of drama across eras and cultures. In the drama component, students will be introduced to the form and function of dramatic literature in relationship to theatrical performance. Study of plays as texts will lead to rehearsal and performance of selected scenes/acts from plays.

Pre-requisite: None

#### GELH2004 VISUAL AND PERFORMING ARTS – MUSIC

This course aims to encourage students to explore an extensive array of music genres throughout the history of Western and non-Western cultures and nurture a positive attitude and appreciation toward music. The students will learn to comprehend the elements of music (i.e., pitch, melody, rhythm, harmony, and form) and commonly used terminologies illustrated in major compositions. The students will travel through different periods (i.e., from the Middle Ages to the Contemporary Era) and listen to distinguished musical features associated with major composers and their popular works. Finally, the students will connect this knowledge to the present context that music has become prevalent in our daily lives (i.e., music in movies or public places). The proportion of Western music is approximately 70%, whereas that of non-Western music (i.e., Chinese or other Asian cultures) is 30%.

#### GELH2005 VISUAL AND PERFORMING ARTS - VISUAL ART

Artworks of different genres have been delighting people from all ages and all places. We enjoy their beauty and their articulation, but we know nothing or very little about their creation process. The practice of aesthetic appreciation of art enables us not only to enjoy art through deeper understanding of the works, but also to recognize and realize our creative potential and capability, as well as to cultivate and broaden our vision of artistic culture. The course will be taught in two parts: Firstly, Introduction to visual and performing arts, which includes common lectures on What is Art? Art and Culture, Understanding Art Genres, Approaches to Art Appreciation. Secondly, Introduction to Visual Arts – Form, Style & Culture, which includes lectures designed to equip the students with basic knowledge of the different visual art forms and teach them how to appreciate and interpret such artworks by illustrating the relationship between form/style and theme/culture. Masterpieces from different regions/places reveal not merely local colors, but also Pre-requisite: None

#### GELH2007 HISTORY OF WESTERN CIVILIZATION

This course examines the evolution of western civilization from antiquity to the eighteenth century. Over the course of the semester, students will develop an understanding of how the concept of "western civilization" – that is taken to mean, the social and cultural norms, ethical values, traditional customs, religious beliefs and political systems of "the west" – were based historically on a series of cultural borrowings – artistic, literary, intellectual and political – between rivalling states and empires based mainly in Europe. With the rise of Christianity in the Late Roman Empire, students will examine how peoples in Europe gradually became aware of themselves and the lands they inhabited as being "western", and of being part of a "western civilization" . Defining themselves first against other powerful civilizations, most notably Islamic civilizations in "the East", this process quickly gathered speed in the sixteenth century as Europeans gradually moved to other parts of the world and began encountering other "non-western" peoples from Asia, Africa and the Americas.

#### GELH2008 ASIAN VALUES AND MORAL TRADITIONS

This course introduces students to major moral traditions (for example: Hinduism, Buddhism, Confucianism, Daoism, Shinto, or Bushido) in Asia. Close attention is given to basic values and ethical categories (for example: karma, samsara, moksha, dharma, ren, li, or dao) that have

informed Asian moral discourse with special reference to the pivotal role of these values and categories in shaping social, economic, and political life in Asian societies. Pre-requisite: None

## Science and Technology

## GEST1001 QUANTITATIVE REASONING FOR BUSINESS

This course aims at providing students a sound foundation in mathematics that is required for future courses in quantitative methods and economics, as well as for some business subjects. The course also discusses how to apply quantitative techniques in dealing with some business and economic problems. By exposing the students to various business and economic applications through a wide range of mathematical procedures, the students not only will get familiar with numerous business procedures that require the use of mathematics, but will also be able to use mathematics to solve some basic business problems. Pre-requisite: None

#### GEST1002 QUANTITATIVE REASONING FOR SOCIAL SCIENCES

The goal of this course is to develop students' quantitative reasoning skills through the enhancement of their mathematical and statistical literacy. The content of this course includes managing your money, logic, probability and statistics and basics of mathematical modelling. Real-life applications will be emphasized.

Pre-requisite: None

#### GEST1003 QUANTITATIVE REASONING FOR HEALTH SCIENCES

The goal of this course is to develop students' quantitative reasoning skills through the enhancement of their mathematical and statistical literacy. The content of this course includes financial mathematics, logic, statistics, and linear programming and optimization. Application examples for health sciences will be emphasized.

Pre-requisite: None

## GEST1004 QUANTITATIVE REASONING FOR SCIENCE AND TECHNOLOGY

This course aims at providing a solid foundation of one variable calculus for science and technology students. The topics include basic reasoning skills, limit and continuity, derivative and its applications, integral and its applications.

Pre-requisite: None

## GEST1005 INTERNET, BUSINESS AND SOCIETY

The emergence of Internet has changed society significantly. One of the main reasons for the tremendous changes is the popularity of Internet services offered to Internet users who make use of them in both business and personal life. This course will, therefore, introduce some popular and important Internet services to students and describe how they improve the operational efficiency in business and society. In addition, there is discussion of Internet security and privacy issues.

Pre-requisite: None

#### GEST1006 LOGIC AND REASONING FOR BUSINESS

This course is to introduce the basic concepts of logic, apply the knowledge in the context of daily applications and reasoning and to enhance student's generic analytical ability in the area of business operations and strategy. The course will make use of various business scenarios to provide the students with training in thinking methods, different ways in solving the same problem, not just only the knowledge of the techniques of logic. Topics include concepts of logic and reasoning, logic puzzles, propositional logic, syllogistic logic and predicate logic. Pre-requisite: None

### GEST1007 FUN IN HEALTH SCIENCE

This course introduces important topics related to health in daily-life including the effect of environment, nutrition, and genetics on health, healthy aging, and mental and physical well-

being. Biotechnology innovations and lifestyle modifications that can impact human health will be introduced. The course will be taught from a biological, biomedical, and biotechnological perspective. Students will participate in regular fun educational activities related to health sciences that illustrate and enforce the concepts learned in class. Pre-requisite: None

#### GEST1008 EXPLORING THE EARTH

An introduction to major principles of physical geology covering the structure of the Earth, plate tectonics, volcanism and mountain building processes, weathering, sedimentation and rock formation, metamorphism and rock cycle, mass movement, earthquake, surface and underground water process, water and climate change. Pre-requisite: None

## GEST1009 MULTIMEDIA TECHNOLOGY IN MODERN SOCIETY

The aim of this course is to introduce and explore the impact of multimedia technology in different aspects of modern society. The contents include visual communications, digital content in website, digital effects, moving image, new media possibilities and experience. The course is also designed to provide the fundamentals and practices for popular technologies and application software for 2D and 3D composition in our daily lives, such as Adobe Photoshop, Autodesk 3DS Max, etc. Lastly the course explores the creativity in interactive and tangible media, and possible research areas in multimedia.

## GEST1010 CHEMISTRY AND MODERN SOCIETY

This course is designed for students that are non-chemistry majors and will be taught with a physical science basis. This course relates application of chemistry to the benefits of modern society. It provides an introduction to the study of the properties and changes in matter. Course emphasizes topics such as: sustainable future, global climates, energy usage followed by their applications in synthetic plastics, medical drugs, food nutrition, genetic engineering, and modern materials.

Pre-requisite: None

## GEST1011 ENVIRONMENTAL SCIENCE

Throughout this course, students can better understand the unity and diversity of life interacting with the surrounding environments. Such major topics as population ecology, community interactions, ecosystems/biogeochemical cycles, biosphere and human impact on biosphere, and animal and social behavior will be covered. Students will also learn the unifying concepts in biology, the cellular basis and the ongoing flow of life, plant and animal systems and their control, and ecology and behavior; and so that students will be able to explore physical and biogeochemical processes and appreciate the importance of the quality of environment. Pre-requisite: None

#### GEST1012 ELECTRICITY AND LIFE

This course is about the study of physical science for non-engineering students with emphasis on basic electricity related topics. The focus of the course is not only the elementary physics of electricity; but also enlightening applications in Energy, Telecommunication, Health and Safety of electricity for the human life. Some demonstrations and hand-on experiments are also arranged to provide hand-one experiences and insights for the students on the relative topics. Pre-requisite: None

## GEST1013 MATHEMATICS IN MODERN SOCIETY

The aim of this course is to enhance students' mathematical literacy and interest. It emphasizes the relevance and practicality of mathematics in modern society. Through the study of different applications, students will see how mathematics comes into our daily lives. The mathematical techniques involved are taught via hands-on applications. The topics discussed may vary from year to year. Pre-requisite: None

## GEST1014 MYSTERIES OF THE UNIVERSE

In this course, we aim to explain the fundamental concepts including gravity, Einstein's relativity, cosmology, etc. Topics including the solar system, the climate of the earth, the life cycle of stars, gravitational lensing, cosmic microwave background radiation will also be discussed. No prior knowledge of astronomy is necessary.

Pre-requisite: None

#### GEST1015 PHYSICS AND MODERN SOCIETY

To enable students to know the use of physics in modern society and technology. Fundamental laws of nature are emphasized with examples of various applications in daily life. Moreover, selected topics of physics relevant to modern society are included. Topics are presented at an introductory level for the students with little or no background in physical science. Pre-requisite: None

#### GEST1016 MYSTERY OF CHEMISTRY

This course will describe a series of interesting stories about the birth, evolution, and important discovery of chemistry. Students will learn fundamental chemistry knowledge from interesting chemistry stories, discovery of chemistry mysteries, and through in-class fancy chemistry demonstrations. The course will also bring students to the frontier of modern chemistry researches which are closely related to our daily life. Pre-requisite: None

#### GEST1017 MODERN DRUG DISCOVERY: DRUGS AND HEALTH

How many drug pills and tablets do you take in your lifetime? What's the role of drugs in human society and today's health care system? What separate drugs from food and toxins? How long does it take to find a new drug and why some drugs are so expensive? If you have ever had one of these questions, then consider taking this GE course. The course aims to enhance understanding and appreciation of the important and multifaceted roles that drugs play in our daily life. No previous background in pharmaceutical or life sciences is required. Pre-requisite: None

#### GEST1018 NUTRITION AND FOOD SAFETY

With the huge rise in diet-related illnesses such as obesity, type II diabetes and cardiovascular disease, and in food safety emergencies, this course aims to provide students with knowledge of the dynamic fields of human nutrition and food safety. It includes an overview of nutrition and human health, and various topics ranging from explanations of the fundamental nutrients (e.g. carbohydrate, lipid, protein and minerals) to the numerous risks to our food and water supplies (e.g. bacterial contamination, agricultural pesticides, food additives, allergens, and industrial chemicals). It will also introduce students to the serious effects of diet-related diseases/disorders and provide them with the knowledge required to make good food choices. This GE course will be of great interest to all learners because the contents are relevant to daily life. Pre-requisite: None

#### GEST1019 MICROELECTRONIC CHIP TECHNOLOGY IN DAILY LIFE

As enabled by powerful technology, microelectronics have become essential in our daily lives. They are also used in a wide range of fields such as healthcare, environmental monitoring, robotics or entertainment etc. This introductory course in microelectronics is tailored for nonengineering students and teaches how to use microelectronic chip components interacting with the environment through sensors and communicate wirelessly with other devices. It covers topics from evaluation and implementation of sensor interface, data conversion, signal processing and device communications. This customized course is bottom-up based, which starts from introducing basic components in information systems, such as 5G communication. Then, followed by system and architectural interface considerations. Finally, the students have a chance to complete a case study on one for Artificial Intelligence and Internet of Things (AIoTs) related system.

Pre-requisite: None

#### GEST2000 ACTIVE LIFESTYLES, WELLNESS AND SPORTS SCIENCE

This course is designed to expose students to the relevant principles in sports science as related to health and fitness, and to discuss how students can apply the relevant sports science principles in one's daily life for making sustainable healthy life style choices to improve one's health and fitness. From the perspectives of sports science, topics relevant for health and fitness, such as health promotion, concepts and principles of exercise, self-evaluation and exercise prescription for health-related physical fitness, effective weight management and nutritional issues, building up healthy social relationships through fitness exercise and practice, sports injury prevention, first aid, etc., will be covered. The course emphasizes the relevance and application of the sports science principles for improving one's physical and mental health. Pre-requisite: None

## GEST2001 BIOLOGY IN OUR DAILY LIFE

In this course, students will be introduced to basic concepts and principles of human biology and health, and recent technological advances in biomedical science. This class aims to highlight on how biology affects human daily life, from simply understanding human bodies to nutrition, treatment of diseases such as cancer and infection, and the personalized medicine. This course will not only broaden the scope of students' understanding of the world from life science perspectives, but also increase overall awareness of the fact that life science has profound effects in everyday life.

Pre-requisite: None

#### GEST2002 PSYCHOLOGY AND HEALTH

How is stress linked to heart disease? Will the immune system change because of psychological stress? Can a sugar pill cure back pain? Do married people live longer? What influences healthy eating? What helps people to cope with illness? Are there ethnic variations in health? How can we change people's health behaviors to improve their health? This course tries to answer these questions, and provides an overview of Health Psychology — a young and exiting field of study that examines the bi-directional relationship between people's thoughts, feelings, behaviors, and their physical health.

Pre-requisite: None

## GEST2003 EXPLORING CHINESE MEDICINE

Traditional Chinese medicine (TCM) has been practiced in China and other Asian nations for more than 2,000 years and has gained increasing attention and popularity all around the world including Europe and North America. The main objectives of this course are 1) to provide a historical overview of the discoveries our ancestors made from natural products; 2) to discuss how modern technologies are used for mining the treasure and uncovering the healing power of Chinese medicine; 3) to introduce the cultures developed along with the therapeutic philosophy in Chinese medicine. Students will learn the basic principles of TCM, and acquire up-to-date information on the medicinal use and scientific research of TCM.

## Society and Behaviour

#### **GESB1000 - ETHICS, VALUES, LAW AND SOCIETY**

#### GESB1001 APPLIED ETHICS

This course component examines the role of ethics in building a just and fair society. Students will be introduced to typical ethical problems they will face in work and society, learn how to apply ethical principles to comprehend and analyse these problems, and make better decisions accordingly.

Pre-requisite: None

## GESB1002 FOUNDATIONS OF MORAL VALUES

How should we live? What is a right conduct and a good life? Why do moral values need foundations? The aim of this course is to help students to understand basic moral theories and ideas in philosophy and religion thatshape values of our lives. The course will also provide students with the intellectual resources needed for thinking systematically and critically about some of moral and ethical issues in a contemporary context. Pre-requisite: None

## GESB1003 LAW AND SOCIETY

This course component aims to introduce the basic knowledge of the Constitution of China and the Basic Law of Macao at both theoretical and practical levels. It is hoped that this course will help students to understand the basic concepts, theories, principles and spirit of the Constitution and the Basic Law, the basic system of the State and Macao, and the importance of the Constitution and the Basic Law to Macao SAR and the Macao residents. Pre-requisite: None

## GESB1004 DEVELOPMENT OF GAMES AND GAMBLING

This course introduces the history of gambling and games. Gambling is a major leisure activity performed by many individuals worldwide. It can take various forms including lottery, sports, horse racing, and casino. This course will introduce students the history of gambling and wagering games across different national cultures including Chinese, Americans and Europeans. Students will examine how gambling and wagering games have evolved over time. It is hopeful that through the lens of time, students can begin to understand the reasons why people take risks and gamble.

Pre-requisite: None

## GESB1005 MACAO LAW AND ITS REAL-LIFE APPLICATIONS

This course provides an account and analysis of the text and practice of the Basic Law of the Special Administrative Region of Macao (Macao SAR) within the political or constitutional system of the People's Republic of China (PRC). We will start with constitutional law, and then move to Macao basic law. We hope that, after finishing the course, students can better grasp the basic theories and concepts of Constitutional Law and Macao Basic Law, and better understand the spirit, structure and workings of Chinese constitution and Macao's political regime. This course is aimed to prepare students for correct and deep understanding and analyzing the constitutional, political, and public phenomena and questions that our country and region are facing. Pre-requisite: None

#### GESB1006 ECONOMICS OF EVERYDAY LIFE

This course provides an introduction to the basic ideas in economics. It will discuss how individuals and firms make their decisions and how to interact with each other. The operation of markets, including the competitive markets and monopolists markets, will also be discussed. The course will also explore the functioning of labor market, product market and other factor markets. The course will use real-world examples to illustrate the economic principles and their applications.

Pre-requisite: None

## GESB1007 UNDERSTANDING MACROECONOMIC POLICIES

This course will introduce students to the study of macroeconomic policies by the government and central bank. Concepts such as national income, gross domestic product (GDP), unemployment, money, inflation, and exchange rate will be discussed. Fiscal policy from the government and monetary policy from the central bank will be introduced and their effects on these macroeconomic variables will be studied. The roles of macroeconomic policies in dealing with real-life economic problems, for example, fighting unemployment, curbing inflation, and so on will be analyzed. Interactions among different markets will be introduced to help students understand how macroeconomic policies work. Pre-requisite: None

#### GESB1008 UNDERSTANDING GOVERNMENT

To understand the structures, responsibilities and importance of government(s) in contemporary time. How governments respond to public needs and people's interests while maintaining the fundamental principles of legality, justice, equality, rights and democracy etc. make up the core of the course. How public policies are made and how they facilitate social progress and development will be another important content. Lastly, how governments interact with the public, community, private sectors, NGOs, and also the external environment will be a third concern introducing students to the important role of government. Examples will be drawn from various places. Reference to current issues or events will complement lectures. Pre-requisite: None

#### GESB1009 PERSONAL GROWTH

Personal and social competence is key to self-discovery and self-knowledge with the aim of becoming involved and succeed in the innovative global economy of the 21st century. The purpose of this is to engage students with the psychological approaches to self-development, leadership, creativity, and interpersonal competence that would help them deal with the unfamiliar and unexpected nature of an ever-changing future. The course will focus on topics such as self-esteem, life goals and careers, personality, the various forms of intelligence, and persuasion and conflict management. Other topics relate to friendship and love, coping mechanisms for difficult life situations, and socio-cognitive processes evident in interpersonal relations in daily life, and students will also actively engage in research through participation in psychological studies and experiments.

Pre-requisite: None

#### GESB1010 PSYCHOLOGY OF EVERYDAY LIFE

Psychology is the study of mind and behaviour. Research in psychology seeks to understand and explain mental processes, emotions, and behaviour. Applications of psychology include performance enhancement, self-help, mental health and many other areas affecting everyday life and work. In this course, we will overview key topics in psychology such as learning, memory, human development, personality, feelings, motivations, and social behaviour representing some of what psychology seeks to understand and explain. In this foundation course, we will take a grand tour of the most prominent theories, principles, findings and applications of psychology, and engage actively in research through participation in psychological studies and experiments.

Pre-requisite: None

#### GESB1011 COURTSHIP, MARRIAGE AND FAMILY

This course focuses on issues of love and intimacy, relationship development, sexuality, cohabitation, and marriage. It provides an overview of choices of mates and dating preferences, examines the ways that cultural, social, and personal factors shape these choices, and identify factors that contribute to happy and enduring relationships. Other topics covered in the course include planning for children, family formation, and parenting practices. We will also discuss common challenges facing love and marital relationships, including gender role, power and control, violence and abuse, and work and money.

Pre-requisite: None

#### GESB1012 CRITICAL PROBLEMS IN CONTEMPORARY SOCIETY

This course describes social problems in contemporary societies especially Macao and China, and identifies how these problems affect and is affected by social forces, institutions, and culture. We will examine a series of long-standing and emergent social problems including gambling. aging, prostitution, substance abuse, violence, crime, inequality, racial and ethnic conflict, sex discrimination, health care, family issues, urban problems, population and food, environmental problems, and terrorism. We will try to identify the causes, distribution, and consequences of these problems. We will learn about theoretical perspectives that provide insights into social problems and empirical research that contributes evidence to the understanding of the problems. We will also assess social policies designed to mitigate the negative consequences of social

#### problems. Pre-requisite: None

#### GESB1013 EVERYDAY STATISTICS

People nowadays are being connected globally in various ways, and statistics plays a role in giving basic international comparison. The first part of this course introduces some basic ideas in social and economic statistics for cross-national comparison. But, statistics is always considered as a hurdle for those not strong in mathematics. The second part introduces statistics which emphasizes intuitive thinking in daily life instead of technical mathematical jargon. This will equip students with minimal statistical literacy to cope with the data saturated society with confidence, and more advanced statistics courses in future studies. Emphasis is on statistical interpretation rather than analysis.

Pre-requisite: None

#### GESB2000 PERSONAL FINANCE AND WEALTH MANAGEMENT

Financial literacy has become increasingly popular and important around the world. Every university students should know how to manage his or her wealth, pension, and insurance. This course teaches non-finance students the core concept of financial planning, including retirement planning. Popular financial instruments will be introduced from the risk-return perspectives, including mortgage and car loans, bank deposits, stocks, bonds, mutual fund, and insurance products. Quantitative tools such as Microsoft Excel will be used to solve various problems in personal finance.

Pre-requisite: None

#### GESB2001 FOOD, EATING AND CULTURE

This course examines social theories of food, eating, etiquette and nutrition. It is divided into five broad components. The first examines relationships between scientific and folk concepts of nutrition. The second analyses theories of food preparation and meal structure in various international cultures. The third investigates how food and eating is governed by explicit and implicit rules of etiquette. The fourth part of the course investigates the role of public dining and the media in promoting particular images of food consumption. Finally, there will be a brief examination of the implication of current trends in food consumption for public health. Pre-requisite: None

#### GESB2002 BUSINESS, SOCIETY AND ENTREPRENEURSHIP

This course is designed to investigate the broad spectrum of business and society as well as sustainability issues that individuals have to face today and will face in the future. It will also provide students with the broad functions and role of business in society, and knowledge in balancing economic, legal, ethical, and philanthropic responsibilities to the variety of stakeholder groups with which businesses interact with the society. This course will explain the nature of business, its purpose and contribution to society as well as management's role in business and the overlapping influence of business, economy, and society. It involves discussion on these issues and debate that pertain to these relationships.

Within the context of business, the course focuses on entrepreneurial behaviors which include social and business entrepreneurship (i.e. new venture creation and management), creativity, and innovation. Within its relationship to society, it will consider citizenship behaviors through topics as stakeholder management and corporate social responsibility.

Pre-requisite: None

#### **GESB2003** CREATIVITY AND MARKETING

Consumers, retailers and suppliers are demanding more creativity and innovation across every marketing activity, especially in such a highly globalized society with internet and mobile devices everywhere. In this course students will learn and experience how to combine creativity and marketing activities together. This course covers (a) the strategic basis for product development including sources and types of innovation, market entry timing, product market structure and competition, disruptive and entrepreneurial innovation, and the development of new services

and service bundles; (b) latest and creative marketing practices including creative product design, creative promotion method, creative advertising example, creative business model; and (c) the management of the new product development and promotion process including collaboration and networks as well as strategies for launching and marketing new products and services.

Pre-requisite: None

#### GESB2004 PUBLIC SPEAKING

The course aims to provide students with an introduction to the skills and practices of public speaking: this will be contextualized across the different socio-cultural and work situations in which they are likely to be required to speak, and with regard to the different groups they will have to address. The emphasis will be on four main areas:

- 1. speaking as a form of communication
- 2. the techniques of public speaking
- 3. understanding & addressing different kinds of audiences
- 4. researching the material to be dealt with in the speech
- 5. organizing the talk
- 6. using A/V aids
- 7. dealing with questions.

Pre-requisite: None

#### GESB2005 ART AND SOCIETY

This course is to focus on the history of the use and function of art in global perspective. Images, with symbolic meanings and particular style, can be powerful visual language that speaks to the viewers directly. Art has been a meaningful endeavour that deals with basic human concerns from the dawn of civilization to the present day. In this course, art works are discussed in context with human survival, religion, politics, sexuality, technology, culture transmission and globalization. This course examines essential art ideas and makes them concrete using examples from around the world, and relates them to contemporary issues. Pre-requisite: None

#### GESB2006 UNDERSTANDING POPULATION

This course provides an overview of how social factors can influence population characteristics and how the characteristics of population in turn affect society. We will focus on three primary demographic processes: mortality, fertility and migration. We will learn basic concepts, theories and measurements of each process from both historical and comparative approach. We will apply these basic demographic concepts to contemporary population issues such as concerns over the persistent low, below-replacement fertility level and the aging of the population in Macao, the consequences of the internal migration on urbanization in China or other developing countries. Population literacy is therefore an important part of an individual's knowledge to understand current social, economic and political debates. In addition, population literacy is essential for yourself as you think about planning your own life in terms of human capital investments, marriage, fertility, labor force participation, saving, migration and many related aspects. In understanding these issues, we will use the social science theories and concepts such as social stratification, social interaction, and continuity and change. We will bridge sociology, anthropology, history, political science, economics, and psychology, and will do a comparative analysis between Macao, China, and other societies. Pre-requisite: None

## GESB2008 PSYCHOLOGY OF SEXUALITY

Sex plays an important role in our lives. In this course we will study human sexuality and attempt to explore the psychology of human sexuality in its evolutionary, physiological, and social context. Based on the evolutionary perspective, various aspects of adaptive human sexual behaviours and mechanisms evolved to facilitate reproductive success. Some example of topics include: the evolutionary origins of gender differences and similarities, and sexual reproduction; historical and contemporary views on the psychology of sex in different cultures; diversity of human sexuality; how psychologists conduct sex research, issue of pornography, nature of physical and psychological attractiveness, and more. Pre-requisite: None

# **Programmes of Study**

(Subject to Revision)

# PROGRAMMES OF STUDY Faculty of Arts and Humanities

# **Doctoral Degree Programmes**

## AREAS OF STUDY

- Linguistics (Chinese)
- Literary Studies (Chinese)
- Linguistics (English)
- Literary Studies (English)
- Applied Linguistics (Portuguese)
- Literary and Intercultural Studies (Portuguese)
- History
- Philosophy and Religious Studies

# FACULTY OF ARTS & HUMANITIES Doctoral Degree Programmes

# **Doctor of Philosophy**

• Linguistics (Chinese)

Compulsory	/ Courses:	Credits
AHGC8000	Research Ethics	
CHLL8001	Academic Writing	2
CHLL8000	Research Methods for Advanced Studies in Chinese	3
CHLL8013	Advanced Topics in Chinese Linguistics	3
Total Credit	s:	8

Doctoral Th	esis	Credits
CHLL8999	Doctoral Thesis	18

# FACULTY OF ARTS & HUMANITIES Doctoral Degree Programmes

# **Doctor of Philosophy**

# • Literary Studies (Chinese)

Compulsory Courses:		Credits
AHGC8000	Research Ethics	
CHLL8001	Academic Writing	2
CHLL8000	Research Methods for Advanced Studies in Chinese	3
CHLL8042	Advanced Topics in Chinese Literature	3
Total Credit	s:	8

Doctoral Thesis		Credits
CHLL8999	Doctoral Thesis	18

# FACULTY OF ARTS & HUMANITIES Doctoral Degree Programmes

# **Doctor of Philosophy**

• Linguistics (English)

Compulsory	/ Courses:	Credits
AHGC8000	Research Ethics	
ENGL8016	Advanced Research Writing	3
ENGL8090	Practice of Scholarship I	3
ENGL8013	Special Topics in English Linguistics	3
Total Credit	S:	9
<u>Doctoral Th</u> ENGL8999	esis Doctoral Thesis	Credits 18
ENGL0999	DUCIULAI THESIS	10

# FACULTY OF ARTS & HUMANITIES Doctoral Degree Programmes

## **Doctor of Philosophy**

# • Literary Studies (English)

Compulsory	y Courses:	Credits
AHGC8000	Research Ethics	
ENGL8016	Advanced Research Writing	3
ENGL8090	Practice of Scholarship I	3
ENGL8014	Special Topics in English Literary Studies	3
Total Credit	s:	9
		• **

Doctoral Thesis		Credits
ENGL8999	Doctoral Thesis	18

# **Doctoral Degree Programmes**

# **Doctor of Philosophy**

• Applied Linguistics (Portuguese)

Compulsory Courses:		Credits
AHGC8000	Research Ethics	
PORT8008	Advanced Research and Academic Writing in Portuguese Studies	3
PORT8009	Cross-language Topics in Applied Linguistics	3
Total Credits:		6
Doctoral Thesis PORT8999 Doctoral Thesis		Credits 18

# FACULTY OF ARTS & HUMANITIES **Doctoral Degree Programmes**

# **Doctor of Philosophy**

#### Literary and Intercultural Studies (Portuguese) •

Compulsory Courses:		Credits
AHGC8000	Research Ethics	
PORT8008	Advanced Research and Academic Writing in Portuguese Studies	3
PORT8010	New Trends in Portuguese Literary and Intercultural Studies	3
Total Credits:		6
Doctoral Thesis PORT8999 Doctoral Thesis		Credits 18

PORT8999 Doctoral Thesis

# FACULTY OF ARTS AND HUMANITIES Doctoral Degree Programmes

# **Doctor of Philosophy**

• History

Compulsory	Credits	
AHGC8000	Research Ethics	
HIST8803	Independent Study on Academic Writing in History	3
Choose 2 out of 4 from the following courses:		6
HIST8861	Advanced Reading/Historiography Seminar	
HIST8802	Advanced Special Topics in History	
HIST8804	Independent Study on Historiography	
HIST8805	Independent Study on History	
Total Credit	s:	9
Doctoral Thesis		Credits
HIST8999	Doctoral Thesis	18

Notes:

"Advanced Special Topics in History", "Independent Study on Academic Writing in History", "Independent Study on Historiography" and "Independent Study on History" can be taught either in English or Chinese by any of faculty members in the Department.

18

# FACULTY OF ARTS & HUMANITIES Doctoral Degree Programmes

# **Doctor of Philosophy**

# • Philosophy and Religious Studies

Compulsory Courses:		Credits
AHGC8000	Research Ethics	
PHIL8004	Special Topics in Philosophy and Religion I	3
PHIL8006	Research Writing in Philosophy and Religious Studies	3
Total Credits:		6
Doctoral Th	esis	Credits

PHIL8999 Doctoral Thesis

# FACULTY OF ARTS & HUMANITIES

# **Master's Degree Programmes**

# **Master of Arts**

# • Chinese History and Culture

Year I		Credits
Compulsory	/ Courses:	
CCHC7000	Introduction of Chinese History and Culture	3
CCHC7001	Seminar on Chinese Classics	3
CCHC7004	The Major Transformations in Chinese History	3
CCHC7005	Chinese Literature and Culture in Modern Transition	3
CCHC7006	Macao in Chinese History	3
Required El Students sho	ective: ould select 1 course from the List of Elective Courses	3
Total Credit	S:	18

Year II		Credits
Compulsory	Courses:	
CCHC7002	Ancient Chinese Intellectual History	3
CCHC7003	The Intangible and Spiritual Civilization of Traditional China	3
CCHC7007	Pedagogical Seminar: Curricular Design on Teaching Chinese History, Culture and Language	3
CCHC7998	Project Report	3
Total Credit	S:	12

#### List of Elective Courses

CCHC7008Topics in Chinese LanguageCCHC7009Chinese History Reflected by Arts and Literature

# FACULTY OF ARTS & HUMANITIES Master's Degree Programmes

# **Master of Philosophy**

• Chinese Linguistics

		Credits
Semester I:		
Compulsory	Courses:	
CHLL7100	Topics in Theories of Chinese Linguistics	3
CHLL7101	Methods in Chinese Linguistics	3
CHLL7990	Thesis	12
Semester II:		
Compulsory	Courses:	
CHLL7102	Studies on Chinese Sociolinguistics	3
from any othe	uld select 3 courses from the List of the Elective Courses or 3 courses or programmes in the Department and the Faculty of Arts and Humanities Il from supervisors)	
Total Credit	S:	30

# List of Elective Courses of Chinese Linguistics

CHLL7103	Studies on Classical Chinese
CHLL7104	Studies on Modern Chinese
CHLL7105	Topics in Chinese Linguistics I
CHLL7106	Topics in Chinese Linguistics II
CHLL7107	Studies on Chinese Grammar
CHLL7108	Studies on Chinese Phonology
CHLL7110	Studies on Chinese Lexicon

# FACULTY OF ARTS & HUMANITIES Master's Degree Programmes

# **Master of Philosophy**

Chinese Literature

		Credit
Semester I:		
Compulsor	y Courses:	
CHLL7400	Topics in Traditional Chinese Literature	3
CHLL7401	Topics in Modern Chinese Literature	3
CHLL7990	Thesis	12
Semester II		
Compulsor	/ Course:	
CHLL7402	Topics in Literary Theory	3
from any oth	ould select 3 courses from the List of the Elective Courses or 3 courses er programmes in the Department and the Faculty of Arts and Humanities al from supervisors)	•
(mar appior		

# List of Elective Courses of Chinese Literature

CHLL7403	Methods in the Study of Traditional Chinese Literature
CHLL7404	Methods in the Study of Modern Chinese Literature
CHLL7405	Topics in Chinese Literature I
CHLL7406	Topics in Chinese Literature II
CHLL7407	Topics in Traditional Chinese Literary Genres
CHLL7408	Topics in Modern Chinese Literary Genres

# FACULTY OF ARTS & HUMANITIES Master's Degree Programmes

# **Master of Arts**

• English Studies

Year I		Credits
Compulsory	Course:	
Choose 1 from	m the following courses:	
ENGL7001	Linguistics Research Methods	3
ENGL7024	Critical Reading	
7 Required E	lectives from the Required Elective Course Lists	21
Total Credits	:	24
Year II		Credits
ENGL7998	Project Report	6
Total Credits	:	6

\* Students should choose courses from the Elective Course Lists in Linguistics and Literature and are allowed to take up to 2 courses (6 credits) from any other programme/major (within FAH), with the permission of the Faculty of Arts & Humanities.

### **Elective Course List in Linguistics**

Elective course Ele	
ENGL7001	Linguistics Research Methods
ENGL7002	Comparative Chinese - English Structure
ENGL7504	Course Design for Language Learning
ENGL7505	Current Trends and Issues in Language Learning
ENGL7003	Descriptive Linguistics
ENGL7508	Materials Design and Evaluation
ENGL7509	Phonology
ENGL7004	Psycholinguistics
ENGL7005	Sociolinguistics
ENGL7006	Syntax - The Structure of English
ENGL7013	Discourse Analysis
ENGL7014	History of English
ENGL7015	Special Topics in Linguistics
ENGL7019	World Englishes
ENGL7020	Bilingualism
ENGL7021	Cognitive Linguistics
ENGL7022	Corpus Linguistics

ENGL7023	Media Discourse
ENGL7025	Language and Popular Culture

# Elective Course List in Literature

	Cinama Studios
ENGL7007	Cinema Studies
ENGL7008	Colonial and Postcolonial Writing
ENGL7009	Drama & Theatre Studies
ENGL7010	Modernity in English Literature
ENGL7011	Romanticism
ENGL7012	Victorian Novels and Poetry (1840 – 1870)
ENGL7016	Genre Studies
ENGL7017	Shakespeare
ENGL7018	Special Topics in Literature
ENGL7026	Advanced Cinema Studies
ENGL7027	Asian Diaspora Literature in English
ENGL7024	Critical Reading
ENGL7028	Representing the Shoah: The Holocaust in Literature, Memoir and Film
ENGL7029	Ecology and Apocalypse
ENGL7030	Nineteenth Century Gothic Fiction

# FACULTY OF ARTS AND HUMANITIES Master's Degree Programmes

# Master of Arts

• History

Year I		Credits
Compulsory	Courses:	
HIST7780	Advanced Historical Theory and Practice	3
HIST7781	Advanced Reading Seminar	3
HIST7782	Advanced Writing Seminar	3
5 - 6 Require	d Electives:	15-18
<ul> <li>With prior approval of the Department of History Graduate Studies Committee, up to 2 of the Required Electives may be a Master level course outside of the history programme</li> <li>For students who take Applied Thesis, one more Free Elective Master level course outside of the history programme</li> </ul>		
Total Credits	:	24-27
Year II	(Academic Thesis or Applied Thesis)	Credits
Compulsory	Courses:	
HIST7996	Applied Thesis	3
HIST7999	Academic Thesis	6
Total Credits	:	3-6

# List of Required Electives

HIST7750	Macao, China and World Heritage
HIST7751	Cultural History of Macao in Ming and Qing Dynasties
HIST7753	Architecture and History
HIST7754	Buddhist Sculptures and Paintings
HIST7755	U.S. Diplomatic History since 1900
HIST7756	Diasporas in South of China
HIST7757	Late Imperial China
HIST7758	Pirates in World History
HIST7759	Cultural History of Macao since the Early Republic of China
HIST7762	Law and Society in Ancient China
HIST7763	Social and Cultural History of South China
HIST7764	Indian, Chinese and Japanese Religions
HIST7765	Buddhist Art: Theory and History
HIST7766	Asian Culture
HIST7767	Family and Gender in Asian History
HIST7768	East-West Interactions and Exchanges

- HIST7769 Sino-Indian-Southeast Asian Interactions in Early Modern Asia
- HIST7771 Secret Societies and Popular Movements in Modern China
- HIST7772 Historiography of Southeast Asia
- HIST7773 Studies in Imperialism I
- HIST7774 Studies in Imperialism II
- HIST7775 Western Diasporas in Asia
- HIST7776 History and Anthropology
- HIST7783 Special Topics in History I
- HIST7784 Special Topics in History II

# FACULTY OF ARTS & HUMANITIES Master's Degree Programmes

# **Master of Philosophy**

• Portuguese Language and Intercultural Studies with Specialization in Applied Linguistics

	Credits
Compulsory Courses:	
PORT7000 Linguistics Method I	3
PORT7001 Linguistics Method II	3
PORT7013 Thesis and Research Writing Seminar	3
PORT7990 Thesis	12
Required Elective Courses:	6
2 courses chosen from the List of Elective Courses in Applied Linguistics	
1 course chosen from within the Master's programmes offered by the Faculty of Art and Humanities relevant to the programme (with approval from programm coordinator)	

# **Total Credits:**

30

# List of Elective Courses of Portuguese Language and Intercultural Studies with Specialization in Applied Linguistics

PORT7002	Portuguese for Professional Purposes I
PORT7003	Portuguese for Professional Purposes II
PORT7004	The Process of Language Acquisition (L1 and L2)
PORT7005	Methodology of Teaching Portuguese as a Second Language
PORT7006	Curriculum Planning and Materials Evaluation for Portuguese as a Foreign
	Language
PORT7007	Developing Reading Skills in Portuguese as a Foreign Language
PORT7008	Supervised Teaching Planning and Practice in Portuguese as a Second
	Language
PORT7009	Portuguese Sociolinguistics
PORT7010	Special Topic in Portuguese Applied Linguistics I
PORT7011	Special Topic in Portuguese Applied Linguistics II

# FACULTY OF ARTS & HUMANITIES

# **Master's Degree Programmes**

# **Master of Philosophy**

• Portuguese Language and Intercultural Studies with Specialization in Literary and Cultural Studies

		Credits
Compulsory	v Courses:	
PORT7111	Literary & Cultural Studies Method I	3
PORT7112	Literary & Cultural Studies Method II	3
PORT7013	Thesis and Research Writing Seminar	3
PORT7990	Thesis	12
Required El 2 courses ch	ectives: osen from the List of Elective Courses in Literary and Cultural Studies	6
	osen from within the Master's programmes offered by the Faculty of Arts ities relevant to the programme (with approval from programme	
Total Credit	S:	30

# List of Elective Courses of Portuguese Language and Intercultural Studies with Specialization in Literary and Cultural Studies

otaaloo mitii	opeolanzation in ziterary and outtand otdatee
PORT7002	Portuguese for Professional Purposes I
PORT7003	Portuguese for Professional Purposes II
PORT7800	Portugal in the Asia-Pacific Region
PORT7105	Modern Lusophone Literature
PORT7117	Literature and Other Arts
PORT7803	Relations between China and the Portuguese-Speaking
	Countries
PORT7107	Images of the East in Portuguese Language Literature
PORT7108	Macau Literature in Portuguese
PORT7113	Special Topic In Literary and Cultural Studies I
PORT7114	Special Topic In Literary and Cultural Studies II
PORT7115	Intercultural Communication
PORT7116	Grammar and Communication

# FACULTY OF ARTS & HUMANITIES Master's Degree Programmes

# **Master of Arts**

# Translation Studies (English – Chinese)

Year I		Credits
Compulsory	Courses:	
AHGC7000	Comparative Language Studies for Translation	3
AHGC7001	Theoretical Concepts of Translation Studies	3
AHGC7002	Translation Technology	3
4 Required Ele	ectives chosen from the List of Elective Courses	12
Total Credits:		21

Year II		Credits
Compulsory	Courses:	
AHGC7003	Research Design and Writing	3
AHGC7998	Project Report	6
Total Credits:	:	9

\* Students are allowed to take no more than 2 courses (6 credit hours) from any other any other programme/major (within the Faculty of Arts and Humanities), with the permission of the Faculty of Arts and Humanities.

### List of Elective Courses of Translation Studies for English-Chinese Specialization

- AHGC7040 A Discoursal Approach to Translation Studies
- AHGC7042 Cultural Issues in Translation
- AHGC7043 Gender in Translation Studies
- AHGC7044 History, Culture and Translation
- AHGC7045 Literary Translation
- AHGC7046 Literature, Culture and Translation: Language and Ideology
- AHGC7047 Reading Translated Works
- AHGC7048 Special topic in Translation I
- AHGC7049 Special topic in Translation II
- AHGC7050 Special topic in Translation III
- AHGC7051 Special topic in Translation IV
- AHGC7052 Translating Cultures
- AHGC7053 Translating for the Media
- AHGC7054 Translation and Comparative Literature
- AHGC7055 Translation of Legal Texts

AHGC7057 Translation of Texts in Popular Culture AHGC7058 Translation of Texts in the Arts AHGC7059 Translating Texts in Social Sciences Translation Criticism and Assessment AHGC7060 Translation Project AHGC7061 AHGC7062 Translation Pedagogy Translation for Administration and Commerce AHGC7063 Audio-visual Translation AHGC7064 AHGC7065 Theories and Practice of Interpreting AHGC7066 **Consecutive Interpreting** Simultaneous Interpreting AHGC7067 AHGC7068 Conference Interpreting

# FACULTY OF ARTS & HUMANITIES Master's Degree Programmes

# **Master of Arts**

# Translation Studies (Portuguese – Chinese)

Year I		Credits
Compulsory	Courses:	
AHGC7000	Comparative Language Studies for Translation	3
AHGC7001	Theoretical Concepts of Translation Studies	3
AHGC7002	Translation Technology	3
4 Required Electives chosen from the List of Elective Courses		12
Total Credits	:	21

Year II		Credits
Compulsory	Courses:	
AHGC7003	Research Design and Writing	3
AHGC7998	Project Report	6
Total Credits	s:	9

\* Students are allowed to take no more than 2 courses (6 credit hours) from any other programme/major (within the Faculty of Arts and Humanities), with the permission of the Faculty of Arts and Humanities.

### List of Elective Courses of Translation Studies for Portuguese-Chinese Specialization

- AHGC7014 Chinese Portuguese Translation
- AHGC7015 Portuguese Chinese Translation
- AHGC7016 Interpreting I Chinese/Portuguese
- AHGC7017 Interpreting II Chinese/Portuguese
- AHGC7040 A Discoursal Approach to Translation Studies
- AHGC7042 Cultural Issues in Translation
- AHGC7043 Gender in Translation Studies
- AHGC7044 History, Culture and Translation
- AHGC7045 Literary Translation
- AHGC7046 Literature, Culture and Translation: Language and Ideology
- AHGC7047 Reading Translated Works
- AHGC7048 Special topic in Translation I
- AHGC7049 Special topic in Translation II
- AHGC7050 Special topic in Translation III
- AHGC7051 Special topic in Translation IV

AHGC7052 Translating Cultures AHGC7053 Translating for the Media Translation and Comparative Literature AHGC7054 Translation of Legal Texts AHGC7055 Translation of Texts in Popular Culture AHGC7057 AHGC7058 Translation of Texts in the Arts Translating Texts in Social Sciences AHGC7059 Translation Criticism and Assessment AHGC7060 AHGC7061 **Translation Project** Translation Pedagogy AHGC7062 Translation for Administration and Commerce AHGC7063 AHGC7064 Audio-visual Translation Theories and Practice of Interpreting AHGC7065 AHGC7066 Consecutive Interpreting AHGC7067 Simultaneous Interpreting **Conference Interpreting** AHGC7068

# FACULTY OF ARTS & HUMANITIES Master's Degree Programmes

# **Master of Arts**

# • Translation Studies (Portuguese – English)

Year I		Credits
Compulsory	Courses:	
AHGC7000	Comparative Language Studies for Translation	3
AHGC7001	Theoretical Concepts of Translation Studies	3
AHGC7002	Translation Technology	3
4 Required E	lectives chosen from the List of Elective Courses	12
Total Credits	3:	21

Year II		Credits
Compulsory	Courses:	
AHGC7003	Research Design and Writing	3
AHGC7998	Project Report	6
Total Credits	s:	9

\* Students are allowed to take no more than 2 courses (6 credit hours) from any other programme/major (within the Faculty of Arts and Humanities), with the permission of the Faculty of Arts and Humanities.

### List of Elective Courses of Translation Studies for Portuguese-English Specialization

- AHGC7040 A Discoursal Approach to Translation Studies
- AHGC7042 Cultural Issues in Translation
- AHGC7043 Gender in Translation Studies
- AHGC7044 History, Culture and Translation
- AHGC7045 Literary Translation
- AHGC7046 Literature, Culture and Translation: Language and Ideology
- AHGC7047 Reading Translated Works
- AHGC7048 Special topic in Translation I
- AHGC7049 Special topic in Translation II
- AHGC7050 Special topic in Translation III
- AHGC7051 Special topic in Translation IV
- AHGC7052 Translating Cultures
- AHGC7053 Translating for the Media
- AHGC7054 Translation and Comparative Literature
- AHGC7055 Translation of Legal Texts

AHGC7057 Translation of Texts in Popular Culture Translation of Texts in the Arts AHGC7058 AHGC7059 Translating Texts in Social Sciences Translation Criticism and Assessment AHGC7060 **Translation Project** AHGC7061 AHGC7062 Translation Pedagogy Translation for Administration and Commerce AHGC7063 Audio-visual Translation AHGC7064 AHGC7065 Theories and Practice of Interpreting Consecutive Interpreting AHGC7066 Simultaneous Interpreting AHGC7067 AHGC7068 Conference Interpreting English - Portuguese Translation AHGC7282 AHGC7283 Portuguese - English Translation AHGC7284 Interpreting I English/Portuguese AHGC7285 Interpreting II English/Portuguese

# FACULTY OF ARTS & HUMANITIES Bachelor's Degree Programmes

# **Bachelor of Arts**

# • Chinese Language and Literature

Year I		Credits
CHLL1001	Modern Chinese Language	3
CHLL1002	Introduction to Chinese Linguistics	3
CHLL1003	Contemporary Chinese Literature	3
CHLL1004	Modern Chinese Literature	3
2 Required Electives		6
Community and Peer Education Courses		2
Languages and Skills Courses		12
1 Free Elective	e	3
Total Credits:		35

Year II		Credits
CHLL2000	Classical Chinese Language I	3
CHLL2001	Classical Chinese Literature: Pre-Qin to Tang and Five Dynasties	3
CHLL2002	Classical Chinese Language II	3
CHLL2003	Classical Chinese Literature: Song to Qing Dynasties	3
2 Required E	Electives	6
Community a	and Peer Education Courses	1
Languages a	and Skills Courses	3
4 General Ec	ducation Courses	12
1 Free Electi	ve	3
Total Credit	s:	37

Year III		Credits
CHLL3000	Language Comparison	3
CHLL3001	Literary Theory and Criticism	3
2 Required Electives		6
4 General Education Courses		12
1 Free Elective		3
Total Credit	s:	27

Year IV		Credits
CHLL4000	Traditional Chinese Literature Theory	3
CHLL4001	Graduation Project I	3
CHLL4002	Comparison between Chinese and Foreign Literatures	3
CHLL4003	Graduation Project II	3
2 Required Electives		6
1 Free Elect	ive	3
Total Credit	s:	21

List of	Required	Elective	Courses:

Year I:	
CHLL1005	Cantonese Language and Culture
CHLL1006	Classical Chinese Poetry
CHLL1007	Classical Chinese Fiction
CHLL1008	Selected Readings in Chinese Historiography
Year II:	
CHLL2004	Topics in Modern and Contemporary Chinese Writers
CHLL2005	World Chinese Literature
CHLL2006	Classical Chinese Prose
CHLL2007	Readings in Pre-Qin Classics
CHLL2008	Modern Chinese Grammar and Pragmatics
CHLL2009	Special Topics in Chinese Lexicon
Year III:	
CHLL3002	Chinese Philology
CHLL3003	Readings of Chinese Linguistics Work
CHLL3004	Bibliography
CHLL3005	South China Literature and Culture
CHLL3006	Chinese Sociolinguistics
Year IV:	
CHLL4004	Language Analysis and Research
CHLL4005	Special Topics in Chinese Linguistics I
CHLL4006	Topics in Classical Chinese Literature
CHLL4007	History of Chinese Thought
CHLL4010	Special Topics in Chinese Linguistics II

# List of More Free Elective Courses

- CHLL1009 Creative Writing
- CHLL1010 Popular Literature and Culture
- CHLL1011 Practical Chinese
- CHLL1012 Chinese for Non-Native Speakers I (not for this major)
- CHLL1013 Chinese as a Second Language (not for this major)
- CHLL2010 Poetry of Tang-Song Period
- CHLL2011 Readings in Modern and Contemporary Works
- CHLL2012 Languages and Dialects Spoken in Hong Kong and Macao
- CHLL2013 Book Editing Knowledge and Skill
- CHLL3007 Chinese Dialectology
- CHLL3008 Classical Chinese Drama
- CHLL3009 Chinese Etymology and Semantics
- CHLL3010 Contemporary Practical and Pragmatic Writing
- CHLL3011 Special Topics in Literature and Culture of Macao
- CHLL3012 Special Topics in Chinese Culture and Fine Arts
- CHLL3013 Wen Xin Diao Long
- CHLL3014 Special Topics in Classical Literary Genres
- CHLL4008 Readings in Chinese Classics
- CHLL4009 Chinese Phonetics and Phonology
- CHLL4011 Special Topics in Literary Criticism
- CHLL4012 Selected Readings in Western Literature
- CHLL4013 Special Topics in Literature and Arts

# FACULTY OF ARTS & HUMANITIES Bachelor's Degree Programmes

# **Bachelor of Arts**

# • English Studies

Year I		Credits
ENGL1000	Introduction to Literary Studies I	3
ENGL1001	Introduction to Literary Studies II	3
ENGL1002	Describing the Sounds of English	3
ENGL1003	Introduction to the Study of Language	3
Community	and Peer Education Courses	2
Languages a	and Skills Courses	12
3 General Education Courses		9
Total Credit	S:	35

Year II		Credits
ENGL2000	Survey of English Literature I	3
ENGL2001	Survey of English Literature II	3
ENGL2002	Introduction to English Grammar	3
ENGL2003	Language and Society	3
Community a	and Peer Education Courses	1
Languages and Skills Courses		3
4 General Education Courses		12
2 Free Electives		6
Total Credit	s:	34

Year III		Credits
ENGL3000	Language and Meaning	3
ENGL3001	20th Century and Contemporary Literature in English I	3
ENGL3002	Analyzing Spoken Discourse	3
ENGL3003	20th Century and Contemporary Literature in English II	3

2 Required Electives	
1 General Education Course	3
1 Free Elective	3
Total Credits:	24

Year IV	Credits
1 Research and Internship Elective Course	3
7 Required Electives	21
1 Free Elective	3
Total Credits:	27

List of Research and Internship Elective Cours	es
--	----

ENGL4000	Research Report
ENGL4001	Graduation Project

# List of English Major Required Electives

LIST OF LING	
ENGL2006	Introduction to Interpreting
ENGL3004	Bilingualism
ENGL3008	Language and Cognition
ENGL3009	Syntax
ENGL3011	Language Acquisition
ENGL3014	World Englishes
ENGL3016	Advanced English Structure
ENGL3018	Morphology
ENGL3020	Narrative, Discourse and Identity
ENGL3021	Children's Literature
ENGL3022	Victorian Literature
ENGL3023	Romanticism
ENGL3024	Drama and Theatre
ENGL3027	20 <sup>th</sup> Century American Literature
ENGL3029	Introduction to Literary Criticism
ENGL3030	Shakespeare
ENGL3031	Creative Writing
ENGL3033	The English Renaissance
ENGL3034	Postcolonial Writing
ENGL3035	World Literatures in English
ENGL3036	Life Narratives
ENGL3038	Major Authors

ENGL3039 Special Topics in Literature I Special Topics in Literature II ENGL3040 Special Topics in Linguistics I ENGL3041 Special Topics in Linguistics II ENGL3042 Translation for the Media ENGL3044 Translation of Business and Legal Writings ENGL3045 ENGL3046 Conference Interpreting Translation of Literary Writings ENGL3047 ENGL3051 The Gothic ENGL4003 Audiovisual Translation

# FACULTY OF ARTS & HUMANITIES Bachelor's Degree Programmes

# **Bachelor of Arts**

• History

Year I		Credits
HIST1000	History of Macao	3
HIST1001	History of China I	3
HIST1002	History of China II	3
HIST1004	Historical Theory and Practice	3
HIST2001	Western Civilizations I	3
Community and Peer Education Courses		3
Languages and Skills Courses		12
2 General Education Courses		6
Total Credit	s:	36

Year II		Credits
HIST1003	History of China III	3
HIST2002	Western Civilizations II	3
HIST2003	History of Portugal and its Maritime Expansion	3
2 Required	Electives in History	6
Languages	and Skills Courses	3
5 General Education Courses		15
Total Credi	ts:	33

Year III	Credits
4 Required Electives in History	12
1 General Education Course	3
4 Free Electives	12
Total Credits:	27

Year IV Final Year Project Courses <sup>(1)</sup>	Credits 9
5 Free Electives	15
Total Credits:	24

### Required Electives in History

Students are required to take 9 Required Electives (27 credits) to fulfil the Required Elective requirement.

(1) Final Year Project Course requirement: students are required to complete 2 or 1 research courses (6 credits for option 1 or 3 credits for option 2) as stated in the following table.

Final Year Project Requirement			
Option 1		Option 2	
HIST4001 Advanced I (research course)	History Writing I	HIST4003 Research Project (research course)	
HIST4002 Advanced I (research course)	History Writing II	1 Required Elective in History	

\*\* HIST4001/4002/4003 are research courses.

- (2) Required Electives in History: for the remaining Required Elective credits, students are required to complete 7 or 8 courses (21 credits for option 1 or 24 credits for option 2) from the following list of History courses.
  - **HIST1005** History of Modern East Asia HIST1006 History of the United States **HIST1007** Art History of Ancient China Art History of Modern China **HIST1008** Historical Sources, Archives and Bibliography HIST1009 **HIST1010** Digital Resources in the Humanities HIST1011 **Cultural Heritage Studies HIST1012** Museum Studies HIST2004 Reading of Chinese Classical Documents and Historical Materials HIST2006 Macao in World History HIST2007 Worldviews and Mapping in History **HIST2008** History of Southeast Asia HIST2010 History of Asian Arts HIST2011 History of Western Arts **HIST2012** Chinese Culture History **HIST2013** History of Japan Political System of Ancient China **HIST2014** The British Empire and the World HIST2017 **HIST2018** Medical Identities in East and West HIST2024 History of Foreign Relationships in the Qing Dynasty HIST3000 Asian Maritime History HIST3003 History of Chinese Painting Chinese Buddhist Art HIST3004 HIST3009 Macao Memory and Archives Military History of Modern China HIST3010 **HIST3013** Chinese Socio-Economic History History of Catholicism in China **HIST3014 HIST3015** Jesuits in Ming-Qing China Special Topics in History HIST3021

# FACULTY OF ARTS & HUMANITIES **Bachelor's Degree Programmes**

# **Bachelor of Arts**

# • Japaneses Studies

Year I		Credits
JAPN1000	Practical Japanese I	6
JAPN1001	Japanese Grammar I	6
JAPN1002	Practical Japanese II	6
JAPN1003	Japanese Grammar II	6
Community	and Peer Education Courses	2
Languages	and Skills Courses	9
1 General Education Course		3
Total Credit	ts:	38

Year II		Credits
JAPN2000	Practical Japanese III	3
JAPN2001	Integrated Japanese I	3
JAPN2002	Japanese Reading I	3
JAPN2003	Japanese Composition I	3
JAPN2004	Practical Japanese IV	3
JAPN2005	Integrated Japanese II	3
JAPN2006	Japanese Reading II	3
JAPN2007	Japanese Composition II	3
Community	1	
Languages a	6	
3 General E	9	
Total Credits:		40

# **Total Credits:**

Year III		Credits
JAPN3002	Japanese Research Method I	3
JAPN3005	Japanese Research Method II	3

3 Required Electives	9
4 General Education Courses *** OR	12
2 Free Electives***	6

# **Total Credits:**

\*\*\* 4 General Education Courses and Total Credits is 27 (For students not going to exchange in 3<sup>rd</sup> year)

27 or 21

30 or 24

2 Free Électives and Total Credits is 21 (For students going to exchange in 3rd year)

Year IV	Credits
5 Required Electives	15
1 Free Elective	3
4 General Education Courses*** OR	12
2 Free Electives***	6

# Total Credits:

\*\*\* 4 General Education Courses and Total Credits is 30 (For students returning from exchange) 2 Free Electives and Total Credits is 24 (For students not going to exchange or going to exchange in 4<sup>th</sup> year)

### List of Japanese Studies Required Electives

JAPN3000	Business Japanese I
JAPN3003	Selected Readings in Modern Japanese I
JAPN3004	Business Japanese II
JAPN3006	Selected Readings in Modern Japanese II
JAPN3007	Practical Japanese V
JAPN3008	Practical Japanese VI
JAPN3009	Translation and Interpretation I
JAPN3010	Translation and Interpretation II
JAPN3011	Special Topics on Japan I
JAPN3012	Special Topics on Japan II
JAPN3013	Special Topics on Japan III
JAPN3014	Special Topics on Japan IV
JAPN4002	Business in Japan I
JAPN4003	Business in Japan II
JAPN4004	Selected Readings in Modern Japanese III
JAPN4005	Selected Readings in Modern Japanese IV
JAPN4006	Modern Japan
JAPN4010	Art of Japan
JAPN4015	Japanese Literature I
JAPN4016	Japanese Literature II
JAPN4018	Special Topics in Humanities I

# FACULTY OF ARTS & HUMANITIES Bachelor's Degree Programmes

# **Bachelor of Arts**

# • Portuguese Studies

Year I		Credits
PORT1002	Oral Comprehension and Production Skills I	6
PORT1003	Written Comprehension and Production Skills I	6
PORT1004	Oral Comprehension and Production Skills II	6
PORT1005	Written Comprehension and Production Skills II	6
PORT1006	Languages and Skills – Portuguese Language and Culture I <sup>1</sup>	3
PORT1007	Portuguese Language and Culture II	3
Community and Peer Education Courses		
Languages and Skills Courses		
Total Credit	s:	38

Year II		Credits
PORT2006	Oral Comprehension and Production Skills III	6
PORT2007	Written Comprehension and Production Skills III	6
PORT2012	Oral Comprehension and Production Skills IV	6
PORT2013	Written Comprehension and Production Skills IV	6
Community a	1	
Languages and Skills Courses		6
2 Free Electives		6
Total Credit	s:	37

Year III	(Exchange/Study Abroad)*	Credits
PORT3002	Practical Writing for Professional Purposes I	3
PORT3011	Practical Writing for Professional Purposes II	3
PORT3019	Advanced Oral Comprehension and Production Skills I	3
PORT3020	Advanced Oral Comprehension and Production Skills I	3
2 Required Electives		6

2 General Education Courses		6
1 Free Elective		3
1 Required E 1 <sup>st</sup> Semester PORT3004 PORT3005 PORT3006	Elective from the following: Translation I (Portuguese to Chinese) Introduction to Linguistics Introduction to the Study of the Literature of the Portuguese-speaking	
PORT3007	World I Modern and Contemporary History of the Portuguese-speaking Countries I	
PORT3008 PORT3009	Special Topics I Special Topics II	
1 Required Elective from the following: 2 <sup>nd</sup> Semester		
PORT3013	Translation II (Chinese to Portuguese)	
PORT3014	Portuguese Linguistics: Grammar	
PORT3015	Introduction to the Study of the Literature of the Portuguese-speaking World II	
PORT3016	Modern and Contemporary History of the Portuguese-speaking Countries II	
PORT3017	Special Topics III	
PORT3018	Special Topics IV	
Total Credits: 27		

Year IV		Credits
PORT4001	Research and Report Writing Skills	3
PORT4008	Graduation Project**	3
2 Required Electives		6
6 General Education Courses		18
1 Required Elective from the following:		
1 <sup>st</sup> Semester		
PORT4002	Advanced Translation I (Portuguese to Chinese)	
PORT4003	Interpreting I (Portuguese to Chinese)	
PORT4004	Teaching Portuguese as a Foreign Language I	
PORT4005	Contemporary Society and Institutions of the Portuguese-speaking Countries I	9
PORT4006	Special Topics V	
PORT4007	Special Topics VI	
1 Required Elective from the following: 2 <sup>nd</sup> Semester		
PORT4011	Advanced Translation II (Chinese to Portuguese)	

PORT4012	Interpreting II (Chinese to Portuguese)
PORT4013	Teaching Portuguese as a Foreign Language II
PORT4014	Contemporary Society and Institutions of the Portuguese-speaking Countries II
PORT4015	Special Topics VII
PORT4016	Special Topics VIII
PORT4017	Portuguese Language Drama

# **Total Credits:**

30

\* Students will follow this study plan if they do not go Exchange/Study Abroad. For students who go to Exchange/Study Abroad, they will be required to enroll similar courses in exchange university

\*\* Research course

1. Students majoring in Portuguese Studies are required to complete the course, Portuguese Language and Culture I, to fulfill the Chinese/Portuguese language requirement in Languages and Skills.

# **Course Description**

#### AHGC7000 COMPARATIVE LANGUAGE STUDIES FOR TRANSLATION

This course is concerned with the comparative description of the morpho-syntax of Chinese and Portuguese, Chinese and English, and Portuguese and English. Among the topics covered, attention will be given to phrase and clause structure, interrogation, embedding, conjoining, comparison, focusing devices, the auxiliary, temporal and aspectual representation, and the representation of reference.

Pre-requisite: None

#### THEORETICAL CONCEPTS OF TRANSLATION STUDIES AHGC7001

This course covers contemporary concepts and approaches to translation. It surveys different strategies and techniques in the translation theory and methodology literature, discusses the critical evaluation of translations, and introduces aspects of modern translation tools. It furnishes the student with a grounding in the principal theories of translation studies and practice essential to the practicing professional and basic to academic research in the discipline. Pre-requisite: None

#### AHGC7002 TRANSLATION TECHNOLOGY

This course surveys computer-aided and computer-based methods and approaches used in the translation area. It introduces the student to concepts and basic topics in machineaided/computer-assisted translation and machine translation, concentrating on mainstream developments in these areas and providing practical training in the use of technologies such as Translation Memory System TRADOS and other translation software.

Pre-requisite: None

#### RESEARCH DESIGN AND WRITING AHGC7003

This course is a practical seminar designed to train students in the formulation of advanced research projects in the area of translation or interpreting. It is intended as a springboard for the development of a dissertation topic. The student will be required to identify relevant research guestions and conduct systematic and creative research thereon from a theoretical and practical framework, presenting papers to the class on the development of their projects. Pre-requisite: None

#### AHGC7014 CHINESE - PORTUGUESE TRANSLATION

This course involves the practice and critical discussion of translation from Chinese to Portuguese in a range of topic areas, in order to develop recognition of translation problems specific to this direction of translation, to develop strategies for dealing with them, and to construct data-bases relating to the lexicon and structure involved. Students will work alone, in pairs and in small groups.

Pre-requisite: Permission of the Coordinator of the Programme

#### **PORTUGUESE – CHINESE TRANSLATION** AHGC7015

This course involves the practice and critical discussion of translation from Portuguese to Chinese in a range of topic areas, in order to develop recognition of translation problems specific to this direction of translation, to develop strategies for dealing with them, and to construct databases relating to the lexicon and structure involved. Students will work alone, in pairs and in small groups.

Pre-requisite: Permission of the Coordinator of the Programme

#### AHGC7016 INTERPRETING I CHINESE/PORTUGUESE

This course will concentrate on basic interpreting skills as a basis for more advanced interpreting training. It will cover skills such as note taking, memory span improvement, sight translation and the basics of consecutive interpreting. Students will undertake practical training in the language laboratory. Pre-requisite: Permission of the Coordinator of the Programme

# AHGC7017 INTERPRETING II CHINESE/PORTUGUESE

This course will work further with sight interpreting and consecutive interpreting, while advancing to simultaneous interpreting. The student will be exposed to a wide range of topic areas, including business, socio-political topics, and advances in science and technology. Students will undertake practical training in the language laboratory.

Pre-requisite: Permission of the Coordinator of the Programme

### AHGC7040 A DISCOURSAL APPROACH TO TRANSLATION STUDIES

This course offers a translation study oriented examination of the use of language by English and Chinese communities. It takes the discourse approach to the study based on different theoretical perspectives: the social theory of language, known as systemic functional linguistics, speech act theory, pragmatic theory and the relevance theory. With both spoken interaction and written texts as objects of analysis, this course involves the study of both language form and function. It identifies linguistics features that characterize different genres as well as social and cultural factors that aid in the understanding and interpretation of different texts. Pre-requisite: None

# AHGC7042 CULTURAL ISSUES IN TRANSLATION

This course considers the notion of a cultural transfer in text translation. Particular attention will be paid to cross-cultural matters of information structure, cohesion and pragmatics, and to questions of reception and power relations. The student will develop an advanced understanding of the notion of cultural transfer, and the ability to identify and mediate its conditioning influence in the process of translation.

Pre-requisite: None

### AHGC7043 GENDER IN TRANSLATION STUDIES

This course introduces students to a general understanding of the theories and practices of feminism and issues related to gender, language and translation. It will examine questions of sexism in language, subjectivities and writing, text and representation, cultural identity and politics of transmission in the context of Chinese and English. Texts to be examined may include original and translated works of feminist theories, writing on gender issues and works of women writers.

Pre-requisite: None

### AHGC7044 HISTORY, CULTURE AND TRANSLATION

This general introduction to the history of translation focuses on the long relationship between Chinese language and the Western European languages, and considers other translation traditions where relevant. The first part of the course examines the works, activities, and roles of important translators in history, with special reference to Macao's pivotal role in the history of translation. The second part of the course will look at the role of translation in the dissemination of knowledge, culture, law and trade.

Pre-requisite: None

# AHGC7045 LITERARY TRANSLATION

This course will introduce students to approaches to literary translation. Students will learn to identify the linguistic, stylistic and cultural features of literary texts as well as to formulate strategies for translating those works. Seminars are conducted to examine the particularities of different literary genres, such as poetry, drama, and fiction, and the special strategies required for their translation.

Pre-requisite: None

### AHGC7046 LITERATURE, CULTURE AND TRANSLATION: LANGUAGE AND IDEOLOGY

This course will examine the relationship between literature, culture, and translation with respect to ideological questions in selected works from the Chinese and Western literary traditions. Examples of the questions which may be explored include gender, race, colonialism, post-colonialism, humanism and religion. These questions will be discussed on two levels:

(i) comparison of different writers' approaches within the same broad cultural tradition, and (ii) comparison of approaches between different cultural traditions. Through these discussions, students will develop an understanding of some of the major concerns of writers in different cultural traditions. Texts of different genres and backgrounds will be selected for discussion. Pre-requisite: None

#### AHGC7047 READING TRANSLATED WORKS

This course aims at learning from good examples that, nevertheless, can be treated critically. This course will cover a variety of texts and genres, and above all, it aims at learning from master translators and focuses on the study of translation classics from the Chinese and the Portuguese into English and vice versa.

Pre-requisite: None

#### AHGC7048 SPECIAL TOPIC IN TRANSLATION I

This course is designed to permit visiting scholars, or existing staff, to offer postgraduate level courses in their particular areas of specialisation. The topic and content of the courses will vary from year to year depending on the availability of specialised staff. Pre-requisite: None

#### AHGC7049 SPECIAL TOPIC IN TRANSLATION II

This course is designed to permit visiting scholars, or existing staff, to offer postgraduate level courses in their particular areas of specialisation. The topic and content of the courses will vary from year to year depending on the availability of specialised staff. Pre-requisite: None

#### AHGC7050 SPECIAL TOPIC IN TRANSLATION III

This course is designed to permit visiting scholars, or existing staff, to offer postgraduate level courses in their particular areas of specialisation. The topic and content of the courses will vary from year to year depending on the availability of specialised staff. Pre-requisite: None

#### AHGC7051 SPECIAL TOPIC IN TRANSLATION IV

This course is designed to permit visiting scholars, or existing staff, to offer postgraduate level courses in their particular areas of specialisation. The topic and content of the courses will vary from year to year depending on the availability of specialised staff. Pre-requisite: None

#### AHGC7052 TRANSLATING CULTURES

This course aims at providing students with a basic understanding of the cognitive and epistemic problems involved in cross-cultural encounters and dialogues. General problems in cultural representation will be discussed with particular reference to the systematically used cultural stereotypes such as "the Orient" and "the Occident". The epistemological and political underpinnings of the ways in which the East-West divide has been historically established will be demonstrated and critically analysed with concrete examples, enhanced by the perspectives of cultural history and of translation studies. In contrast to courses that are entitled "Culture and Translation", this course will focus also on the new cultural identities that emerged in recent years as a result of East-West contacts via translations.

Pre-requisite: None

#### AHGC7053 TRANSLATING FOR THE MEDIA

In this course students will learn the basic techniques for translating for the media, including newspapers, news magazines, and press releases. Students will study and compare the linguistic, stylistic, and cultural features of writing for the media in both Chinese and English, then learn approaches for translating such texts between the two languages. Attention will also be paid to the standard reference tools for this kind of translation.

Pre-requisite: None

# AHGC7054 TRANSLATION AND COMPARATIVE LITERATURE

This course aims to assess the place and function of translation within the wider domain of China-West comparative literature through the representative works of major scholars in translation and literature and thus to enable students to achieve a critical awareness of social, literary, and cultural issues crucial to translation and comparative studies. Students on the course will have the opportunities to compare and analyze commonalities and divergences, identities and discontinuities in the aesthetic transmission of texts between the Chinese and Western literary traditions. Instead of technical details, this course will lay more emphasis on helping students look into larger intercultural issues involved in a perception of translation and comparative literature.

Pre-requisite: None

# AHGC7055 TRANSLATION OF LEGAL TEXTS

This course is concerned with the translation of legal documents within the context of Macao Law, covering a wide range of document types, including informational documents, common legal documents, and specialized and technical documents such as, for example, contracts, and legal forms. Particular attention will be paid to translation problems associated with the legal text, including legal equivalence, terminology, register, structural layout. Pre-requisite: None

# AHGC7057 TRANSLATION OF TEXTS IN POPULAR CULTURE

This is a translation course which focuses on popular culture in both the English- and the Chinese-speaking worlds (Hong Kong in particular). Selected texts from areas such as cinema, popular music, popular novels, newspaper columns, magazines, advertisements, and TV programmes, and related criticism, will be used as materials for students to practise translation. Concepts and theories of the formation of different cultural phenomena and cultural representations will be introduced. Students will be encouraged to discuss how cultural elements work in the process of translating texts which might involve dialects, subcultures and local cultural interests of different societies.

Pre-requisite: None

# AHGC7058 TRANSLATION OF TEXTS IN THE ARTS

In this course the students will learn the basic terminology, vocabulary and techniques for translating texts in the arts, primarily in music, painting and films.

Students will be required to translate either (i) programme notes of recitals and concerts, and TV/Radio talks on music; or (ii) catalogues of exhibitions and museum collections of items of arts and antiques; or (iii) films.

Pre-requisite: None

### AHGC7059 TRANSLATING TEXTS IN SOCIAL SCIENCES

This course will introduce students to the basic socio-political concepts used in different cultures. It aims to enable students to compare and reflect on these social issues and socio-cultural concepts when they are used in the contexts of both Chinese and Western societies. It will provide students with a historical background of when and how these concepts are introduced, both in Chinese and in English. Samples of writing in the social sciences, including economics, political science, sociology and anthropology, will be selected and students are required to work on their translation.

Pre-requisite: None

# AHGC7060 TRANSLATION CRITICISM AND ASSESSMENT

This course involves the critical reading and analysis of existing translated works. The aim of the course is twofold. Firstly, it will enable students to learn how to appreciate the stylistic treatments and philosophic attitudes involved in the translation. Secondly, by means of reading and discussion activities, it will guide students in the methods and principles of evaluating translated works.

Pre-requisite: None

# AHGC7061 TRANSLATION PROJECT

In the translation project, each student will have to translate a long piece of text of a particular genre. During the project, discussions will be conducted on how to solve translation problems and how strategic decisions are to be made. The instructor will also participate in discussions and give guidelines when necessary. Presentations will be given by students on their translation experience.

Pre-requisite: None

### AHGC7062 TRANSLATION PEDAGOGY

This course examines theories of translation teaching, from a perspective which takes into account the needs of the didactics of translation and of interpreting. Detailed analysis of syllabuses will be presented to make students aware of recent trends in the teaching of translation. The use of new technologies for the teaching of translation skills will be emphasized. Pre-requisite: None

### AHGC7063 TRANSLATION FOR ADMINISTRATION AND COMMERCE

This is a practice course concentrating on the translation of a wide range of specific administrative and commercial documents, including correspondence, memos and documents for meetings, reports, informational and marketing documents, contracts and insurance policies, normative instructions, administrative policies, website contents. Pre-requisite: None

### AHGC7064 AUDIO-VISUAL TRANSLATION

This is an introduction to audiovisual translation (AVT). It is concerned with the nature, characteristics, and translation principles and approaches pertaining to this particular type of translation in the service of dubbing as well as subtitling. Emphasis will be placed on seeking optimum effect through applying AVT-specific translation strategies and techniques in overcoming problems that stem from the conflict between the medium constraints and translatability of culture-bound elements in the context of required immediate comprehensibility of the translation consumer.

Pre-requisite: None

### AHGC7065 THEORIES AND PRACTICE OF INTERPRETING

This course aims to introduce both the emerging field of Interpreting Studies and the practice of Interpreting to post-graduate learners. Through selected readings, the course will explore fundamental differences between written translation and oral interpreting besides discussing current approaches to research in the field. The course itself will be conducted in training labs where learners will be drawn into the practice through assignments and interpreting of a variety of texts.

Pre-requisite: None

### AHGC7066 CONSECUTIVE INTERPRETING

This course focuses on the consecutive mode of interpreting. Learners will be exposed to a range of accents and different settings. Their professional expertise will be developed through exercises in paraphrasing, note-taking and exercises aimed at aiding short-term memory. Learners will also be exposed to seminal readings to further enhance their understanding of interpreting in general and consecutive interpreting in particular. Pre-requisite: None

### AHGC7067 SIMULTANEOUS INTERPRETING

This course focuses on the simultaneous mode of interpreting. Learners will undergo intensive training in shadowing, visualizing, sight interpreting, speed training, transcoding, linear interpreting, etc., before interpreting in the simultaneous mode. The course will be conducted in the state-of-the-art SI Training Lab and students will be invited to observe live SI performances. Learners will also be exposed to seminal readings to further enhance their understanding of interpreting in general and simultaneous interpreting in particular. Pre-requisite: None

# AHGC7068 CONFERENCE INTERPRETING

This course aims to provide post-graduate learners a platform to gain extensive practice in the art of Conference Interpreting. Both Consecutive and Simultaneous modes of interpreting will be engaged. Learners will be introduced to internationally accepted codes of conduct for interpreters and conference management and gain hands on experience through guided inhouse or external assignments including field trips.

Pre-requisite: None

# AHGC7282 ENGLISH – PORTUGUESE TRANSLATION

This course involves the practice and critical discussion of translation from English to Portuguese in a range of topic areas, in order to develop recognition of translation problems specific to this direction of translation, to develop strategies for dealing with them, and to construct data-bases relating to the lexicon and structure involved. Students will work alone, in pairs and in small groups.

Pre-requisite: Permission of the Coordinator of the Programme

# AHGC7283 PORTUGUESE - ENGLISH TRANSLATION

This course involves the practice and critical discussion of translation from Portuguese to English in a range of topic areas, in order to develop recognition of translation problems specific to this direction of translation, to develop strategies for dealing with them, and to construct data-bases relating to the lexicon and structure involved. Students will work alone, in pairs and in small groups.

Pre-requisite: Permission of the Coordinator of the Programme

# AHGC7284 INTERPRETING I ENGLISH/PORTUGUESE

This course will concentrate on basic interpreting skills as a basis for more advanced interpreting training. It will cover skills such as note taking, memory span improvement, sight translation and the basics of consecutive interpreting. Students will undertake practical training in the language laboratory.

Pre-requisite: None

### AHGC7285 INTERPRETING II ENGLISH/PORTUGUESE

This course will work further with sight interpreting and consecutive interpreting, while advancing to simultaneous interpreting. The student will be exposed to a wide range of topic areas, including business, socio-political topics, and advances in science and technology. Students will undertake practical training in the language laboratory.

Pre-requisite: Permission of the Coordinator of the Programme

# AHGC7302 SECOND LANGUAGE ACQUISITION

This course will examine current theories of second language acquisition, in relation to the acquisitional process, developmental stages, and external factors conditioning acquisition, including the effects of the first language, age of acquisition, motivation, instructional context and the nature of input. Topics discussed will include the critical period hypothesis, parallels with first language acquisition, bilingualism and exceptional language learning. Pre-requisite: None

### AHGC7303 EVALUATION AND ASSESSMENT OF LANGUAGE USE

This course introduces students to fundamental concepts of language testing and assessment and critically examines testing instruments and procedures for specific purposes, with particular attention to test use in classroom settings.

Pre-requisite: None

### AHGC7304 ENGLISH PEDAGOGICAL GRAMMAR

This course focuses on a systematic review of the grammatical difficulties common to learners of English, particularly learners whose first language is Chinese. There is a focus on devising clear descriptions of grammatical patterns from a learner's perspective, diagnosing learners'

grammatical errors, and devising linguistically informed and appropriate strategies to assist learners to understand and correct these errors. Pre-requisite: None

### AHGC7305 METHODOLOGY OF TEACHING ENGLISH AS A SECOND LANGUAGE

This course addresses the application of current methodologies in the teaching of English as a Second Language. Developments in linguistics, educational and psychological studies lead to constant new input to foreign language teaching methodology and practice. The course introduces the student to major current practices and how research-driven innovations are developed in current practice.

Pre-requisite: None

### AHGC7306 RESEARCH METHODS IN APPLIED LINGUISTICS

The purpose of this course is to introduce the major components of theoretical and action research as carried out in language learning and teaching. Students read a variety of case studies on theoretical and action research with a focus on understanding and evaluating study design, procedures, analyses, as well as the use of electronic resources. They consider the process of literature review in the development of research questions and develop a proposal for their own research project.

Pre-requisite: None

# AHGC7307 SUPERVISED TEACHING PLANNING AND PRACTICE IN ENGLISH AS A SECOND LANGUAGE

In this course the student is supervised in the planning and delivery of class teaching sessions in English as a Second Language within the framework of specific curricula. Students will design lesson plans and present class activities and procedures to the instructor and fellow students, and receive and respond to critical evaluations.

Pre-requisite: AHGC7305

### AHGC7308 SPECIAL TOPICS IN APPLIED LINGUISTICS I

This course is designed to offer visiting scholars, or existing staff, the opportunity to offer postgraduate level students courses in their particular area of specialisation. The topic and content of the courses will vary from year to year depending on the availability of expert staff. Examples of specialised topics that may be offered include: Second Language Reading; Intercultural Language Education; Teaching English for Academic Purposes; Teaching Business English; etc.

Pre-requisite: None

### AHGC7309 SPECIAL TOPICS IN APPLIED LINGUISTICS II

This course is designed to offer visiting scholars, or existing staff, the opportunity to offer postgraduate level students courses in their particular area of specialisation. The topic and content of the courses will vary from year to year depending on the availability of expert staff. Examples of specialised topics that may be offered include: Second Language Reading; Intercultural Language Education; Teaching English for Academic Purposes; Teaching Business English; etc.

Pre-requisite: None

### AHGC7310 IT & LANGUAGE TEACHING AND LEARNING

This course focuses on the application of IT, digital technology and new media in language education. The students are introduced to current software, mobile applications and classroom facilities (e.g. smartboards) and they explore the principles used in integrating new technology into teaching and learning inside and outside the classroom. Pre-requisite: None

### AHGC7311 LITERATURE AND ENGLISH LANGUAGE LEARNING

This course considers the role of literature in language learning from a theoretical and practical

perspective. Topics covered may include the role of literature in the service of linguistic imperialism, the role of stylistics in grammar instruction, and the place of the literary text in communicative and intercultural language learning task design. Pre-requisite: None

# AHGC7312 TEACHING THE LANGUAGE SKILLS

This course focuses on the teaching and learning of specific language skills, broadly reading, writing, listening and speaking. There is also coverage of discrete subskills, such as pronunciation, or reading and listening for gist and detail, and discussion of process and productoriented perspectives on writing and speaking. Students consider different approaches to the teaching of skills and evaluate and design tasks that promote skills development. Pre-requisite: None

# AHGC7313 TRANSLATION & APPLIED LINGUISTICS

This course looks at the historical, current and contested role of translation in the language classroom. The course covers theoretically-informed practice, from the unfashionable era of 'grammar translation' to the current re-evaluation of the role of translation practices in language learning and teaching.

Pre-requisite: None

### AHGC7314 CLASSROOM INTERACTION

This course focuses on the nature of classroom discourse. Various models of discourse analysis are introduced, and students apply them to different situations to analyse styles of learning and teaching. Classes studied range from traditional to progressive, and the language of learning may be English, Portuguese and/or Chinese.

Pre-requisite: None

# AHGC7396 APPLIED THESIS

Under the supervision of an instructor, each individual student designs, carries out and writes up a substantial piece of action research based on classroom observation and/or teaching. Pre-requisite: AHGC7306/PORT7000

### AHGC7399 ACADEMIC THESIS

Under the supervision of an instructor, each individual student designs, carries out and writes up a substantial piece of theoretical research based on an in-depth study of a particular research area, a review of the research literature, the formulation of relevant research questions, and the development of a method of addressing these questions.

Pre-requisite: AHGC7306/PORT7000

### AHGC7998 PROJECT REPORT

The students will need to develop a report (6000 to 9000 words) in which they discuss some important aspects/areas of a substantial translation project or interpreting project that they have completed. The students can describe their project with regards to its nature, background, major components, and relevant procedures and processes. They can elaborate on the project's characteristics and (special) requirements, and evaluate their own performance, particularly in relation to some difficulties or challenges, reflecting on their use of tactics, strategies and solutions. The Project Report can also address some technical, practical and ethical issues or topics.

Pre-requisite: AHGC7003 and an average minimum GPA of 2.7 in not less than two-thirds of the course requirement.

### AHGC8000 RESEARCH ETHICS

The course Research Ethics will be conducted online. PhD students will be required to pass the web-based learning modules in the CITI Programme (Collaborative Institutional Training Initiative at the University of Miami). Human Subjects Research – Social-Behavioral-Educational (SBE) Modules that was picked for FAH PhD students, content includes history and ethical

principles, defining research with human subjects, the federal regulations, assessing risk, informed consent, privacy and confidentiality, research with prisoners and with children, research in public elementary and secondary schools, international and internet-based research, unanticipated problems and reporting requirements in social and behavioural research. Pre-requisite: None

# CCHC7000 INTRODUCTION OF CHINESE HISTORY AND CULTURE

The course is the foundational course for the programme. It introduces students the existing literature on studying Chinese history and culture as well as the major theories and methodologies for the subject, allowing them to have the basic knowledge of the subject, which shall guide them to study the subject with a sound foundation and an appropriate approach and from an advanced starting point.

Pre-requisite: None

### CCHC7001 SEMINAR ON CHINESE CLASSICS

The course, via carefully studying the existing Chinese classics including, e.g., "Four Books and Five Classics," "Twenty Four Histories," writings by Lao Zi and Zhuang Zi, "Yangming's Philosophy of Mind," etc., shall cultivate students' capability of reading and understanding Chinese classical writings, help them accurately grasp the core values of Chinese traditional culture, and guide them along with a critical and cautious thinking line and other related historical materials to analyze and decode the first hand historical texts, truly learning Chinese history and traditional culture by solid historical evidence and deconstructing texts.

### CCHC7002 ANCIENT CHINESE INTELLECTUAL HISTORY

This course is to trace the development of Chinese thoughts and intellectual activities, from the ancient time to the premodern time with a focus on the periods of Tang, Song and Ming, and to show the evolving ideas and diverging theories of the core Chinese thoughts and philosophies along the change of social and political circumstance. It will try to find the lasting fundamental elements of traditional Chinese thoughts, no matter how their discourses and expressions on surface differed, as well as their advancement and continuity. Pre-requisite: None

# CCHC7003 THE INTANGIBLE AND SPIRITUAL CIVILIZATION OF TRADITIONAL CHINA

Focusing on the intangible civilization and spiritual civilization of traditional China, the course will help students learn about all kinds of traditional Chinese intangible arts and culture as well as artistic and cultural creativities, such as literature, music, dance, drama, painting, craftwork, folk custom, etc., to broadly and deeply grasp the spiritual and moral dimension and wisdom of China, various historical situations and delicate and emotional aspects of the complicated human experiences displayed and passed on by Chinese intangible civilization, which have been hardly expressed by official documents.

Pre-requisite: None

### CCHC7004 THE MAJOR TRANSFORMATIONS IN CHINESE HISTORY

The course will choose the major topics in Chinese history, such as the First Emperor Qin who unified China, the restoration and decline of Ming and Qing, etc., to describe major changes in Chinese institutions, traditions, and society during the different historical phases, the main phenomena and features of Chinese history, and the historical legacies, so that the students could learn about the main issues and direction of Chinese history, the causes for revolutions and reforms, namely where China is from and where China is moving toward, as well as the historical mission of the Chinese people nowadays.

Pre-requisite: None

#### CCHC7005 CHINESE LITERATURE AND CULTURE IN MORDERN TRANSITION

The course will portray the transition of Chinese literature and culture in modern time, and explain the causes to such a change. It will examine the profound impact of the literary and

cultural transformation on China, with a focus on the major intellectual debates, advancement and divergence, to find their relationship with the political and social development. Pre-requisite: None

# CCHC7006 MACAO IN CHINESE HISTORY

The course will trace the activities of Western missionaries and businessmen in Macao and their impact on China via Macao since the sixteenth century. It will measure the historical implications and effects of Sino-Western interactions through Macao during the same period and investigate the role of Macao in modern Chinese history, especially during the wartimes and revolutionary times, as well as the influence the major historical events of the mainland brought to Macao. Pre-requisite: None

# CCHC7007 PEDAGOGICAL SEMINAR: CURRICULAR DESIGN ON TEACHING CHINESE HISTORY, CULTURE AND LANGUAGE

This is a pedagogical seminar, focusing on the curricular design and the method of teaching Chinese history, culture or language for the students of elementary and high schools. It will use class discussions and presentations to analyze and solve the most common problems in teaching the subject, technically, culturally and socially, and train and guide students to make curricular design for the course of "Chinese History," "Chinese Culture" or "Chinese language," and strengthen their teaching capability and skill through practice, making a well-designed, very practical and well-suited curricular design for the courses.

### CCHC7008 TOPICS IN CHINESE LANGUAGE

The course will teach and train students to accurately and skillfully read classical Chinese language through practice, strengthen their writing capability with modern Chinese language, focusing on correcting typical errors that often occurred in using Chinese language, in terms of grammar, punctuation, writing styles, way of expression, etc. It will also introduce Xu Shen's study on Chinese characters and teach students about how to see the social and cultural and implications deeply contained in linguistic expressions, as well as the subtlety, depth, richness and the enormous power and effect of Chinese language as the carrier of a culture. Pre-requisite: None

### CCHC7009 CHINESE HISTORY REFLECTED BY ARTS AND LITERATURE

The course will use ancient and modern arts and literature to teach students Chinese history, training them to read historical messages and hidden truths from images, artifacts and unofficial writings and to see the emotional and delicate aspects of human experiences as well as the historical context of ancient Chinese arts and literature. Pre-requisite: None

### CCHC7998 PROJECT REPORT

Students, guided and supervised by individual instructor on a person-to-person basis, are required to independently and individually complete a research project on Chinese history and culture as well as the pedagogy for teaching that subject with an in-depth report. They shall apply the knowledge and the research methods of Chinese history and culture they learned to enhancing and strengthening their capability of doing research project and writing academic report, as well as designing courses and pedagogy for teaching the subject. The main assignment and final product of this course is a project report on one of the learned subjects. Pre-requisite: None

### CHLL1000 大學語文 UNIVERSITY CHINESE

本科是一門基礎課,供全校各專業同學修讀。其內容包括古今中外有代表性的文學作品,包括詩歌、散文和小說。通過教學的多個環節,使同學增加對文學作品的興趣,提高閱讀和分析的能力, 進而提高語文的表達能力。 先修科目:沒有

### CHLL1001 現代漢語 MODERN CHINESE LANGUAGE

本課程是漢語言文學專業的必修基礎課。通過實例分析、小組討論報告等教與學的手段,學生系統地掌握現代漢語的文字、語音、詞彙等基本理論和基本知識,學會語音、詞彙分析的基本技能,培養和提高學生分析和運用語音、詞彙知識的能力。通過本課的各種練習,學生能對普通話的語音和詞彙有較全面的認識,為學習其他語言學科目奠定良好的基礎。 先修科目:沒有

#### CHLL1002 漢語語言學概論 INTRODUCTION TO CHINESE LINGUISTICS

啟發學生觀察和討論澳門的各種語言、方言現象,將日常語言現象與語言的基本概念、性質、結 構、演變規律、以及其他社會現象的聯繫起來,培養學生對語言現象的敏感性,以及自覺將語言 學理論運用在語言分析、語言運用、語言教學、語言規劃等方面。通過實例分析,學會對日常語 言現象有一個正確的和科學的態度,掌握語言工作者的基本理論和知識。 先修科目:沒有

#### CHLL1003 中國當代文學 CONTEMPORARY CHINESE LITERATURE

本課程主要探討二十世紀下半葉以來中國文學之歷史發展的規律與成就,並旁及其與古典文學、 外國文學和現代文學之關係。課程的重點內容是對當代文學重要作家的代表作品進行歷史和美學 的解讀,並對朦朧詩派、先鋒派等重要文學思潮和流派,對山藥蛋派、探求者、他們詩社等重要 文學社團,將結合作品進行重點介紹,且以互動式、啟發式教育,激發同學的獨立思考與課堂討 論,從而達到化課堂所學為自身學識的教學目的。 先修科目:沒有

#### CHLL1004 中國現代文學 MODERN CHINESE LITERATURE

本課程主要探討二十世紀上半葉中國文學之歷史發展的規律與成就,並旁及其與古典文學、外國 文學之關係。課程的重點內容是對現代文學重要作家的代表作品進行歷史和美學的解讀,並對新 人文主義、新感覺派、九葉詩派等重要文學思潮和流派,對文學研究會、創造社、新月社等重要 文學社團,將結合作品進行重點介紹,且以互動式、啟發式教育,激發同學的獨立思考與課堂討 論,從而達到化課堂所學為自身學識的教學目的。 先修科目:沒有

# CHLL1005 粤語與粵文化 CANTONESE LANGUAGE AND CULTURE

本課程通過方言調查、實地考察、觀賞表演、分析討論等方式,引導學生探討粵語與粵文化各個 方面的密切關係,諸如宗教信仰、社會風俗、戲曲藝術、飲食文化及中西語言文化的融合等。本 課程旨在深化學生的地域語言文化修養,培養其收集、分析及運用地方文獻和口述資料的能力。 先修科目:沒有

#### CHLL1006 中國古典詩歌 CLASSICAL CHINESE POETRY

本課程引導學生閱讀、分析、闡釋先秦至清代的詩、詞、曲作品,通過討論、報告、撰寫論文等 方式,啟發學生分析詩歌的語言、意象、韻律、格調、風格、結構、詩體、主題、題材等,探討 古代詩歌的發展演變歷程及其與社會歷史背景的關係,並練習創作舊體詩詞的格律和技巧。本課 程旨在使學生熟悉古典詩歌的代表作家作品和發展歷程,並培養其獨立欣賞、分析、批評古典詩 歌的能力。

先修科目: 沒有

#### CHLL1007 中國古典小說 CLASSICAL CHINESE FICTION

本課程引導學生閱讀、分析、闡釋清代之前的古典小說代表作品,通過討論、報告、撰寫論文等 方式,啟發學生分析小說的文本、語言風格、主題、題材類型、敘事結構、人物塑造等,探討古 典小說的發展演變及其與社會歷史背景的關係。本課程旨在使學生瞭解古典小說的作表作家作品 和發展歷程,並培養其獨立欣賞、分析、批評古典小說的能力。 先修科目:沒有

#### CHLL1008 中國歷史文獻選讀 SELECTED READINGS IN CHINESE HISTORIOGRAPHY

《史記》是我國史學的偉大著作,司馬遷開創了我國史學編著和研究的新局面。《史記》以其材料 豐富、內容廣泛、體例獨特、文筆生動、識見高明著稱,後世修史者奉為典範。本課程側重介紹 《史記》之成書、體例、地位,並且選取其中有代表之篇章,作出分析,顯示中國史學研究中之 史才、史學、史識;亦從文學角度欣賞《史記》,蓋《史記》實為中國古代散文的佳作,優美辭句, 敘事活潑明快。 先修科目:沒有

元修件日· 没角

# CHLL1009 文學創作 CREATIVE WRITING

本課程旨在透過講課、習作、小組討論等,增強同學的文學創作能力。課程內容包括:1. 訓練同 學掌握規範的白話文、減少病句和粵方言痕跡、應用文寫作、詞語搭配、標點符號、使用字典詞 典等;2. 講解文學創作的要素,如觀察、構思、想像、表達等;3、引導同學掌握小說、散文、詩 等各類文體的寫作。 先修科目:沒有

### CHLL1010 通俗文學與文化 POPULAR LITERATURE AND CULTURE

本課程以現當代民間文學和通俗文學文本為研究對象,運用多媒體教學、社會調查、課堂討論等 手段,引導同學探究民間文學和通俗文學中的題材種類,表達藝術手法,共同特徵與差異,以及 流行文化的思維表達,進而追蹤當代大眾文學的發展變遷、文化底蘊及其所體現的社會大眾意識。 本課程將聯係中國現當代通俗文學與民間文學的實際,從民俗學乃至文化人類學的理論視野探討 民俗文化當代發展的規律,並指導學生對澳門民間文學進行採集與研究。 先修科目:沒有

#### CHLL1011 實用中文 PRACTICAL CHINESE

本課程的目標是訓練同學有效地應用中文到日常生活和工作中去,培養和提高同學的中文應用能 力和水平,無論將來從事什麼行業,都可運用中文為其溝通和發揮能力的工具。課程將採用講課、 討論和練習的方式授課。講授的內容包括公函、通告與啟事、計劃書和私人書信等。 先修科目:沒有

### CHLL1012 對外漢語教學 I CHINESE FOR NON-NATIVE SPEAKERS I

In this course we learn Mandarin Chinese at a beginning level. It aims at students who have had no prior knowledge of the Chinese language. In the class, students work on massive oral exercises in order to build up and improve their Chinese pronunciation skills. The course helps students better understand Chinese by introducing them to fundamentals of Chinese syntax and morphology. The course also introduces various aspects of Chinese culture in order to reduce the cultural obstacles to Chinese language learning. Pre-requisite: None

# CHLL1013 對外漢語 CHINESE AS A SECOND LANGUAGE

This course is designed to develop oral skills and vocabulary knowledge in preparation for students to conduct day-to-day conversations with confidence. Situational dialogues, pronunciation drills, and comprehension exercises will strengthen students' competence on conversational skills. Chinese culture will also be introduced. Follow this course to gain access to the incredible opportunities available to Chinese speakers.

Pre-requisite: CHLL1012 or interviewed by the instructor.

# CHLL2000 古代漢語 I CLASSICAL CHINESE LANGUAGE I

#### CHLL2001 中國古典文學:先秦至唐五代 CLASSICAL CHINESE LITERATURE: PRE-QIN TO TANG AND FIVE DYNASTIES

本課程引導學生閱讀、分析、闡釋先秦至唐五代的古典文學代表作品,通過討論、報告、撰寫論 文等方式,啟發學生探討古典文學發展的重要時期和階段,各類文體風格,主要作家和流派,文 學發展與政治、宗教、思想、文化的關係等。本課程旨在使學生瞭解中國古典文學的特質和發展 歷程,並培養其獨立欣賞、分析、批評古典文學作品的能力。 先修科目:沒有

#### CHLL2002 古代漢語 II CLASSICAL CHINESE LANGUAGE II

課程大綱同「古代漢語」」 先修科目:沒有

# CHLL2003 中國古典文學:宋代至清代

#### CLASSICAL CHINESE LITERATURE: SONG TO QING DYNASTIES

本課程引導學生閱讀、分析、闡釋宋代至清代的古典文學代表作品,通過討論、報告、撰寫論文 等方式,啟發學生探討古典文學發展的重要時期和階段,各類文體風格,主要作家和流派,文學 發展與政治、宗教、思想、文化的關係等。本課程旨在使學生瞭解中國古典文學的特質和發展歷 程,並培養其獨立欣賞、分析、批評古典文學作品的能力。 先修科目:沒有

#### CHLL2004 中國現當代作家專題

#### **TOPICS IN MODERN AND CONTEMPORARY CHINESE WRITERS**

在系統、深入地閱讀漢語新文學作品並瞭解中國現當代文學史的基礎上,對漢語新文學發展過程 中的若干問題作較爲深入、專業的分析,解讀,重點解剖在中國現當代歷史上產生過重大影響或 出現過較明顯困擾的文學現象,並從文學、美學、社會學、文學心理學等多個角度對這些文學現 象進行理論分析,以提高同學的文學批評和理論判斷能力,為進一步介入漢語新文學的研究作準 備。此課程將讓學生分組自選課題進行學術討論練習,教師進行指導並對分組交流進行評分。 先修科目:沒有

#### CHLL2005 世界華文文學 WORLD CHINESE LITERATURE

港澳臺的華人在各自不同的生活環境中,適應著不同的時代和歷史的要求,創作了大量與祖國文 學有著不同特色的文學。它們從不同的角度、側面反映了台灣、香港和澳門的華人的生活與人生 追求,對這些文學創作的研究,有助於同學對台、港及澳門華人社會的瞭解。通過對各地的華文 文學的歷史與現狀描述,重要的作家作品研究,以及不同文學流派的介紹等,使同學對各地的華 文文學有整體的瞭解。本課程將引導學生自主地研究和討論澳門文學的經驗教訓。 先修科目:沒有

#### CHLL2006 中國古典散文 CLASSICAL CHINESE PROSE

本課程引導學生閱讀、分析、闡釋先秦至清代的優秀散文作品,通過討論、報告、撰寫論文等方式,啟發學生分析古典散文在體裁、題材、表現技巧、語言風格等方面的特點和發展演變,並詮 釋其歷史文化背景。本課程旨在培養學生獨立欣賞、分析、批評古典散文的能力,並提高其寫作 文章的水平。

先修科目: 沒有

#### CHLL2007 先秦諸子閱讀 READINGS IN PRE-QIN CLASSICS

本課程選擇閱讀一至二部先秦諸子的經典著作,通過討論、報告、撰寫論文等方式,啟發學生分析經典著作的思想內涵和語言形式,探討其對中國思想文化傳統的形成和發展的影響,並介紹新近出土的先秦諸子資料和學術研究動態。本課程旨在使學生瞭解作為中國思想文化源頭和主流的 先秦諸子著作和思想,深化對文學和文化傳統的認識,並培養其批評性思考和分析研究的能力。 先修科目:沒有

#### CHLL2008 現代漢語語法語用學 MODERN CHINESE GRAMMAR AND PRAGMATICS

本課程是漢語言文學專業的必修基礎課。通過實例分析、小組討論報告等教與學的手段,學生能 系統地掌握現代漢語的語法學、語用學的基本理論和基本知識,學會語法、修辭、語用的基本技 能,培養和提高學生分析語法和判斷語法錯誤以及修正語法錯誤的能力,增強語言的表達效果。 先修科目:沒有

### CHLL2009 漢語詞彙學專題 SPECIAL TOPICS IN CHINESE LEXICON

該課程專門為漢語言文學專業或有志於系統學習漢語詞彙知識的本科生開設。通過該課程的學習, 學生可了解漢語詞彙的基本概念和構詞原則,並運用這些知識分析漢語乃至其他語言的詞彙,進 而在生活和學習中更加準確地運用漢語詞彙。 先修科目:沒有

#### CHLL2010 唐宋詩詞 POETRY OF TANG-SONG PERIOD

本課程引導學生閱讀、分析、闡釋唐宋詩詞的優秀作品和相關理論批評著作,通過討論、報告、 撰寫論文等方式,啟發學生探討唐宋時期的主要詩詞作家、重要發展階段、詩詞體式的格律和表 現特點等,並練習創作舊體詩詞的格律和技巧。本課程旨在使學生認識唐宋詩詞的傑出成就,熟 悉優秀詩詞作家和作品,並提高欣賞、分析、批評、研究詩詞的能力。 先修科目:沒有

#### CHLL2011 現當代文學經典作品閱讀

#### **READINGS IN MODERN AND CONTEMPORARY WORKS**

中國現代文學發展的歷史雖然只有短短幾十年,但值得選讀的作品實在不少。這門課引導學生重 點閱讀魯迅、郭沫若、李金發、戴望舒、錢鈡書、張愛玲、穆旦、廢名、汪曾祺、王小波、北島 等人的富有經典意義的作品,並通過課堂上分析和討論這些有代表性的作品,培養和提高學生獨 立思考和分析文學作品的能力。本課程會聯係古今中外文學現象,發動學生討論經典的定義和意 義。

先修科目: 沒有

#### CHLL2012 港澳語言研究

#### LANGUAGES AND DIALECTS SPOKEN IN HONG KONG AND MACAO

課程旨在讓學生充分認識和瞭解港澳豐富多彩的語言現象及其產生的政治、經濟和文化的原因, 並以語用學的理論從不同角度分析其現象及規律,引導學生對港澳語言研究的興趣,並提高學生 在社會實踐中正確運用語言的能力。 先修科目:沒有

#### CHLL2013 圖書編輯基礎 BOOK EDITING KNOWLEDGE AND SKILL

該課程教學目的使學生較全面瞭解、掌握編輯學的基本原理和編輯技能,對現代編輯,尤其是港澳 地區中文圖書編輯的功能和特點有基本的認識。通過教學逐步提高學生組織、整理文字和圖像資 料的能力,初步學會運用知識產權的基本概念處理出版中的各種問題。 先修科目:沒有

#### CHLL3000 語言比較 LANGUAGE COMPARISON

本課程介紹語言比較和分析的一般原則和常用方法,重點放在兩種漢語方言或者漢語跟其他語言的比較分析上,讓學生對自己的母語或某種外語從語言結構上有清晰的認識,並培養分析語言的 能力,使學生對不同語言或者不同方言之間異同規律的專業敏感及對其對應規律的認識。學生將 學會對粵語和普通話的比較和分析,同時認識粵語和普通話的相同點和不同點。 先修科目:沒有

#### CHLL3001 文學理論及批評 LITERARY THEORY AND CRITICISM

介紹重要文學理論流派如形式主義、結構主義、符號學、後結構主義、女性主義、後殖民主義等,

同時配套介紹中西方文學理論批評範圍內的重要論著和相關作品,演示分別運用或綜合運用傳記 批評、印象批評、形式主義文評、新批評、結構主義與符號學、後結構主義、女性主義、後殖民 主義等中西方文學批評的模式與方法分析具體作品,以提高同學將文學理論運用於批評實踐的能 力,並在積極參與課堂討論的前提下,深化與細化對文學理論和批評方法的掌握。 先修科目:沒有

#### CHLL3002 傳統語文學 CHINESE PHILOLOGY

本課程旨在讓學生系統掌握傳統文字學、音韻學及訓詁學的基本理論與基礎知識。本課程通過這 方面知識學習,提高學生閱讀和研究古代文獻的興趣與能力。教學手段包括學生嘗試古文分析、 小組討論、老師指引等多種方法。 先修科目:沒有

### CHLL3003 語言學名著選讀 READINGS OF CHINESE LINGUISTICS WORK

選擇有代表性的語言學名著,學生進行分組研讀、討論、報告,通過對一些有代表性的漢語方言 和外語的分析文章的研讀,提高學生分析語言、分析方言的能力;同時了解和認識一些有代表性 的語言理論和流派。

先修科目: 沒有

#### CHLL3004 文獻學 BIBLIOGRAPHY

本課程介紹傳統和現代文獻學,包括傳統的目錄學、版本學、校勘學及現代的文獻分類和檢索技術,通過討論、報告和實際練習,使學生掌握傳統文獻的傳播、分類、收藏及整理等基礎知識, 瞭解各學科的重要典籍,認識各種中文工具書的使用方法及各類電子資源的檢索利用。本 課程旨在使學生掌握和利用文獻資訊資源,瞭解本專業和相關學科的發展動向,並培 養學術研究的能力。

先修科目: 沒有

#### CHLL3005 華南文學與文化 SOUTH CHINA LITERATURE AND CULTURE

本課程通過閱讀分析、課堂討論及實地考察,使學生瞭解華南地區文學與歷史文化發展的關係, 特別是華南文學文化在近現代時期的重要轉變,並探討其代表人物的成就和影響。本課程旨在深 化學生的地域文學文化修養,培養其收集、分析及運用地方文獻和口述資料的能力。 先修科目:沒有

#### CHLL3006 漢語社會語言學 CHINESE SOCIOLINGUISTICS

社會語言學是一門與多學科交叉的語言科學。本課程通過實例分析、小組討論報告等教與學手段, 使學生對語言學有更廣泛的認識,從語言社團的角度認識和研究語言的發展和演變,特別是語言 與社會的關係、語言與區域文化的關係,認識澳門社會對於澳門語言的影響,同時讓學生掌握社 會語言學的基本研究方法。

先修科目: 沒有

# CHLL3007 漢語方言學 CHINESE DIALECTOLOGY

課程通過實例分析、小組討論報告(各人運用自己的方言)等教與學的手段,讓學生瞭解漢語各種 方言的語音、詞匯及語法的特點,認識漢語各方言之間的異同以及形成異同的歷史的和區域社會 的原因,學會方言調查和方言研究的基本方法,進而培養學生運用現代語言學理論分析和研究漢 語方言事實的能力。

先修科目: 沒有

# CHLL3008 中國古典戲曲 CLASSICAL CHINESE DRAMA

本課程引導學生閱讀、分析、闡釋古典戲曲的代表作品,通過討論、報告、撰寫論文等方式,啟 發學生探討古典戲曲的起源、形式與發展。本課程旨在使學生瞭解古典戲曲作品的特質、類別、 表演形式和發展歷程,並培養學生獨立欣賞、分析、批評戲曲作品的能力。 先修科目:沒有

#### CHLL3009 漢語訓詁學與語義學 CHINESE ETYMOLOGY AND SEMANTICS

課程旨在讓學生系統掌握傳統訓詁學和現代語義學的基礎知識,以期貫通古今,洋為中用。本課 程還要培養學生閱讀和研究古代文獻的興趣,鍛煉學生運用現代語義學理論分析漢語古今字義、 詞義和句義的能力。 先修科目:沒有

CHLL3010 當代實用文體 CONTEMPORARY PRACTICAL AND PRAGMATIC WRITING

本課程以實用的题材為具體的教學內容,指導同學掌握各類型應用文的寫作特點,講授基礎的寫 作知識,透過講解及學習,培養同學的寫作興趣及提升寫作能力。講授的不僅是私人書信或求職 自薦的書寫,也有喜慶宴會的柬帖及喪務用的訃聞、哀啓等,甚至業務的公函、公啓、意向書、 會議錄、報告等,以及與生活息息相關的各類法律文件,如契約、章則、規程等等。 先修科目:沒有

#### CHLL3011 澳門文學與文化專題

#### SPECIAL TOPICS IN LITERATURE AND CULTURE OF MACAO

該課程以介紹、考察和分析澳門歷史與文學專題為主要內容。 專題主要包括:澳門文學、澳門城 市發展和歷史建築、澳門宗教與信仰、澳門社會風俗、澳門飲食文化等專題。在課堂教學中重點 引導學生認識澳門中西文化併存、融合和發展的原因及其特色,並通過教學和實地考察,培養學 生收集、分析文學、歷史文化資料的能力,加深對澳門文化、文學的認識。 先修科目:沒有

#### CHLL3012 中國文化與藝術專題 SPECIAL TOPICS IN CHINESE CULTURE AND FINE ARTS

藉著對中國傳統文化的生活文化、表層文化及經典的介紹作為理解中國傳統文化核心理念的主要 教材。中國文化的食療與養生、中國古代科技成就概論及反思、禪與中國文化、中國詩樂等都是 本課程探討的重要主題。本課程希望藉此鞏固同學對中國文化藝術的認識及興趣,更能體驗傳統 文化與現人之本

先修科目: 沒有

#### CHLL3013 文心雕龍 WEN XIN DIAO LONG

南北朝是中國文學批評及文學理論的一個重要發展朝代,《文心雕龍》的出現絕對不是偶然的,它 既集合了文學理論與批評的大成之外,更是至今的文學批評準則的楷模。本課程以《文心雕龍》 一書為研討對象,探討該書的理論體系,對中國文學批評思想的影響及其批評方法等,並評價其 在文學史上的地位。 先修科目:沒有

**元**修件日 及月

# CHLL3014 古代文體專題 SPECIAL TOPICS IN CLASSICAL LITERARY GENRES

本課程以介紹、考察和分析中國古典文學文體專題為主要內容。專題包括古典詩詞、古文、辭賦、 古典戲曲、文言小說、章回小說、史傳文學等,旨在讓學生認識和了解中國古典文學中的各種文 體的分類、源流、體式和風格,以及代表性作品,從而掌握各種不同文體的特質。 先修科目:沒有

#### CHLL4000 中國傳統文論 TRADITIONAL CHINESE LITERARY THEORY

本課程引導學生閱讀、分析、闡釋中國傳統文學理論和批評的代表性著作,通過討論、報告、撰 寫論文等方式,啟發學生探討傳統文論的基本命題、範疇及其發展演變,並與現代文學理論和批 評相比較。本課程旨在使學生熟悉歷代文論家和批評流派,掌握傳統文論的基本內容和批評方法 並運用於文學批評,及培養學生獨立思考和分析批評的能力。 先修科目:沒有

#### CHLL4001 畢業專題 I GRADUATION PROJECT I

本課程指導學生從中國語言、文學、思想、文化等領域選擇研究課題,撰寫學士學位論文。本課 程旨在使學生掌握創新性思考、擬定研究課題、瞭解研究背景、尋找選擇文獻資料、撰寫學術論 文的完整過程,熟練運用注釋、參考書目等國際標準文章格式,並提升中文寫作能力。 先修科目:沒有

#### CHLL4002 中外文學比較 COMPARISON BETWEEN CHINESE AND FOREIGN LITERATURES

介紹比較文學這一跨文化、跨藝術的文學研究學科的目的、意義和方法,介紹比較文學研究范式 的形成與發展、比較文學在未來人類文化發展中的地位,重點介紹中國文學與英語世界的互動, 中西比較文學研究對傳遞中華文化、增進中外中國文學研究者的交流和互補等方面所具有的重要 意義,令同學在通過相關課程掌握了中國文學文化與西方文學文化的基本知識的基礎上,對中西 方的文學與文化有一整體的認識,對比較文學學科在中西方文學對話中所能發揮的作用有一深刻 的認識。同時程選取中外美學史和文藝理論史上若干最具典型性且有現實意義的概念、範疇與論 題,結合中西方小說名著、經典電影等藝術文本進行梳理與分析,廓清其基本內涵,確定其理論 邊界,發掘其學術意蘊,為同學提供多维的文藝學知識視野,令其加深對文學藝術形式特徵及人 文內涵的認知,並提升跨學科綜合分析的能力和文藝理論修養。

#### CHLL4003 畢業專題 II GRADUATION PROJECT II

本課程指導學生從中國語言、文學、思想、文化等領域選擇研究課題,撰寫學士學位論文。本課 程旨在使學生掌握創新性思考、擬定研究課題、瞭解研究背景、尋找選擇文獻資料、撰寫學術論 文的完整過程,熟練運用注釋、參考書目等國際標準文章格式,並提升中文寫作能力。 先修科目: CHLL4001

#### CHLL4004 語言分析與研究 LANGUAGE ANALYSIS AND RESEARCH

本課程通過學生選擇自己方言裡的一兩個語言特點,引導學生對語言事實進行調查,在語料和數 據搜集整理的基礎上,嘗試從比較分析的角度入手,學會對語言特點的性質進行分析和確定,然 後運用語言理論以及採用科學的研究方法詮釋該語言特點。通過對實例的分析和研究,讓學生親 自實踐分析語言和研究語言的全過程,以提高學生分析問題和研究問題的能力。 先修科目: CHLL1001 或者 CHLL2008

#### CHLL4005 漢語語言學專題 | SPECIAL TOPICS IN CHINESE LINGUISTICS |

對漢語語言學的某一個或幾個領域作較爲系統的專題學習,如漢語詞彙學、漢語句法構造、語言類型學、語言的歷史演變等領域,培養學生對語言學的專業興趣,擴大學術視野,拓寬語言研究的角度,掌握一定的研究方法,從而提高學生對語言分析和研究的能力。教學方法為實例分析、小組討論報告等手段。

先修科目: 沒有

#### CHLL4006 中國古典文學專題 TOPICS IN CLASSICAL CHINESE LITERATURE

本課程以專題的形式對中國古典文學展開討論研究,專題的選擇範圍涉及先秦至清代文學發展演變的各個方面,包括重要時期和階段,各類文體風格,主要作家、作品及流派,及古代文學發展與政治、宗教、思想、文化發展的關係,教學方式包括閱讀、討論、報告、撰寫論文等。本課程旨在使學生深入瞭解中國古典文學的特質,掌握分析運用文學史料的方法,並培養其獨立研究古典文學的見,如在

先修科目: 沒有

# CHLL4007 中國思想史 HISTORY OF CHINESE THOUGHT

本課程引導學生閱讀、分析、闡釋中國思想史上的代表性著作,通過討論、報告、撰寫論文等方式,啟發學生探討中國思想從古代至現代的發展演變,使學生熟悉主要的哲學家和思想家,瞭解

儒、道、佛等諸家思想,認識中國哲學思想的歷史、現狀和發展趨勢,並培養其批評性、哲理性
 思維的能力。
 先修科目:沒有

#### CHLL4008 中國經典閱讀 READINGS IN CHINESE CLASSICS

本課程選擇一至二部中國傳統文學、思想、哲學、文化的經典著作,在精細閱讀分析原著的基礎 上,通過討論、報告、撰寫論文等方式,啟發學生展開集中深入的探討,使學生深化對經典著作 和文化傳統的認識,並培養其獨立思考、分析、批評、研究的能力。 先修科目:沒有

#### CHLL4009 漢語語音學 CHINESE PHONETICS AND PHONOLOGY

課程通過對學生對自己的母語習得和普通話的學習經歷,讓學生學會分析語音學的基本發音規律, 運用粵語、普通話的知識,學會漢語音韻學的基本理論,瞭解漢語語音系統從古至今的歷史演變 過程及演變規律,引導學生將語音學知識運用到學術研究和語言實踐中。 先修科目:沒有

#### CHLL4010 漢語語言學專題 II SPECIAL TOPICS IN CHINESE LINGUISTICS II

對語言學的某一個或幾個領域作較爲系統的專題講授,以進一步培養學生對語言學的專業興趣, 擴大學術視野,拓寬語言研究的角度,掌握一定的研究方法,從而提高學生對語言分析研究的能 力。教學方法為實例分析、小組討論報告等手段。 先修科目:沒有

#### CHLL4011 文學批評專題 SPECIAL TOPICS IN LITERARY CRITICISM

介紹中西方文學批評範圍內有代表性人物的著述,演示分別運用或綜合運用傳記批評、印象批評、 形式主義文評、新批評、結構主義與符號學、後結構主義、女性主義、後殖民主義等中西方文學 批評的模式與方法分析具體作品,有助學員深化與細化對文學批評理論和方法的掌握。該課程爲 "文學批評" 必修課的配套輔助課程。

先修科目: 沒有

#### CHLL4012 外國文學作品選讀 SELECTED READINGS IN WESTERN LITERATURE

介紹由古希臘直至現代的西方重要文學作品,包括戲劇、詩歌、散文和小說等各種體裁,包括古典主義、浪漫主義、象徵主義、現實主義、自然主義、現代主義、後現代主義等各流派的作品。 重點介紹荷馬、古希臘三大悲劇家、但丁、歌德、荷爾德林、莎士比亞、雪萊、華茲華斯、陀斯 妥也夫斯基、艾略特、普魯斯特、福克納、昆德拉、卡爾維納等西方文學名家。課程亦會對中西 方文學作品進行比較分析,播放外國文學名著改編的電影錄影。 先修科目:沒有

#### CHLL4013 文藝學專題 SPECIAL TOPICS IN LITERATURE AND ARTS

介紹文藝倫理學的目的、意義、範域和方法,令學員從人性與審美相互動的角度加深對文學藝術 形式特徵及人文內涵的認知。對藝術性敘事與倫理意識與之間的互動關系,本課程將通過倫理學 典籍的文學性解析、中西方小說名著章節分析、經典電影欣賞、商業化藝術敘事(如敘事型廣告) 解讀等靈活的授課方式,重點加以探討,以期提高學員跨學科綜合分析的能力和文學、哲學修養。 先修科目:沒有

#### CHLL7100 漢語語言學理論專題 TOPICS IN THEORIES OF CHINESE LINGUISTICS

本課程旨在提高學生的語言學理論素養,引導學生科學地借鑒和運用西方語言學理論,對漢語實際進行深入的觀察和分析。課程包括介紹當代語言學理論在漢語研究中的運用和所取得的重要成果,漢語語言學理論的最新進展,各種語言學理論在漢語研究中的展望等內容。 先修科目:沒有

#### 漢語語言學研究方法 METHODS IN CHINESE LINGUISTICS CHLL7101

本課程旨在系統介紹語言學的研究思路、方法和一些重要的語言學理論,指導學生採用科學的工 具和方法對漢語進行共時或歷時的系統研究。課程包括語言學研究的一般方法和特殊方法,語言 學研究中經常使用的工具性概念,各個語言學流派所採用的分析技術,國內學者建立的語言學理 論等內容。

先修科目: 沒有

#### CHLL7102 道語社會語言學研究 STUDIES ON CHINESE SOCIOLINGUISTICS

本課程旨在引導學生深入瞭解語言與社會的關係,運用社會語言學的概念和方法觀察、分析漢語 中的詞彙、語法、語音等現象。課程包括宏觀語言狀況的調查研究,語言政策的制定,語言變異 與語言變體, 漢語與華人社會, 語言的接觸與競爭等內容。 先修科目: 沒有

#### CHLL7103 古代漢語研究 STUDIES ON CLASSICAL CHINESE

本課程旨在進一步提高學生古漢語素養,引導學生將語言研究古今貫通——嘗試運用現代漢語的 理論和方法解決古代漢語的問題。內容包括古代漢語的音韻、文字、訓詁、詞彙、語法、方法論 等幾大專題。 先修科目: 沒有

#### CHLL7104 現代漢語研究 STUDIES ON MODERN CHINESE

指導學生掌握必要的現代漢語專業性知識,培養學生觀察、分析和描寫共時狀態下漢語語音、語 法和辭彙中的一些現象以及運用中的一些問題。內容包括現代漢語總論、文字、語音、詞彙、語 法和修辭等幾大專題。 先修科目: 沒有

#### CHLL7105 漢語語言學專題 | TOPICS IN CHINESE LINGUISTICS |

本課程旨在進一步提高學生的語言學素養,培養學生深入觀察、分析語言現象的能力。課程將就 漢語語言學的一些本質問題進行深層次的探討,向學生介紹最新的語言學理論和方法、漢語研究 中最前沿的一些問題,內容將涉及語言學的分支領域如語法學、詞彙學、語音學以及語言和文學 之關係等。

先修科目: 沒有

#### 漢語語言學專顧 Ⅱ TOPICS IN CHINESE LINGUISTICS Ⅱ CHLL7106

本課程旨在進一步提高學生的語言學素養,培養學生深入觀察、分析語言現象的能力。課程將就 漢語語言學的一些本質問題進行深層次的探討,向學生介紹最新的語言學理論和方法、漢語研究 中最前沿的一些問題,內容將涉及語言學的分支領域如語用學、第二語言習得、漢字與漢文化之 關係等。

先修科目: 沒有

#### CHLL7107 漢語語法研究 STUDIES ON CHINESE GRAMMAR

本課程將緊密結合漢語實際,介紹漢語語法研究中的一些熱點問題和主要的理論與方法,提升學 牛對漢語語法進行專題思考和學科探索的能力。課程包括當前國際上主要語法學派的研究狀況和 思路,漢語語法的應用研究,漢語語法研究與中文資訊處理、對外語教學等相關學科的互補研究 等內容。

先修科目: 沒有

#### CHLL7108 漢語聲韻研究 STUDIES ON CHINESE PHONOLOGY

本課程旨在夯實學生的漢語音韵知識,引導學生在方言、隋朝和唐朝的反切系統的基礎上,探測 古漢語的發音,以及古今發音的演變規律,爲方言調查描寫及訓詁學、詞源學等相關學科的研究 打下基礎。課程包括漢語音韵史,音韵研究方法,韵書概覽等專題。 先修科目: 沒有

# CHLL7110 漢語詞彙研究 STUDIES ON CHINESE LEXICON

本課程的內容設置側重於現代漢語詞彙研究。課程旨在指導學生掌握現代漢語詞彙學的專業知識 和最新理論,引導學生觀察、分析和描寫共時或歷時狀態下漢語詞彙中的一些現象和問題,從而 提高詞彙研究乃至語言研究的素養和水平。課堂以教師講授為主,輔以課堂討論和學生發表。 先修科目:沒有

#### CHLL7200 漢語作為第二語言教學法 METHODOLOGY OF TEACHING CHINESE AS A SECOND LANGUAGE

This course addresses the application of current methodologies in the teaching of Chinese as a Second Language. Developments in linguistics, educational and psychological studies lead to constant new input to foreign language teaching methodology and practice. The course introduces the student to major current practices and how research-driven innovations are developed in current practice.

Pre-requisite: None

### CHLL7201 漢語作為第二語言教學課程設計與實習 SUPERVISED TEACHING PLANNING AND PRACTICE IN CHINESE AS A SECOND LANGUAGE

A course wherein the student is supervised in the planning and delivery of class teaching sessions in Chinese as a Second Language within the framework of specific curricula. Students will prepare and present class designs and procedures to the instructor and fellow students, and receive critical evaluations thereon.

Pre-requisite: CHLL7200

# CHLL7202 漢語教學語法

#### CHINESE PEDAGOGICAL GRAMMAR

This course focuses on a systematic review of the grammatical difficulties common to Western students learning Chinese, with a focus on diagnosing learners' errors and devising practical, linguistically informed and appropriate strategies to assist students to understand and correct these errors.

Pre-requisite: None

# CHLL7400 中國古典文學專題 TOPICS IN TRADITIONAL CHINESE LITERATURE

本課程以專題形式對中國古代文學進行深層的研討,專題的選擇範圍涉及先秦至清代文學發展演 變的各個方面,包括重要時期和階段,各類文體風格,主要作家、作品及流派,古代文學發展與 政治、宗教、思想、文化發展的關係等。本課程旨在使研究生深入瞭解中國古代文學的特質,掌 握分析運用文學史料的方法,並培養其獨立研究古代文學的能力。 先修科目:沒有

### CHLL7401 中國現代文學專題 TOPICS IN MODERN CHINESE LITERATURE

以中國現當代重要的文學現象為研究對象,劃分為若干專題進行高層次研討,以利於研究生初步把 握對本學科的發展歷史及內部規律。本專題包括中國現當代文學學科發展與學科概念的學術反思, 台港澳暨海外華文文學與中國新文學傳統的關係研究,現當代文學社團與文學流派的考察分析,現 當代重要作家作品的重新解讀等內容。 先修科目:沒有

# CHLL7402 文學理論專題 TOPICS IN LITERARY THEORY

本課程致力於提高研究生理論素養,可分爲兩個方向講授。其一是古代文論方向,系統地介紹中國傳統文學理論和文學批評的成就,並對古典文論的現代運用問題進行學術思考;其二是西方文論和現代文論方向,分若干專題探討對於中國文學和文化建設產生重大影響的理論課題。 先修科目:沒有

# CHLL7403 古代文學研究方法

# METHODS IN THE STUDY OF TRADITIONAL CHINESE LITERATURE

本課程綜合介紹中國古代文學的研究方法和學術規範,包括傳統的考據方法和批評方式,現代以 文學批評為主而融合諸多學科的多元化研究方法,西方和日本漢學研究概述,學術論文撰寫的國 際規範等。本課程旨在使研究生訂開學術視野,以多角度、多方法研究古代文學,並訓練其按國 際規範撰寫學術論文的能力。 在 K 和日中, 2 在

先修科目: 沒有

# CHLL7404 現代文學研究方法

#### METHODS IN THE STUDY OF MODERN CHINESE LITERATURE

本課程以講授方法學之知識為主,在系統介紹中西文學研究方法的基礎上,對現當代文學選題、 觀點提煉、材料開發和利用、論文操作等等重要環節進行理論解析,並輔之以相應的學術訓練, 以利於研究生掌握學術研究規範和有效的學術研究方法,順利地進入學位論文的寫作。 先修科目:沒有

# CHLL7405 中國文學專題 I TOPICS IN CHINESE LITERATURE I

本課程選擇中國古代韻文、散文、小說、戲劇等經典作品,在精細閱讀分析原著的基礎上,展開 集中深入的探討,使研究生深化對傳統經典作品的認識,並掌握研究專著的方法。 先修科目:沒有

# CHLL7406 中國文學專題 II TOPICS IN CHINESE LITERATURE II

本課程以中國現代文學經典作家和作品以及比較文學為主要研究對象,通過作品細讀和深入的作 家創作道路分析,幫助研究生準確地瞭解和把握現當代文學經典,並提高分析作品和解讀作家的 學術能力。課程的研究範圍是自新文化運動以來在漢語新文學史上最具影響力的作品,包括在港 澳臺及海外寫作並產生影響的經典作品。 先修科目:沒有

# CHLL7407 中國古代文體專題 TOPICS IN TRADITIONAL CHINESE LITERARY GENRES

本課程以專題方式研討中國古代文體的發展演變,專題選擇範圍包括各種體類的韻文、散文、小 說、戲劇等。通過閱讀相關的文體分類、批評著作,以及分析探討各類文體的發展階段和代表作 家作品,使研究生瞭解不同文體的特質,掌握不同文體的研究方法。 先修科目:沒有

# CHLL7408 中國現代文體專題 TOPICS IN MODERN CHINESE LITERARY GENRES

本課程以現代文體的分類和流變為主要研究目標,以利於研究生系統地掌握文體知識,並對某一 個現代文體有深入的學術認知。傳統的文體分類在進入現代後受西方影響產生很大變化,而自上 世紀二十年代開始進行了現代性的整合。在系統講解現代文體的發展歷史和整合過程的基礎上, 對其中一類現代文體(如小說、詩歌、戲劇、散文等)進行重點研究。 先修科目:沒有

# CHLL7990 論文 THESIS

Thesis is designed for graduate students who pursue Master of Philosophy in Chinese Literature and Master of Philosophy in Chinese Linguistics. Students will choose one valuable topic from Chinese Literature and Chinese Language, including classical Chinese literature, modern Chinese literature, classical Chinese language, modern Chinese language, and do intensive research of these academic fields under the guidance of their supervisor. To fulfill the requirements of Academic Thesis, students are required to complete the thesis and pass the oral defence.

Pre-requisite: None

# CHLL8000 中文研究方法論高級研讀 RESEARCH METHODS FOR ADVANCED STUDIES IN CHINESE

本課程是研究方法論方面的高級課程。通過對當代語言學研究成果的介紹和分析,了解不同的語言研究所采用的方法以及這些方法所表示的語言學的理論價值。利用這些學術成果啟發學習者對 漢語(包括方言和漢語各類變體)語音和句法規律的認識和即將進行的博士階段的研究。 先修科目:沒有

# CHLL8001 學術寫作 ACADEMIC WRITING

本課程是為中文系博士研究生開設的基礎訓練課程,旨在強化對於研究生的學術論文規範訓練, 提高他們審閱論文和撰寫論文的能力。內容主要包括:中文學術論文的品質與特性,學術論文規 範;學術研究方法與論文撰寫原則;學術論文的外在品相與內在品相;學術論文的發表及其後續 處理等等。

先修科目: 沒有

### CHLL8013 中國語言學專題高級研讀 ADVANCED TOPICS IN CHINESE LINGUISTICS

本課程是專門為漢語語言學專業博士生規劃的高級研討課程。任課教師將會在理論語言學、社會 語言學、語法學、音系學、語用學、方言學等學術領域精心挑選一組前言課題,引導博士生展開 深入探討。課程目標是通過對這些問題的研討,進一步提升博士生們獨立地分析問題和解決問題 的能力,以及創造性地整合前人、規劃議題,開拓創新的能力。 先修科目:沒有

# CHLL8042 中國文學專題高級研讀 ADVANCED TOPICS IN CHINESE LITERATURE

系統地整合、討論中國現當代文學的學術體系,並對這一學科領域的重要學術課題展開討論。 先修科目:沒有

#### EELC1004/1005 LISTENING AND SPEAKING IMPROVEMENT I / II

These courses will develop oral proficiency of spoken English and listening comprehension at an intermediate level. Listening will focus on note-taking and aural comprehension using thought-provoking material from texts, television, film and music. Speaking will focus on fluency, accuracy, and skills and strategies for effective communication and personal interaction. These courses will also place a large focus on vocabulary building and collocation for the purpose of improving spoken communication. A smaller focus on reading and writing will also be included in preparation for group presentations, role play and story telling. Group work involving discussion is an integral part of the course. In addition, the course will involve some contact assignments that will take place outside the classroom.

Prerequisite: None

Note: For the students admitted in AY 2016/2017 onwards who are placed in to EELC1001 or EELC1002

### EELC1006/1007 READING SKILLS & STRATEGIES I / II

These one-semester 3-credit elective courses provide a foundation in reading comprehension, critical reading, and vocabulary development. Students will learn to locate main ideas and supporting details; make inferences, and understand common idioms and expressions. In addition, students will learn strategies which will help them to read faster and more effectively. Course activities include reading and vocabulary assignments, discussions, and presentations. Pre-requisite: None

Note: for the students admitted in AY 2016/2017 onwards who are placed in to EELC1001 or EELC1002

# EELC1008 GRAMMAR & WRITING IMPROVEMENT I

This is a one-semester course for elementary English language level students. Students have three class hours every week. This course uses the English sentence as a basic concept unit and builds upon the sentence toward academic paragraphs with topic, explanation, example,

and link sentences. Students learn to recognize sentence-level errors such as subject-verb agreement and tense consistency; they identify paragraph-level errors such as cohesion and coherence. Basic academic vocabulary is also covered.

Global Skills Development in English Language Learning such as communication and collaboration, creativity and critical thinking, global citizenship, learner wellbeing, and digital literacies will be incorporated where appropriate.

Pre-requisite: None

Note: Only for the students who are placed in to E1a and IE1 (On ELC discretion)

# EELC1009 GRAMMAR & WRITING IMPROVEMENT II

These one-semester three-credit courses will focus on basic sentence structure for simple and compound sentences, expanding to complex sentence structures as students become more proficient. Editing to recognize sentence- and paragraph-level errors such as subject-verb agreement, pronouns and plural forms, use of referents and transitions, and problems with sentence fragments will also be covered.

Pre-requisite: None

Note: for the students admitted in AY 2016/2017 onwards who are placed in to EELC1001 or EELC1002

#### EELC1011 UNIVERSITY ENGLISH I

This is a one-semester Academic English course for elementary English language level students. Students have six class hours, one tutorial hour and an e-learning requirement. This course introduces basic academic listening, speaking, reading and writing skills through students' active participation in diverse and intensive academic and discipline-related activities and assessments at an appropriate elementary level. Simple academic texts and discipline-related materials enhance students' accurate use of basic grammar structures, enlarge their vocabulary and facilitate their development of language skills for a variety of academic contexts. The course provides a foundation for students to develop the academic English skills and abilities necessary for studying at the university level in English.

Pre-requisite: None

### EELC1012 UNIVERSITY ENGLISH II

This is a one-semester Academic English course for low-intermediate English language level students. Students have six class hours, one tutorial hour and an e-learning requirement. This course improves and consolidates academic listening, speaking, reading and writing skills through students' active participation in diverse and intensive academic and discipline-related activities and assessments at an appropriate low-intermediate level. Short academic texts and discipline-related materials enhance students' accurate use of more complex grammar and text structures, enlarge their vocabulary and facilitate their development of language skills for a variety of academic contexts. The course provides practice for students to develop the academic English skills and abilities necessary for studying at the university level in English. Pre-requisite: EELC1011 or a required score in a placement test

Fre-requisite. EELC for thor a required score in a placement

# EELC1013 UNIVERSITY ENGLISH III

This is a one-semester Academic English course for intermediate English language level students. Students have three class hours. This course develops and reinforces academic listening, speaking, reading and writing skills through students' active participation in diverse and intensive academic and discipline-related activities and assessments at an appropriate intermediate level. Academic texts and discipline-related materials enhance students' confident use of appropriate grammar and text structures, enlarge their vocabulary and facilitate their development of language skills for a variety of academic contexts. The course provides students with the academic English skills and abilities necessary for studying at the university level in English.

Pre-requisite: EELC1012 or a required score in a placement test

# EELC2000/2001 ENGLISH FOR BUSINESS AND PROFESSIONAL CONTEXTS I / II

Students will acquire skills and improve their ability in using English as an international language for business and professional communication. Using authentic texts as well as digital resources, the content of the course focuses on knowledge and skills required in various business management contexts including finance, human resources, marketing, production and services management. Emphasis is on listening and speaking skills for meetings, negotiations, presentations, and social situations. Up-to-date texts are used to develop reading and writing skills needed in business correspondence such as e-mails, minutes of meeting, business letters, and reports through the medium of English.

Pre-requisite: EELC1001/EELC1002/EELC1003 or permission of instructor

Note: Students who are placed into English Electives or approved for test-out of all English language courses based on the placement/admission assessments may enroll in this course.

# EELC2004/2005 INTRODUCTION TO ACADEMIC WRITING I / II

These two courses cover the basic skills students need for academic writing. Students will be taught writing techniques such as planning, drafting, and revising. In the second semester the main focus will be on the revision of papers using self- and peer-evaluation. Students will also be taught the basic skills of how to locate, evaluate, and document sources. Students are expected to learn these skills through analyzing sample papers, engaging in process writing, and responding to papers written by their peers. Upon completion of these courses, students are expected to have acquired the technical knowledge of how to write and organize a basic academic paper.

Pre-requisite: EELC1001/EELC1002/EELC1003 or permission of instructor

Note: Students who are placed into English Electives or approved for test-out of all English language courses based on the placement/admission assessments may enroll in this course.

### EELC2006 SPEAKING AND FLUENCY

These courses aim to help students improve their English language skills, especially in regard to fluency and accuracy in spoken English. Speaking and Fluency course topics include, but are not limited to, pronunciation, intonation, and word stress with students asked to practice English in a host of different language settings. Students will explore current theory and practice of how to be a more effective user of English when speaking for various purposes. In the Public Speaking course, a review of current theories and practices regarding effective presentation skills will lead to an application of those skills when speaking for various audiences and purposes. Students will be asked to engage in critical review of themselves and others with an aim toward setting and meeting individual goals as they work to improve their expressive and persuasive skills.

Pre-requisite: EELC1001/EELC1002/EELC1003 or permission of instructor

Note: Students who are placed into English Electives or approved for test-out of all English language courses based on the placement/admission assessments may enroll in this course.

### EELC2007 SPEAKING IN ENGLISH: ORAL PRESENTATION SKILLS

This course will help students improve their English language skills, especially their fluency and accuracy in spoken English. The course topics include, but are not limited to, practicing pronunciation, intonation, and word stress in English in a host of different language settings. Students will explore current theory and practice of how to be a more effective user of English when speaking for various purposes. Students will be asked to engage in critical review of themselves and others, with a view to setting and meeting individual goals as they work to improve their expressive and persuasive skills. Pre-requisite: EELC1001/EELC1002/EELC1003 or permission of instructor

Note: Students who are placed into English Electives or approved for test-out of all English language courses based on the placement/admission assessments may enroll in this course

# EELC2008 ACADEMIC ENGLISH: SPEAKING

This is a one-semester Academic English course for students with an intermediate English language level. Students have three class hours every week. The course requires students to apply the skills they have learned in previous University English or Academic English course(s). Additionally, students will learn to use introductory academic speaking skills. These skills include: logical persuasion, information sharing, meeting facilitation, impromptu speaking, and responding to questions. Students are expected to analyze sample academic speaches/presentations for discipline-specific academic features in preparation for advanced academic speaking. Depending on students' disciplines, they will be introduced to different genres in academic speaking (e.g. oral reports, persuasive/informative speeches, poster presentations, and oral reflections, etc.).

Pre-requisite: EELC1013 or a required score in a placement test

### EELC2009 ACADEMIC ENGLISH: WRITING

This is a one-semester Academic English course for students with an intermediate English language level. Students have three class hours every week. The course requires students to apply the skills they have learned in University English or Academic English course(s). Additionally, students will learn to use introductory academic writing skills. These skills include: writing summaries and responses, conducting secondary research, evaluating sources, documenting the research process, considering the rhetorical situation, making an argument, paraphrasing from sources, using academic language, and writing coherently. Students are expected to analyze sample academic text for discipline-specific academic features in preparation for advanced academic writing. Depending on students' disciplines, they will be introduced to different genres in academic writing (e.g. essays, reports, case studies, research proposals, book reviews, literature reviews, reflective writing, etc.).

Pre-requisite: EELC1013 or a required score in a placement test

# EELC2010 ACADEMIC ENGLISH: PROJECT-BASED LEARNING

This is a one-semester Academic English course for students with an intermediate English language level. Students have three class hours every week. The course requires students to apply the skills they have learned in University English or Academic English course(s). In groups, students will learn to use introductory academic writing and speaking skills to design and implement their multigenre/multimodal projects. These skills include: primary/secondary research, critical thinking skills, problem-solving skills, writing/presentation skills, teamwork, etc. Through experiential learning, students will be guided to observe, collect information, persuade, and generate a writing/speaking product.

Pre-requisite: EELC1013 or a required score in a placement test

# EELC2011 ENGLISH SPEAKING FOR ACADEMIC RESEARCH

This is a one-semester academic speaking course for students with an upper-intermediate English language level. Students have three class hours every week. The course also addresses the information literacy and higher-order thinking skills necessary for conducting extensive secondary research, constructing ideas, providing evidential support, and structuring ideas coherently in spoken academic settings. Students develop both verbal and non-verbal communication in small and large group academic settings. Students will critically evaluate their own and others' performances, and will learn how to utilize a variety of technology-enhanced communication tools. Other skills addressed in this course include critical thinking and argumentation.

Pre-requisite: EELC2008, EELC2009, EELC2010 or a required score in a placement test

#### EELC2012 ENGLISH WRITING FOR ACADEMIC RESEARCH

This is a one-semester academic writing course for students with an upper-intermediate English language level. Students have three class hours every week. This course addresses the information literacy and higher-order thinking skills necessary for conducting extensive secondary research, providing evidential support, and structuring ideas in coherent written academic texts. Students spend time responding to multiple drafts of peer academic papers to

improve precision and clarity in the writing process. Other specific skills addressed in this course are critical thinking and argumentation

Pre-requisite: EELC2008, EELC2009, EELC2010 or a required score in a placement test

# EELC2013 ENGLISH INTEGRATED SKILLS FOR ACADEMIC RESEARCH

This is a one-semester integrated academic language course for students with an upperintermediate English language level. Students have three class hours every week. Students will engage in data gathering, analysis and interpretation skills and communicate research results effectively in academic presentation or report formats. Students will critically evaluate their own and others' performances, and will learn to utilize a variety of technology-enhanced tools to aid in preparing and communicating academic concepts and findings. Upon completion, students are expected to have acquired a basic understanding of primary academic research methods and have developed techniques to effectively communicate concepts and research results. Pre-requisite: EELC2008, EELC2009, EELC2010 or a required score in a placement test

# EELC3004/3005 ADVANCED ACADEMIC WRITING I / II

These one-semester three-credit writing courses will enable students to express themselves coherently when engaged in written academic discourse. The courses offer intensive work and instruction in writing skills through the discussion and analysis of assigned readings. Students spend time responding to multiple drafts of peer academic papers to improve precision and clarity in the writing process. Other necessary skills addressed in these courses are identifying and making logical arguments as well as avoiding faulty reasoning. Upon completion of these courses, students are expected to have acquired the confidence and techniques to write academic papers in a professional writing style.

Pre-requisite: EELC1002/EELC1003 or permission of instructor

Note: Students who are placed into English Electives or approved for test-out of all English language courses based on the placement/admission assessments may enroll in this course.

# EELC3006/3007 ADVANCED SPEAKING I / II

These courses emphasize elements of both verbal and non-verbal communication in public settings. Students will engage in a variety of public speaking activities, will critically evaluate their own and others' performances, and will learn how to utilize presentation tools such as handouts and PowerPoint. Students should enhance their confidence in speaking and demonstrate effective oral presentation skills.

Pre-requisite: EELC1002/EELC1003 or permission of instructor

Note: Students who are placed into English Electives or approved for test-out of all English language courses based on the placement/admission assessments may enroll in this course.

# EELC3008/3009 ADVANCED INTEGRATED SKILLS I / II

These one-semester three-credit courses may use a content- or theme-based approach to engage students in critical thinking, logical analysis, persuasion/argumentation, and other high level language skills required in academic English. Needs analysis will help determine which skills to emphasize each semester. Students will be expected to work independently and in groups. Topics may address current events as well as participants' major fields of study. Class materials will reflect the language level expected of high-intermediate to advanced level students whether they plan to enter the workforce or pursue graduate studies in English.

Pre-requisite: EELC1002/EELC1003 or permission of instructor

Note: Students who are placed into English Electives or approved for test-out of all English language courses based on the placement/admission assessments may enroll in this course.

# EELC3010 INTRODUCTION TO ENGLISH LANGUAGE TUTORING I

This 3-credit elective course offers students an opportunity to experience English language tutorials related to writing, speaking, and other language development and improvement skills.

In a seminar format with the course instructor, students 1) learn about tutoring theories and oneon-one and/or small group tutoring strategies, 2) practice tutoring, and 3) critique each other's tutorials.

Students who are interested to continue accruing their tutoring experience may elect to take Introduction to English Language Tutoring II as an extension of Introduction to English Language Tutoring I. Introduction to English Language Tutoring I is not a prerequisite of Introduction to English Language Tutoring II, and students may enrol in one or both semesters of this course depending on the number of credits they wish to earn. Students are not required to take these two courses in sequence.

Pre-requisite: EELC1003 or permission of instructor

Note: Students who are placed into English Electives or approved for test-out of all English language courses based on the placement/admission assessments may enroll in this course.

### EELC3011 INTRODUCTION TO ENGLISH LANGUAGE TUTORING II

This 3-credit elective course offers students an opportunity to experience English language tutorials related to writing, speaking, and other language development and improvement skills. In a seminar format with the course instructor, students 1) learn about tutoring theories and one-on-one and/or small group tutoring strategies, 2) practice tutoring, and 3) critique each other's tutorials.

Students who are interested to continue accruing their tutoring experience may elect to take Introduction to English Language Tutoring II as an extension of Introduction to English Language Tutoring I. Introduction to English Language Tutoring I is not a prerequisite of Introduction to English Language Tutoring II, and students may enrol in one or both semesters of this course depending on the number of credits they wish to earn. Students are not required to take these two courses in sequence.

Pre-requisite: EELC1003 or permission of instructor

Note: Students who are placed into English Electives or approved for test-out of all English language courses based on the placement/admission assessments may enroll in this course.

#### EELC4004 ACADEMIC RESEARCH WRITING WORKSHOP

This is a 3-credit elective writing course for students who need writing help when completing an undergraduate or graduate thesis. The course emphasizes the recursive nature of the writing process and takes students through the different stages of planning, drafting, and revising. The course will introduce students to methods of supporting arguments, positions, and points of view within a thesis, including various forms of citation and documentation of references. Students receive instructor feedback that focuses on readability, including cohesion and coherence. They also critique each other's writing, with an emphasis on the development of self-revision. Students will examine the various genres within thesis writing and evaluate the effectiveness of these writing styles. In particular, students will need to demonstrate an understanding of academic writing as a series of expert practices that are situated within specific disciplines, and to develop the necessary skills for reading and writing within those disciplines.

Special Topic Electives (Meet 80 minutes/week for one semester) EELC2002 SPECIAL TOPIC ENGLISH LEVEL II A

Pre-requisite: None

EELC3000 SPECIAL TOPIC ENGLISH LEVEL III A Pre-requisite: None

EELC4000 SPECIAL TOPIC ENGLISH LEVEL IV A

Pre-requisite: None

Notes: Special Topic courses meet once a week (1.5 hours) and carry 1 credit. They are meant

to encourage students to take an English class for enjoyment or self-improvement and to be intrinsically motivated to sign up for and attend the class. At level II, one special topics class will be announced at each level each semester and at levels III and IV, two special topics classes will be announced at each level each semester. However, a minimum number of students will be required by the end of drop-and-add for the class to actually be offered.

# ENGL1000 INTRODUCTION TO LITERARY STUDIES I

The purpose of this course is to help students develop basic skills for understanding major literary genres and to increase their sensitivity to the language and devices used in literature. Students will be introduced to a basic critical vocabulary with which to examine a range of literary texts. The genres covered in this course include poetry, and short fiction. Pre-requisite: None

### ENGL1001 INTRODUCTION TO LITERARY STUDIES II

The purpose of this course is to further develop reading and analytic skills for understanding extended works of prose and dramatic fiction. The course will build on the basic critical vocabulary introduced in ENGB110. The genres covered in this course include the novel and drama.

Pre-requisite: ENGL1000

# ENGL1002 DESCRIBING THE SOUNDS OF ENGLISH

This course studies the theory and techniques of descriptive linguistics as applied to the pronunciation of contemporary English. It addresses the basic questions of: What are the sounds of English, how are they produced and perceived, and how are they described? The course will introduce students to the pronunciation of different varieties of English and increase their sensitivity to their own pronunciation of English.

Pre-requisite: None

### ENGL1003 INTRODUCTION TO THE STUDY OF LANGUAGE

This course surveys the major areas in linguistics and attempts to answer two questions: What is language? How can language be studied scientifically? To address these issues the course will introduce basic concepts and analytic tools for describing and explaining the nature and structure of language. Major topics may include properties of language, human language and other communication systems, brain and language processing, spoken and sign language, writing systems, language families, etc. The course will also raise the students' awareness and understanding of language use.

Pre-requisite: None

### ENGL1004/1005 INTRODUCTION TO FRENCH I/II

A course that focuses on the comprehension of spoken French and the ability to communicate orally in a variety of everyday situations. The reading and writing of simple texts will also be introduced.

Pre-requisite: None

### ENGL1006 INTRODUCTION TO GERMAN I

The course will integrate all four language skills, speaking, listening, reading and writing, throughout class and home assignments and provide guidance and practice to develop essential study skills. The main focus will be on understanding and speaking German of moderate difficulty, and you will be introduced to the contemporary civilization and culture of the German peoples through the textbook and supplementary materials from the Internet, CDs, etc. You will also study some of the major grammatical and structural aspects of the language. Pre-requisite: None

# ENGL1007 INTRODUCTION TO GERMAN II

This course will integrate all four language skills in class and home assignments and provide

guidance and practice to develop essential study skills. The aim will be to extend the number of typical everyday situations in which you are able to understand and speak German of moderate difficulty. In compliance with each chapter, you will receive information on the contemporary civilization and culture of the German peoples through the textbook and supplementary materials from the internet, cds, etc. You will also continue to study some of the major grammatical and structural aspects of the language.

Pre-requisite: ENGL1006

### ENGL2000 SURVEY OF ENGLISH LITERATURE I

This course presents a chronological survey of works from major periods and genres of English literature. Literature from important periods will be studied in their historical context. The course will begin with an introduction to English literature in the medieval period and end with an introduction to the 18th century, and will include the study of Chaucer, English Renaissance dramatists, and Neo-classical poetry.

Pre-requisite: None

# ENGL2001 SURVEY OF ENGLISH LITERATURE II

This course presents a chronological sampling of literature from major periods and genres of English literature, which will be studied in their historical context. The course will begin with the 18th century and continue to the end of the 19th century, covering topics that include Neo-classical satire, Romanticism, and writing in the Victorian period. Pre-requisite: ENGL2000

### ENGL2002 INTRODUCTION TO ENGLISH GRAMMAR

This course describes the syntax and morphology of modern Standard English. It introduces in an accessible way the necessary terminology and modes of analysis that students need in order to understand English structure, and it provides a firm foundation for further studies in linguistics. Pre-requisite: None

### ENGL2003 LANGUAGE AND SOCIETY

This course will introduce students to the study of language in a social context and to the various theories and methods of sociolinguistics. Topics that will be covered may include bilingualism and multilingualism, second language variation, language and identity, dialectology, stylistic variation and language change.

Pre-requisite: None

### ENGL2004 LANGUAGE STUDIES FOR TRANSLATION

This course is designed to compare and contrast Chinese and English at various levels – lexical, phrasal, sentential and textual. Theoretical concepts are introduced in relation to translation problems. Upon completion of this course, students are expected to appreciate the major differences between Chinese and English, and be able to use essential linguistic tools to deal with translation problems.

Pre-requisite: None

#### ENGL2005 INTRODUCTION TO THE THEORY AND PRACTICE OF TRANSLATION

This course prepares students for more specialized translation courses in later semesters. While it attempts to familiarize students with fundamental theoretical concepts of and various approaches to translation, it is a practice-oriented course by nature. Particular attention is placed on strategies and methods of translation in relation to the functions of the text, and on various approaches to deal with translation problems.

Pre-requisite: None

#### ENGL2006 INTRODUCTION TO INTERPRETATION

This course strengthens students' foundational knowledge and communicative abilities required in consecutive interpretation (CI). It is designed to train the students in the skills concerned, including vocabulary building, memory retention, thought organization, sight translation and note-taking. Students will learn to use the techniques of CI progressively, starting from single sentences to longer segments. Classes are conducted in the language laboratory to give students practical experience.

Pre-requisite: None

#### ENGL2007 **CONSECUTIVE INTERPRETATION**

This course concentrates on the practice of consecutive interpretation (CI). Focusing on coping tactics of CI comprehension, reformulation and production, it involves intensive practice sessions with various simulation drills on a diverse range of subjects. It also aims at building up students' public speaking and dialogue abilities and professionalism in the process. Classes and tests are conducted in the language laboratory.

Pre-requisite: None

#### ENGL2009/2010 **INTERMEDIATE FRENCH I/II**

A course that expands and extends the skills developed in ENGL1004/1005. Students will receive intensive instruction and practice in speaking, reading and writing. Pre-requisite: ENGL1004/1005

#### ENGL2011 GERMAN, ADVANCED BEGINNERS, LEVEL I

The course will integrate all four language skills throughout the class and home assignments. The objective will be to expand 1) the range of vocabulary through the coverage of new topics of general interest and relevance and 2) the range of grammatical and structural aspects. Listening and speaking will remain the focus of the course but there will be a stronger emphasis on reading and writing compared with the beginner courses to apply and strengthen the acquired skills and knowledge freely and comprehensively. In addition, background information on the contemporary civilization and culture of the German peoples will be provided. Pre-requisite: ENGL1007

#### ENGL2012 GERMAN, ADVANCED BEGINNERS, LEVEL II

The course will be of the same nature as German for Advanced Beginners. Level I. All four language skills as well as grammar will be integrated in class and home assignments. The objective will be to apply and strengthen the acquired knowledge and skills and to expand on 1) the range of vocabulary through the coverage of new topics of general interest and relevance and 2) the range of grammatical and structural aspects. Students will be guided towards applying the existing knowledge freely and comprehensively in relevant tasks. The focus will be on communicative competence, which means students will have to use communication skills and the language appropriately depending on the given task context, with grammar as integral component necessary to varying extent. Background information on the contemporary civilization and culture of the German peoples will be provided.

Pre-requisite: ENGL2011

#### ENGL3000 LANGUAGE AND MEANING

This course is concerned with one of the fundamental issues in linguistics: meaning. It looks at meanings of individual words and the meanings they engender in combination (semantics), as well as how language-users construct meaning in communication (pragmatics). Fundamental concepts and issues introduced may include sense and reference, semantic features, lexical relations, polysemy, non/literality, presupposition, inference, implicature, speech acts and politeness.

Pre-requisite: None

#### 20TH CENTURY AND CONTEMPORARY LITERATURE IN ENGLISH I ENGL3001

This course introduces students to a selection of major texts in poetry and fiction that illustrate important themes, concerns, and literary techniques of literature in English during the first half of the 20th century. The main emphasis will be on Modernism in Anglo-American writing. Pre-requisite: None

# ENGL3002 ANALYZING SPOKEN DISCOURSE

This course will introduce the major approaches to the analysis of spoken discourse, including conversation analysis, discourse analysis and critical discourse analysis. It will equip the student with basic methodologies of data collection, transcription and analysis and establish those techniques essential for studying spoken discourse in institutional settings such as those of journalism, medicine, education or law.

Pre-requisite: None

# ENGL3003 20TH CENTURY AND CONTEMPORARY LITERATURE IN ENGLISH II

This course introduces students to selected major texts that illustrate important themes, concerns, and literary techniques of literature in English during the 20th century. Topics to be covered may include the theatre of the absurd, feminist concerns, postmodernism, and English literature from outside the Anglo-American tradition.

Pre-requisite: ENGL3001

## ENGL3004 BILINGUALISM

This course introduces students to the basic concepts and issues in the study of bilingualism by focussing on issues related to the social and cultural background of bilingual communities, namely, the systematic use of different languages, language maintenance and shift, language attitudes and the motivations and effects of code-switching. The course references the Hong Kong context and discusses how some key concepts have been applied in accounting for bilingualism in Hong Kong. It is hoped that students will learn from comparing Hong Kong with Macao or other bilingual communities.

Pre-requisite: None

#### ENGL3008 LANGUAGE AND COGNITION

The course investigates the relationship between language, language use, and human cognition: how language is grounded in human perception and conceptualization at both the individual and sociocultural levels. The course will introduce students to the fundamental concepts and issues involved, including frames, attention, metaphor, metonymy, categorization, and mental spaces. Pre-requisite: None

#### ENGL3009 SYNTAX

This course introduces students to the fundamental issues in the description and analysis of phrase and clause structures. Students will learn analytic skills in the survey of major syntactic phenomena, including phrase structure, constituency, the lexicon, agreement, movement, negation, clause types, and subordination.

Pre-requisite: None

### ENGL3011 LANGUAGE ACQUISITION

This course introduces key concepts and surveys major issues in language acquisition, with a focus on the acquisition of English syntax/grammar and morphology. Three types of language acquisition will be considered and compared, namely, first language acquisition, second language acquisition and bilingual language acquisition. Data are drawn from monolingual children who speak English as their first language, bilingual children who are also exposed to Cantonese/Chinese, and second language learners whose first language is Cantonese/Chinese. Pre-requisite: None

#### ENGL3014 WORLD ENGLISHES

This course will introduce students to the study of contemporary and historical varieties of English worldwide. The pluralistic status of English varieties as well as the nature and effect of standards and standardizing varieties will be emphasized. The course may include historical approaches to varieties, geographical approaches or an approach that focuses on several recurring themes of how English is used internationally. Pre-requisite: None

# ENGL3016 ADVANCED ENGLISH STRUCTURE

The course is a more in-depth study of English grammar. It provides students with the argumentative techniques required in syntactic analyses. Particular attention will be given to the gradient nature of English categories and structures. The course will draw insights from different approaches where appropriate.

Pre-requisite: None

# ENGL3018 MORPHOLOGY

This course introduces students to the basic issues of linguistic morphology, the study of the structure of words. It covers important areas such as wordhood, word-formation processes, inflection, derivation, compounds and allomorphy. The course also examines current research on the relations between morphology, phonology and syntax. Pre-requisite: None

ENGL3020 NARRATIVE. DISCOURSE AND IDENTITY

Narrative-making is a basic human behavior which pervades all domains of human experience. In terms of form, narratives can range from the most complex saga to the simplest recount of mundane events. More fundamentally, however, narratives fulfill certain crucial functions in human life: in cognition, information structuring, identity construction and performance, intersubjectivity, and sociocultural ritual. This course examines the construct of 'narrative' — what it is, what its structure is, how it is constructed, how it has been theorized — and how its various functions manifest themselves linguistically in discourse. Pre-requisite: None

# ENGL3021 CHILDREN'S LITERATURE

This course examines a range of literature written for children and young adults. Classic and contemporary texts from various genres will be studied. These may include nursery rhymes, fairy tales, poetry, drama, fiction and film. The course will typically include an examination of the idea of childhood and the origins of children's writing. A survey of 19th and 20th century English-language writing for children will emphasize well-known texts. Pre-requisite: None

## ENGL3022 VICTORIAN LITERATURE

This course will study novelists, poets, dramatists and prose writers whose work contributed to the diversity range of writing in the Victorian period. A range of texts will be examined in their social, religious, scientific, philosophical and aesthetic contexts. Issues such as the Industrial Revolution, imperialism, Faith and doubt and the "woman question" will be examined in relation to literary texts of the 19th century.

Pre-requisite: None

### ENGL3023 ROMANTICISM

This course will focus on the Romantic Movement, beginning with its rise to prominence in the late 18th century to its later influence on Western writing. Key English Romantic poets will receive special attention. Certain classic texts of the Gothic genre may also be considered. The sociohistorical and cultural origins of Romanticism and its influence on near-contemporary Western writing may also be examined. A parallel aim of this course is the development of competence in the analysis of poetry, especially the lyric poem.

Pre-requisite: None

# ENGL3024 DRAMA AND THEATRE

This course is designed to give the student a fuller understanding of the relationships among dramatic literature, performance, and society. This course will combine the academic study of dramatic literature in English with that of theatre history to demonstrate the inherently social character of drama-in-performance. A selection of plays and excerpts will be read and considered within cultural, social, and theatrical contexts. Pre-requisite: None

# ENGL3027 20th CENTURY AMERICAN LITERATURE

American literature in the twentieth century engages with the United State's rapid expansion into a global power. The early century was an era of great novelists and poets troubled by fading traditions, commercial values, and increasing social regimentation. With the rapid development of technology and complex global systems of trade following the Second World War at midcentury, many American writers struggled to reconnect with nature and with the more naturally human.

Pre-requisite: None

# ENGL3029 INTRODUCTION TO LITERARY CRITICISM

Like all discourse, literary criticism has a historical character. Critical statements about literature combine critical and philosophical traditions with a contemporary understanding about imaginative writing and the role of the critic. To study literary criticism is to become self-conscious about what is read, how it is read, what response it elicits, and how it is to be evaluated. This course involves reading selections from literature and literary criticism to address these and other questions.

Pre-requisite: None

# ENGL3030 SHAKESPEARE

This course is designed to give students an opportunity to explore a range of Shakespeare's plays through which they can learn to appreciate the thematic and linguistic richness of the playwright's works. Selected plays will be studied in connection with the theatrical and cultural backgrounds of Elizabethan England. Students will also be familiarized with schools of Shakespearean criticism in the 20th- and 21st-centuries. In addition, the class will read selected sonnets and narrative poems.

Pre-requisite: None

# ENGL3031 CREATIVE WRITING I

This course uses examples of canonical or famous literature to develop critical reading skills and, more importantly, to support the production by students of their own imaginative work. Various genres of creative writing will be practiced throughout the course, and this may include fiction, poetry and life writing. The focus is on students' creative production, in both individual and in group work. Students will draft and polish their work with the goal of publication and/or performance, and they will present creative portfolios at the end of the semester. Pre-requisite: None

# ENGL3033 THE ENGLISH RENAISSANCE

This course is designed to offer students an opportunity to broaden their understanding of the English Renaissance and to develop a critical appreciation of the work of major writers from the period. Areas of study will include poetry and drama from Elizabethan, Jacobean, and Caroline periods. A number of key concepts will be introduced, such as 'Metaphysics', 'Reformation', and 'Humanism'. We will also explore popular themes and topics which include love, sexual relations, religion, and order.

Pre-requisite: None

# ENGL3034 POSTCOLONIAL WRITING

This course is a general survey of the issues and concerns in the field that is broadly called postcolonial studies. It aims to develop a critical awareness of the effects of British imperialism on the literary production of formerly colonized places. A selection of literary texts from outside the Anglo-American tradition will be read alongside critical texts dealing with concerns such as identity, representation, nationhood, and diasporas.

Pre-requisite: None

# ENGL3035 WORLD LITERATURES IN ENGLISH

This course will examine the histories, development and concerns of literatures written in English outside the Anglo-American tradition defined in relation to specific geographical areas, national

cultures or socio-political movements. The specific areas for study will depend on faculty availability and specialist interest.

Pre-requisite: None

#### ENGL3036 LIFE NARRATIVES

This course is designed to introduce students to the literary genre of life narratives and to familiarize them with the interrelationship between fact and fiction. Texts studied are chosen from different cultures and historical periods in order to provide a survey of different forms of life writing (auto/biography, memoir, diary), as well as different modes of discourses in relation to one's socio-cultural identity.

Pre-requisite: None

#### ENGL3038 **MAJOR AUTHORS**

This course is an intensive study of the life and the works of a significant author (or authors) with important contributions to the development of canonical or contemporary literature written in English. Author(s) studied may vary from year to year. Pre-requisite: None

#### SPECIAL TOPICS IN LITERATURE I ENGL3039

This course is a focussed study of an area in literary studies. The content will vary from year to year depending on the availability of staff. Pre-requisite: None

#### SPECIAL TOPICS IN LITERATURE II ENGL3040

This course is a focussed study of an area in literary studies. The content will vary from year to year depending on the availability of staff.

Pre-requisite: None

#### ENGL3041 SPECIAL TOPICS IN LINGUISTICS I

This course is an intensive study of an area in linguistics. The content will vary from year to year depending on the availability of staff. Pre-requisite: None

#### ENGL3042 SPECIAL TOPICS IN LINGUISTICS II

This course is an intensive study of an area in linguistics. The content will vary from year to year depending on the availability of staff.

Pre-requisite: None

#### LANGUAGE. CULTURES AND TRANSLATION ENGL3043

This course provides students with an awareness of cross-cultural differences and cognitive problems involved in inter-lingual translation. The first part of the course will discuss general problems in cultural representation and reception, with special reference to issues such as 'linguistic differences', 'religious differences' and 'conceptual differences'. The second part of the course will discuss translation strategies and methods of rendering cultural differences. Pre-requisite: None

#### ENGL3044 TRANSLATION FOR THE MEDIA

This course is an introduction to translation for the media. Texts to be translated and adapted may include: news reports/releases, interviews, public notices and advertisements. Special attention will be paid to the linguistic, stylistic and cultural features of writing for the media in both Chinese and English so that students will learn how to apply different strategies and methods to translating texts for different purposes.

Pre-requisite: None

#### TRANSLATION OF BUSINESS AND LEGAL WRITINGS ENGL3045

This course introduces the characteristic features of business and legal writings and translation

strategies and methods employed when by translating a variety of business and legal documents. Such documents may include minutes, annual reports, business correspondence, tender documents, and legal contracts. Particular attention will be paid to translation problems such as legal equivalence, terminology, register, and structural layout.

Pre-requisite: None

### ENGL3046 CONFERENCE INTERPRETATION

This course will mainly focus on training students in simultaneous interpretation, though consecutive interpretation will also be discussed. Students will be introduced to note-taking, mnemonic devices, visualization and other techniques employed in interpretation. The course will include an overview of conference interpretation and introduce techniques employed in the practice through selected readings and workplace simulation.

Pre-requisite: None

### ENGL3047 LITERARY TRANSLATION

This is course covers a wide range of literary genres: poetry, fiction, prose (including famous speeches) and drama. General theories of literary translation principles and strategies will be introduced along with analyses of selected literary translations as examples. The course will emphasize the identification of linguistic, stylistic and cultural features of literary texts and apply methods of translation specific to each of the sub-genres. Pre-requisite: None

#### ENGL3048/3049 READING COMPREHENSION AND WRITING I/II

A continuation of ENGL2009/2010. A more advanced course in comprehension and writing skills. Pre-requisite: ENGL2009/2010

#### **ENGL3051 THE GOTHIC**

This course is an introduction to the Gothic, focusing on terror, horror, the supernatural, trauma, and the body. Students will study a mix of classic and neglected literary texts and films, covering such areas as the figure of the vampire, ghosts and hauntings, witchcraft and magic, and psychology and dreams. The course will consider the Gothic from perspectives such as the historical, society and politics, philosophy and theology, medicine and contagion, ecology and the environment, science and technology, and critical theory. Pre-requisite: None

### ENGL4000 RESERCH REPORT

Students selected for the Research Report class will work on a research topic of their choice over one semester. Thesis topics will be selected and developed under the supervision of a staff member with whom the student will meet regularly. The length of the report will usually be between five and eight thousand words.

Pre-requisite: None

# ENGL4001 GRADUATION PROJECT

Students who elect to take the Graduation Project class will work on a group research project that involves an element of outreach (e.g. involvement in workplace learning; school, community or residential college liaison; fieldwork; participation in a recognized competition; etc.) Students will meet on a regular basis in small groups with the staff member acting as their project supervisor. The meetings will plan the project and organize the outreach element. The elective will be examined by a portfolio of reflective assignments, which in total will amount to between five and eight thousand words.

Pre-requisite: None

#### ENGL4002 TRANSLATION WORKSHOP

In the translation workshop, students will be working in groups, and each group has to translate a long piece of text of a particular genre. During the course of translation, discussions will be conducted on how to solve translation problems and how strategic decisions are to be made.

Presentations will be given by students on their translation experience and their final product. Good translations may be selected for publication. Pre-requisite: None

# ENGL4003 AUDIOVISUAL TRANSLATION

This is an introduction to subtitling and dubbing for film and television between English and Chinese. The nature and characteristics, as well as translation principles and strategies pertaining to this particular area of translation studies, will be reviewed and discussed. Emphasis is put on topics on subtitling, especially translation techniques for overcoming the conflict between the medium constraints and comprehensibility of culture-bound utterances. Pre-requisite: None

# ENGL4004 TRANSLATION OF JOURNALISTIC WRITING

This course is designed for students who wish to further their interest in the translation of journalistic writings, which include news articles, editorials and commentaries across a wide spectrum of fields. It will involve an in-depth study of the characteristics of journalistic writing and the differences between journalistic writing in Chinese and English. Students will translate a wide variety of texts including reportage and reviews on politics, economics, culture, sports and entertainment. They will also be introduced to aids and tools employed in journalistic translation for web-based portals.

Pre-requisite: None

### ENGL4005 SIMULTANEOUS INTERPRETATION

This course will involve intensive sessions of practice in listening, comprehension, shadowing, paraphrasing and finally simultaneous interpreting. Texts for interpretation will be selected from a variety of fields and genres to expand general knowledge and vocabulary of students. The course will also help students acquire a better understanding of the subject of interpreting in general and Simultaneous interpretation in particular.

Pre-requisite: None

# ENGL4006 SPECIAL TOPICS IN TRANSLATION I

This course is designed to permit visiting scholars, or existing staff, to offer undergraduate level courses in their particular areas of specialization. The topic and content of the courses will vary from year to year depending on the availability of specialized staff. Pre-requisite: None

# ENGL4007 SPECIAL TOPICS IN TRANSLATION II

This course is designed to permit visiting scholars, or existing staff, to offer undergraduate level courses in their particular areas of specialization. Pre-requisite: None

# ENGL4008/4009 FRENCH IN THE MODERN WORLD I/II

A course that introduces students to a range of authentic contemporary texts representative of modern French culture, both in France and in the wider French-speaking world. Pre-requisite: ENGL3048/3049

# ENGL7001 LINGUISTICS RESEARCH METHODS

The purpose of this course is to improve students' language awareness, academic communication skills, and research abilities so they can perform competently as they complete an MA degree in English. Course content and activities are meant to develop skills in academic research and writing to include understanding research methods and thesis development processes as well as presenting "mock" research proposals orally and in writing. Pre-requisite: None

# ENGL7002 COMPARATIVE CHINESE - ENGLISH STRUCTURE

This course involves the comparative description and analysis of the respective sound structures,

morphological structures, and syntactic structures of Chinese and English from the perspective of current linguistic theory. Topics addressed may include tone, stress, and rhythm in the languages, prosody, word formation, phrasal and clausal structure, interrogation, embedding, conjoining, comparison, focusing devices, the auxiliary, and temporal and aspectual representation.

Pre-requisite: None

# ENGL7003 DESCRIPTIVE LINGUISTICS

This course covers three fundamental areas of language description: the analysis of morphology (word structure), syntax (sentence structure), and semantics (the structure of meaning). Examples will be drawn from English and other languages, including Chinese. Pre-requisite: None

### ENGL7004 PSYCHOLINGUISTICS

This course introduces students to the biological, neurological and cognitive bases for language, language development, multilingualism and second language acquisition, and language disorders. It will also deal with some aspects of natural language processing in relation to certain areas of linguistic analysis: phonology, the lexicon, morphology, syntax, semantics, and discourse.

Pre-requisite: None

### ENGL7005 SOCIOLINGUISTICS

This course will examine language variation as it occurs within the notion of a speech community and introduce some of the major theories and methods used in the study of language in society. Topics to be covered may include bilingualism & multilingualism, pidgins, creoles & trade languages, code-switching, second language variation, language & identity, language shift, and language variation. Students are expected to have a good understanding of linguistics and language structure before they enter the course, as these topics depend upon a pre-requisite knowledge of linguistics.

Pre-requisite: None

#### ENGL7006 SYNTAX - THE STRUCTURE OF ENGLISH

This course will deal with the advanced description of syntactic structure from the perspective of current linguistic theory. Within the framework of the Principles and Parameters perspective, it will cover selected issues in the theory of constituent structure and the syntax of predicates, arguments, and grammatical relations. Students will be introduced to each of the seven major components of Principles and Parameters Theory: case theory, theta theory, X'-theory, binding theory, the theory of alpha movement, locality conditions, and the theory of Logical Form (LF). Pre-requisite: None

### ENGL7007 CINEMA STUDIES

This course considers the emergence of cinema in the twentieth century and looks at world cinema from various points of view. Students, with the aid of various readings from film theorists, will view and discuss a variety of classic and contemporary feature films. Pre-requisite: None

# ENGL7008 COLONIAL AND POSTCOLONIAL WRITING

This course will examine the interactive relationship between imperialism/colonialism and literature written in English. The role of imperial discourse in the shaping of 19th and early-20th century English fiction and the reciprocating role of imaginative writing in the maintenance of British imperial authority will be an important focus of the course. Significant attention will also be devoted to writing as a counter-discursive reaction to imperialism and colonialism. Pre-requisite: None

# ENGL7009 DRAMA & THEATRE STUDIES

This course will address major works of dramatic literature spanning the sixteenth to twentieth

centuries and will examine the development of realism and naturalism in the creation of modern and contemporary drama. In addition to textual analysis, students will look at various plays from the point of view of production, and the works of major directors will also be considered. The course aims to place dramatic works within the context of theatre studies. Pre-requisite: None

# ENGL7010 MODERNITY IN ENGLISH LITERATURE

This course examines the impact of modernity on English and American literature. The course will trace the emergence, development, and influence of modernism in Anglo-American writing. The first half of the 20th century, the period of High Modernism, will receive special attention. Also considered will be the legacy and surviving influence of modernism. Pre-requisite: None

# ENGL7011 ROMANTICISM

This course is an in-depth study of the impact of Romanticism on Anglophone writing. The course will begin with a consideration of the origin of romanticism, its development, and application as a conceptual model. Romantic poetry in the English tradition and its influence on nearcontemporary and later writers will be a primary focus. Some major themes can include nature, time, love, and death.

Pre-requisite: None

# ENGL7012 VICTORIAN NOVELS AND POETRY (1840 - 1870)

Covering the period of High Victorianism, the course looks at novelists like Dickens, Mrs. Gaskell, Disraeli, and the Brontes as social critics. The course also includes issues of British regionalism and provincialism in 19th-centurty fiction, focusing on such authors as Eliot and Hardy. Works by Tennyson, the Brownings, and other major poets of the period will be studied within their social and intellectual contexts.

Pre-requisite: None

# ENGL7013 DISCOURSE ANALYSIS

This course covers the key concepts and methods of the linguistic approach to the analysis of spoken discourse and written discourse. Topics covered will include language beyond the sentence, global and local properties of speech and writing, narrative structures, new and old information, subjects and topics, foregrounding and backgrounding. Pre-requisite: None

### ENGL7014 HISTORY OF ENGLISH

This course surveys the development of English from the fifth century until the present, including the historical and cultural contexts of changes in the language. Old, Middle, and Early Modern English texts will be examined in terms of phonology, graphology, morphology, lexicon, syntax, and semantics. Topics such as the effects of cultural and technological developments, dialectal variation, and genetic affiliations may also be examined. Pre-requisite: None

# ENGL7015 SPECIAL TOPICS IN LINGUISTICS

This course is designed to permit visiting scholars, or existing staff, to offer postgraduate level courses in their particular areas of specialisation. The topic and content of the courses will vary from year to year depending on the availability of specialised staff. Examples of specialised topics that may be offered include: Language and Gender, Second Language Reading and Writing, Language Typology, Morphology and Lexicography, etc. Pre-requisite: None

### ENGL7016 GENRE STUDIES

This course will present the concept of literary kinds or types, including the problems of classification, the ways in which expectations of genre influence understanding, and the relationship between genre and ideology. Selected forms of imaginative literature, such as the

novel, poetry, and drama, as well as non-imaginative types, such as journalistic essays and travel writing, will be studied.

Pre-requisite: None

#### ENGL7017 SHAKESPEARE

This course will offer an advanced analysis of selected plays showing the generic range of Shakespeare's work. Non-dramatic works may also be included. The course considers varying stage realisations of Shakespeare's drama and the centrality of Shakespeare in Western literature.

Pre-requisite: None

#### ENGL7018 SPECIAL TOPICS IN LITERATURE

This course is designed to permit visiting scholars, or existing staff, to offer postgraduate level courses in their particular areas of specialisation. The topic and content of the courses will vary from year to year depending on availability of specialised staff. Examples of specialised topics that may be offered include: detailed and close study of major works of literature e.g., Joyce's Ulysses, Shakespeare's Hamlet; Milton's Paradise Lost; particular genres, e.g., travel writing, satire, science fiction; or study of a particular writer.

Pre-requisite: None

#### WORLD ENGLISHES ENGL7019

This course will undertake an examination of the nature of international languages, global communication, and the historical context that has led to the current use of English as an international language. In addition to the study of international varieties of English, this course will examine issues such as language policy, language education, literary canons, and language change within the context of the global use of English as an international medium of communication.

Pre-requisite: None

#### ENGL7020 BILINGUALISM

This course introduces the study of bilingualism as it is made manifest, e.g. through codeswitching, and explores ways to analyse it in different social, cultural, communicative and generic contexts. It starts with an introduction to the definition of code-switching and similar phenomena (such as borrowing, code-mixing and code-alternation), and then it looks into major ideas and frameworks that have been proposed to analyse code-switching. Special attention is devoted to research on code-switching in Chinese/English contexts.

Pre-requisite: None

#### COGNITIVE LINGUISTICS ENGL7021

The course introduces the student to Cognitive Linguistics, a field in linguistics which studies the relationship between language, language use, and human cognition: how language is grounded in human perception and conceptualization; from the most mundane linguistic expressions about time and space, to the most fantastical linguistic behaviors such as the Buddhist koan. The course will introduce students to fundamental concepts and issues, as well as the major theories of the field, including frames, attention, conceptual metaphor, metonymy, categorization, and mental spaces.

Pre-requisite: None

#### ENGL7022 CORPUS LINGUISTICS

This course introduces students to the practices and issues involved in corpus linguistics. Its aims are to demonstrate the practical use of online corpora to explore questions asked by scholars of language and literature, and to address some of the main theoretical issues raised by corpus design and analysis. Students familiarize themselves with some of the available online corpora and practise using concordancers, and search tools that give information about frequencies, collocations, colligations, etc. The classes cover language analysis at the levels of lexis, grammar and discourse and applications such as lexicography and language teaching. As

the course progresses, the students consider questions of representation, size, transcription and tagging in the building of a customized corpus. Pre-requisite: None

# ENGL7023 MEDIA DISCOURSE

This course explores some of the more recent genres of broadcast talk in close detail, focusing on cases such as the celebrity interview, the talk show, news interviewing and some kinds of reality TV show. The course explores the way language has been adapted to the requirements of new media such as the internet and the cell phone. By the end of the course students should be familiar with key concepts for understanding mediated language drawn from sociology, linguistics and critical discourse analysis including notions of register, genre, the cooperative principle, implicature, face work, politeness, participation framework and social deixis. They should be also have gained competence in collecting, transcribing where necessary, and analysing instances of broadcast talk or mediated language using concepts acquired in the course.

Pre-requisite: None

### ENGL7024 CRITICAL READING

Critical Reading fulfills the research course requirement and is aimed especially at students who are interested in literary studies. "Reading" refers to the skill of registering literary form, recognizing intertexts, and interpreting; it also refers to reading literary texts in the contexts within which they are produced and circulated, and, where it is enriching, with the help of concepts associated with literary theory. The course concerns, in brief, the reading of literature, context, and theory in the preparation of criticism of one's own.

Pre-requisite: None

### ENGL7025 LANGUAGE AND POPULAR CULTURE

The study of Sociolinguistics has traditionally dismissed data from popular culture because it is neither spontaneous nor naturally occurring. More recent attention, however, has been given to the linguistic performance of identity within popular culture and the implications that various performances have within the expression of ethnolinguistic identity and language ideologies. This course will examine some of the important theoretical developments within the study of language and identity, including stylisation, communities of practice approach, language crossings and the acts of identity approach.

Pre-requisite: None

### ENGL7026 ADVANCED CINEMA STUDIES

This course focuses on global cinema or filmed literature. It specifically explores issues of industrial practices, authorial subjectivities, spectatorship, and social ideologies. Topics to be covered include but not limited to auteur studies, genre studies, star studies, and other critical approaches to film studies, including feminism, postmodernism, and queer theory. Pre-requisite: None

### ENGL7027 ASIAN DIASPORA LITERATURE IN ENGLISH

Asian Diaspora literature concerns the movement, across the globe, of Asian people, seeking refuge or opportunities outside of Asia. To date the body of Asian diasporic writing and criticism concerns Asian North Americans; however, Asians, especially in recent times, have established themselves in many places. This literature records Asian experiences of diaspora while inscribing the cultural, social, and political forces bearing on authors and their communities. In this course students will read literary texts in this category, along with relevant criticism and theory. Students will develop their own idea about this work, and exercise research, presentation, and writing skills.

Pre-requisite: None

# ENGL7028 REPRESENTING THE SHOAH: THE HOLOCAUST IN LITERATURE, MEMOIR AND FILM

This course looks at how the *Shoah* (Holocaust) is represented in various genres, including memoirs or testimony by survivors, in fiction and drama, and in film and other artistic media. While this course does not aim to provide a study of the Holocaust as a whole, a subject more suited to history, politics and sociology, it will attempt, through the study of various literary and other artistic texts, to provide students with an overview of responses from those who endured and survived the horror as well as from those who have written about the *Shoah* from an historical distance.

Pre-requisite: None

# ENGL7029 ECOLOGY AND APOCALYPSE

This course will consider the theme of environmental crisis in both its historical and contemporary aspects. As well as considering issues of environmental collapse, it will comprehend also the human and cultural dimensions of disease, depopulation and migration associated with climate change and natural disaster. The course will encourage students to extend ecocriticism beyond its customary preoccupation with historical Romanticism and contemporary wilderness by fostering an interest in the depiction of environmental crisis in popular culture. Pre-requisite: None

### ENGL7030 NINETEENTH CENTURY GOTHIC FICTION

This course will look at the rise and dissemination of the Gothic Novel in the Nineteenth Century, and with this the further growth of sensational Fiction in both English language novels and novels translated into English from other cultures. The course will demonstrate the importance of historical and philosophical context in shaping aesthetic form and tastes among the reading public, and the cross-fertilisation of genres from continental Europe through to Britain and North America which facilitated this shaping.

Pre-requisite: None

### ENGL7504 COURSE DESIGN FOR LANGUAGE LEARNING

Approaches to course design and elements to consider when effectively planning English language learning courses will be demonstrated by an examination of the ways in which these components interact when designing, evaluating, and revising courses. Students will investigate course design processes and issues both firsthand and through discussions with practitioners and have opportunities via individual and group projects to apply course design principles to selected situations and settings.

Pre-requisite: None

# ENGL7505 CURRENT TRENDS AND ISSUES IN LANGUAGE LEARNING

This course will examine the newest trends as well as current issues in language learning. An investigation of the most recent underlying theories and hypotheses regarding language acquisition will be combined with research reports and "current practices" in areas such as: multimedia (CALL, internet, etc.), co-operative learning, multiple intelligences, the arts (e.g. music, art, dance, drama, literature), use of authentic materials and video, content-based and theme-based instruction, projects, critical thinking, process writing, reflection and metacognition, alternative assessment, and action research.

Pre-requisite: None

### ENGL7508 MATERIALS DESIGN AND EVALUATION

This course will provide an understanding of materials design principles, techniques, and issues while also examining the ways in which texts and materials can be used to guide, inform and enhance L2 learning. You are expected to become familiar with materials, sources and professional resources available while evaluating and designing materials for selected L2 learning situations and settings. Pre-requisite: None

#### ENGL7509 PHONOLOGY

This course constitutes an overview of phonological theory and analysis. While data from a range of languages will be discussed, however, the focus will be on English. The topics covered will include phonological rules, representations, underlying forms, derivations, and justification of phonological analyses. Attention will also be given to the interaction of phonology with morphology and syntax, syllable structure and stress. The course will emphasise practical skills with problem sets

Pre-requisite: None

#### ENGL7998 PROJECT REPORT

Under the supervision of an instructor, the student designs, executes, and reports on a substantial piece of research in the field of Literature OR Linguistics iin English. Pre-requisite: None

#### ENGL8013 SPECIAL TOPICS IN ENGLISH LINGUISTICS

One or more courses may be offered as a Special Topic in English Linguistics. These may include a continuation of the Practice of Scholarship course, focusing on the experiencing of submitting papers to an academic journal; a course reviewing major approaches to the linguistic analysis of English, advanced topics on a specific area of English linguistics; or a special topic in Translation Studies.

Prerequisite: None

#### ENGL8014 SPECIAL TOPICS IN ENGLISH LITERARY STUDIES

One or more courses may be offered as a Special Topic in English Literary Studies. These may include a continuation of the Practice of Scholarship course, focusing on the experience of submitting papers to an academic journal; a course on the history of the book and print culture that focuses on historical texts and the modes of their production; advanced topics on a specific area of English literary studies; or a special topic in Translation Studies. Prerequisite: None

#### ENGL8016 ADVANCED RESEARCH WRITING

This course will require students to learn how to write research papers and to structure their arguments in academic writing. The course will use various source texts and exercises, and will be examined by coursework.

Pre-requisite: None (for students admitted with a relevant Master's degree); Research Writing (for students admitted without a relevant Master's degree)

Pre-requisite: None

#### ENGL8090 PRACTICE OF SCHOLARSHIP I

This is an experiential task-based course in research methods. Outlining course aims and allocating key roles; deciding a conference theme; deciding a date & organizing a venue; writing a call for papers (cfp); publicising the cfp; suggesting, contacting and confirming plenary speakers; reviewing, accepting & rejecting submissions; writing individual conference papers; training in presentation skills; organizing timetable; promoting and running conference. Prerequisite: None

#### HIST1000 **HISTORY OF MACAO**

This course introduces and examines the historical development of Macao since its founding in the 16th century. Apart from examining the political aspects of Macao's history, students will study the social, economic, and cultural dimensions of the historical development of modern Macao over the past four centuries.

Pre-requisite: None

#### **HISTORY OF CHINA I HIST1001**

This survey course is designed to provide the student with an overview of Chinese history before modern times. It retraces the growth of Chinese civilization from its pre-historical genesis until the 17th century. Students will understand through readings, lectures, videos, and discussions the historical patterns of traditional China's evolution. This course will stress major events and the nature of the political, cultural, and social structures of ancient China. Pre-requisite: None

# HIST1002 HISTORY OF CHINA II

This is a survey course on modern China from the 17th century to the establishment and decline of the Republic in the early 20th century. It traces the social disorders and transformations of modern China, covering such topics as the Ming-Qing dynastic wars, internal rebellions and foreign wars, the fall of the Qing Dynasty, the political disintegration and reintegration under the Republic, the attempts at reforms and modernization, and the rise and victory of Chinese Communism in 1949. This course explores the issues of imperialism, nationalism, revolution, communism, totalitarianism, and modernization.

Pre-requisite: None

### HIST1003 HISTORY OF CHINA III

This is a survey course on Communist China from its outset when the Chinese Communist Party (CCP) seized power and established the People's Republic of China in 1949 to the present. Emphasis will be on the current social, economic and cultural transformations brought about by the reforms since 1978. It investigates the political and economic policies of the CCP and its impacts during the Mao Era and the Post-Mao Era in general, and pays particular attention to the various social phenomena during the periods of the 1950s, the Cultural Revolution, and more recent reforms.

Pre-requisite: None

#### HIST1004 HISTORICAL THEORY AND PRACTICE

This course focuses on the methods of historical study, the sources for doing historical research, and the craft of writing history. It will introduce students to a wide variety of methods and approaches to the study of the past, and to critically examine the issues of "doing" history. Classes will consist of lectures, discussions, as well as visits to libraries, museums, and occasional fieldtrips. On a more practical level, students will learn how to take class notes, prepare for examinations, compile bibliographies, and write short book reports and research papers.

Pre-requisite: None

# HIST1005 HISTORY OF MODERN EAST ASIA

This is a survey course that traces the foundation and development of modern East Asia since the 19th century. Through examining the major historical events, the transformations of political and economic institutions, and the social and cultural trends of China, Korea, and Japan from the early nineteenth century to the present, the course provides interpretations for many intriguing historical phenomena, such as feudalism, imperialism, warlordism, militarism, nationalism, and communism. This course will also compare and contrast the processes and methods involved in modernizing China, Korea, and Japan. Pre-requisite: None

#### HIST1006 HISTORY OF THE UNITED STATES

This is a survey of the American past from the post-Civil War era to the 1990s. Students will study about the growth and impact of industrialization and urbanization in the Gilded Age, the reform movements, such as progressivism, the New Deal, the Civil Rights movements, and the Great Society. This course traces America' path to global involvement in the 20th century, including America's entanglement in the two world wars and the wars in Korea and Vietnam. The course aims to help students acquire a firm knowledge of major themes and characteristics of the United States and its people, and a better understanding of the present with a new perspective derived from the study of the past.

# HIST1007 ART HISTORY OF ANCIENT CHINA

This course is a historical survey of the visual arts of China from the Neolithic Age to Qing Dynasty. Students are introduced to a variety of artistic traditions and media, including ceramics, bronzes, sculpture, painting, and architecture. Discussion will cover significant issues of art history, with emphasis on the underlying philosophy, religion, history, and aesthetics of Chinese culture.

Pre-requisite: None

# HIST1008 ART HISTORY OF MODERN CHINA

This course is a survey of the major trends and art works in China from the late Qing Dynasty to the present. This course explores the ways in which Chinese artists of the 20th century have defined modernity and their tradition against the complex background of China's history. Pre-requisite: None

# HIST1009 HISTORICAL SOURCES, ARCHIVES, AND BIBLIOGRAPHY

This course is designed to help students to become familiar with historical sources and bibliographies, especially archival materials, and to equip students with the knowledge and skills to manage, track down, and use all the sources relevant to historical materials. On a practical level, the various printed and electronic aids to finding and accessing primary materials will be introduced, and students will be shown how to combine these to retrieve all the sources efficiently and comprehensively.

Pre-requisite: None

### HIST1010 DIGITAL RESOURCES IN THE HUMANITIES

This course is designed to introduce students to a range of issues involved in the design, creation, management and use of electronic resources in the humanities. Topics include humanities resources on the digitized information, digital imaging, encoding and markup systems, text analysis, GIS, electronic dictionaries, scholarly electronic publishing in the humanities and interdisciplinary working.

Pre-requisite: None

### HIST1011 CULTURAL HERITAGE STUDIES

This course is designed to introduce students practical and theoretical approaches to the key issues and working practices in the field of cultural heritage. It is aimed at both those who wish to study cultural heritage as an academic subject, and those who might wish to obtain employment in the broad professions. The topics include studies of monuments, historic houses, cultural landscapes, cultural routes, intangible cultural heritage, and so forth. Pre-requisite: None

#### HIST1012 MUSEUM STUDIES

This course is designed to introduce students the major types of museums, and contemporary issues and ethical challenges facing those museums today. How the primary public mission is established and interpreted and an overview of museum organization is included. Planning for exhibitions and community inclusion and diversity are also discussed. Students are encouraged to make field trips, visiting subject-appropriate museum sites in their own area and reporting back to the class. Students will also participate in discussion boards on the assigned topics and research the origins and mission of a museum in their locality. Pre-requisite: None

### HIST2001 WESTERN CIVILIZATIONS I

This course begins in ancient times, with the foundations of Western civilizations, crisis and recovery in the Middle Ages, and then follows the cultural, social and political progress of Europe through the Renaissance and Reformation, its overseas expansion in the early modern era, and the Age of Enlightenment. The course focuses on European thought and culture, as well as technological change and political competition that set the stage for the rise of the Western prominence in the modern world. Pre-requisite: None

## HIST2002 WESTERN CIVILIZATIONS II

This course explores the Enlightenment ideas that gave rise to the French Revolution, as well as the technological foundations that led to the Industrial Revolution. It follows the movement of Europeans throughout the world in the 19th century as well as the cultural and social progress of Western societies. It examines the age of catastrophe punctuated by two world wars that produced the division of Europe, and ends with the economic and political reintegration of the European continent.

Pre-requisite: HIST2001 or permission of the instructor

#### HIST2003 HISTORY OF PORTUGAL AND ITS MARITIME EXPANSION

This survey course introduces students to a wide range of historical issues about Portugal from world power in the Age of Discovery in the 15th and 16th centuries to the Portuguese Empire in the 19th century and up to the present. The course focuses on political, social, cultural, and economic developments, including the expansion and decline of the Portuguese Empire, the end of monarchy and the development of the Republic, and Portugal's integration into Europe and its global involvement.

Pre-requisite: None

# HIST2004 READINGS OF CHINESE CLASSICAL DOCUMENTS AND HISTORICAL MATERIALS

This course consists of two parts. The first part introduces students to the significance of historical source materials, the classification of ancient Chinese historical materials, and the means of examining and utilizing historical source materials. The second part teaches students how to read and find historical source materials. Through case studies, students will learn how to discover and understand historical source materials and develop their capability of examining, analyzing, and using historical source materials, while also enhancing their reading ability of Chinese classics.

Pre-requisite: None

#### HIST2006 MACAO IN WORLD HISTORY

This is an in-depth study of Macao and its role in World History. Topics to be discussed will include the arrival and establishment of the Portuguese and Spanish in Asia; the establishment of Macao as a hub for East-West interchanges; Jesuit activities and Macao as a trading entrepôt in late-Ming; conflicts between Catholics and Protestants in Asia and the changing nature of trading networks; Macao as the gateway to the China trade; the rise of a "coolie trade;" Macao under the umbrella of Hong Kong; Macao as a refuge in WWII; and the emergence of the Gaming Industry in the late 20th century. Special attention will be given to Macao's responses to the changing environment in East Asia and how it was able to redefine itself in the face of competition and adversity.

Pre-requisite: HIST1000 or the permission of the instructor

#### HIST2007 WORLDVIEWS AND MAPPING IN HISTORY

Starting from map analysis, students will explore the different worldviews of medieval, early modern, and modern times from different perspectives. The focus will be on the connections between continents and peoples, with a large part of the course devoted to the cultural exchanges between Europe and Asia, one of the history department's main areas of research. We will actively use maps to explore how peoples of the past understood or experienced the world and reflect on the connections between cartography and power relations, intercultural contact, modern historiography and contemporary society. Pre-requisite: None

·

## HIST2008 HISTORY OF SOUTHEAST ASIA

This course is a survey of Southeast Asian history from 1750 to the present. The course will highlight the development of a modern Southeast Asian civilization during a period of great difficulty and intensity, when Southeast Asians struggled to maintain independence in the face of increasing influence and pressure from outside. Topics to be examined will include colonialism,

nationalism, the formation of new states and societies, efforts at regionalism, and ethnic and religious tensions.

Pre-requisite: One 1000-level History course or permission of the instructor

## HIST2010 HISTORY OF ASIAN ARTS

This course is Survey of the major monuments and trends of Asia, with focuses on three major regions: India, China, and Japan. By examining in depth a few characteristic works of art from each tradition, we will not only discuss the distinctive artistic styles, forms, and aesthetics of each region, but will also explore the mutual influences among these regions, and examine the cultural, social and religious contexts in which these works of art were produced. Pre-requisite: None

## HIST2011 HISTORY OF WESTERN ARTS

An introductory survey of painting, sculpture, and architecture in Europe and America from ancient times to the present. This course will explore such topics as the arts of ancient Greece and Roman, Medieval Europe, the Italian and Northern Renaissance, the Baroque period, and the 18th through 20th centuries. Lectures focus on the historical outlines of the major art movements. We will also focus on developing students' critical faculties – the ability to apprehend and comprehend a work of art.

Pre-requisite: None

## HIST2012 CHINESE CULTURE HISTORY

This is an introductory course to history of Chinese culture. This course will explore Chinese customs, art, literature, festivals, folklore, religious activities, architecture, medicine, everyday life, and so forth. The course has three major goals. First, it provides students with a basic knowledge of Chinese cultural practices; second, it introduces students to some of the current scholarship of Chinese culture and consumption; and third, it offers a cultural background for students to have a better understanding of today's China, Chinese people, their thought, and their society.

Pre-requisite: None

## HIST2013 HISTORY OF JAPAN

This course on Japan covers the Tokugawa to the postwar period. It examines the profound political, economic, and social transformation of Japan before and after Perry's Mission, the Meiji Restoration, the rise and fall of the Imperial Japan, and the development of postwar Japan. It focuses on the issues of modernization, imperialism, militarism, democracy, and economic success.

Pre-requisite: None

## HIST2014 POLITICAL SYSTEM OF ANCIENT CHINA

The course is designed for students to understand the history of the political system in ancient China, its relationship with social development, and the rules of its origin, development, and transformation and get some basic historiographical training through lectures, historiographical reading instructions, class discussion and assignments. The course will expand students' visions and enable them reach conclusion about the gains and loss in the development of political civilization through a comparison study of the history of the political system in ancient China and the west in a global perspective. The course will help students master the basic requirement and cultivate their interest in academic research. It will build a solid foundation for students who aspire to get further education and training in ancient Chinese history research. Pre-requisite: None

## HIST2017 THE BRITISH EMPIRE AND THE WORLD

The world we inhabit today was, in no small sense, created by the British Empire. Starting in the eighteenth century Great Britain underwent a dramatic transformation, from small island kingdom to pre-eminent global power, formally ruling a quarter of the world's land and population and informally exercising a wider influence still. Yet after World War II, the British Empire

experienced a rapid decline. How can these developments be explained? How were they experienced by the British themselves, and by the peoples who fell under their sway? Such questions are at the heart of this course.

Pre-requisite: None

#### MEDICAL IDENTITIES IN EAST AND WEST **HIST2018**

This course is a fascinating exercise in which we will explore, on the one hand, the development of medical ideas, concepts and thought as well as shifting patterns of medical practices and therapeutic treatments in global history. On the other hand, we will focus on the transmissions, interactions and exchanges of healing traditions, medical theories, pharmaceutical knowledge and related religious worldviews, and this over a space stretching from Europe. Africa, the Americas, and across Asia, from China and India to Southeast and West Asia. Taking as a case study the construction of medical identities in East and West, we will reflect on the close relationship between medical thought and the prevailing political, social, economic and cultural manifolds that shaped the condition humane. Likewise, we will unfold the all-encompassing and cross-cultural parallelisms showing that civilizations are not discrete and unalterable units but have been subjected time and again to external influences and impacts. Following this interdisciplinary and comparative theoretical framework, with due attention paid to primary sources in Eastern and Western languages, this course aims at promoting an awareness of the historical forces that have molded, and continue to shape, medicine in the world, thus helping us to reach a deeper understanding of the origin and developments that define the world's modernities

Pre-requisite: None

#### HIST2024 HISTORY OF FOREIGN RELATIONSHIPS IN THE QING DYNASTY

The course aims to cover three main subjects: the traditional Chinese diplomatic systems and ideas, the collapse and transformation of traditional diplomacy and the establishment of modern diplomacy. This course will first investigate how traditional Chinese regime understood and dealt with foreign relations by setting Qing dynasty as an example. It will then come to a discussion of the collapse of traditional diplomacy and the establishment of modern diplomacy. Besides, it will also have a comprehensive observation of the frontier crisis such as Korea and Vietnam resulted from the western colonialization and Chinese domestic transformation. Pre-requisite: None

#### HIST3000 ASIAN MARITIME HISTORY

Maritime history involves more than trade. This course explores the political, economic, social, and criminal (piracy and smuggling) interactions between China, Southeast Asia, and India from the 16th century to the present day. Students will study about pan-Asian trade and tribute interactions, and retrace the migrations of different ethnic groups as they interacted across maritime Asia. Special attention will be paid to the cultural diversities of each group and the reasons behind their migrations, exchanges, and encounters.

Pre-requisite: One 1000- or 2000-level History course or permission of the instructor

#### HISTORY OF CHINESE PAINTING HIST3003

This course will examine Chinese painting and calligraphy from the Eastern Zhou to the Qing Dynasties, with emphasis on style, subject matter, and cultural context. We will deal with representative masterpieces of painting, the most important artists of each dynastic period, and the major artistic movements to study essences of Chinese art. At the same time through these we will also try to understand the characteristics of Chinese culture. Pre-requisite: None

#### HIST3004 CHINESE BUDDHIST ART

This course offers a study of major iconographies, artistic trends, and monuments in Chinese Buddhist art. By the end of the course, special attention will be given to temples and images from Macao. We will examine the multifaceted tradition of Buddhist art as a profound expression of both artistic and religious values. Through this course, students will develop skills of visual

analysis and a critical vocabulary for discussing the iconographies and styles of Chinese Buddhist art. In addition, the course is designed to foster an understanding of Buddhist images according to their physical, social, and especially religious contexts. Pre-requisite: None

#### HIST3009 MACAO MEMORY AND ARCHIVES

This course will focus on the subjects of Macao Archives, as well as Macao Memory. In particular, it consists of the topics on exploring of the Macao history and cultural development in relations with documentary heritages, and the sciences of management and integrating of documentary resources in the new information and communication technologies, such as the worldwide project Memory Programme. Thus, the course will introduce the basic concept of documentation development, information management, professional ethics, government archives management, etc., with the theory and practical knowledge in the ever-changing environment of electronic and Internet world.

Pre-requisite: HSTB1000 History of Macao

#### HIST3010 MILITARY HISTORY OF MODERN CHINA

This course is to discuss the evolution of military force in China from the early Qing to the Korean War, including the Eight Banners, Green Standard, Militia, New Army, and People's Liberation Army. The course will introduce the major fights, battles, and wars, such as the Opium Wars, Taiping Rebellion, Sino-French War, Sino-Japanese War, War of Resistance against Japanese, and Civil War. The course will also analyze the military ideas, tactics, and strategies of major military leaders such as Li Xiucheng, Zeng Guofan, and Mao Zedong. The instructor will guide students to read some important works on the subject.

Pre-requisite: None

#### HIST3013 CHINESE SOCIO-ECONOMIC HISTORY

This course aims to provide a basic understanding of social and economic history of China from early times to the present. Topics include (but not confined with) social institutions such as clan, lineage, huiguan, and etc, trade, money, banking, imperial economic policies, and so on. Pre-requisite: None

## HIST3014 HISTORY OF CATHOLICISM IN CHINA

This course aims to provide a basic understanding of social and economic history of China from early times to the present. Topics include (but not confined with) social institutions such as clan, lineage, huiguan, and etc, trade, money, banking, imperial economic policies, and so on. Pre-requisite: None

#### HIST3015 JESUITS IN MING-QING CHINA

This course aims to retrace the path of the Jesuit missionaries who sailed from Portugal to China, believing that they could convert China to Christianity. Besides describing the role of Jesuits as cultural emissaries, this course will examine how these priests, in the first concerted European effort to engage with Chinese language and thought, translated Roman Catholicism into the Chinese cultural frame until the proscription of Christianity in China in 1724. In the retelling, this course will take students across continents and centuries to reveal the deep political, cultural, scientific, linguistic, and religious complexities of a true early engagement between East and West.

Pre-requisite: None

## HIST3021 SPECIAL TOPICS IN HISTORY

Special courses on various historical topics to be developed by current faculty and visiting scholars.

Pre-requisite: None

## HIST4001/4002 ADVANCED HISTORY WRITING I/II

These are capstone courses, to be taken in sequence, designed to help majors pursue an

individual research project under the supervision of a faculty of the History Department. The purpose of course meetings is to give the students a chance to learn the mechanics and methods of senior research and to share with classmates the work process and experience, excitement and frustration in historical writing and research. The courses, which aim to enhance the seniors' critical thinking, oral skills and capability of examining and interpreting historic events, will explore the methods of collecting, sorting, and analyzing source materials and collectively deal with common problems rising from research. The end result of their research will be a 25-50-page essay based on primary sources and presented to the public. The seniors in the class will also need to prepare a Portfolio that summarizes their college experience as a History Major. Pre-requisites: None.

## HIST4003 RESEARCH PROJECT

This Research Project allows the history senior to gain research experience in one of the areas of specialization of the department for one semester and under close supervision of one faculty member. At the completion of the research project, final assessment is earned by writing a research report. A research report is different from an academic thesis in that it does not require extensive literature review and theoretical framework, and it is shorter. Pre-requisites: None.

#### HIST7750 MACAO, CHINA AND WORLD HERITAGE

This course will introduce students to the concepts of world heritage with an emphasis on the culture and history of Macao and China and their places in world heritage. In this course students will survey the definition, meaning, history and characteristics of world heritage sites in Macao and China and acquire new skills that contribute to a better understanding of the importance of both tangible (monuments, historical centers, natural reserves, etc.) and intangible heritage (traditional know-how, music, literature, etc.). As part of this course students will participate in regular field trips to museums and world heritage sites in Macao, where they will gain first-hand experience seeing and appreciating Macao's colorful history and culture.

#### HIST7751 CULTURAL HISTORY OF MACAO IN MING AND QING DYNASTIES

In this course students will explore the fascinating and intriguing phenomenon in cultural history of Macao from the sixteenth century to the nineteenth century. Lectures and discussions will focus on the cases of cross-cultural exchanges between East and West in the making of a unique Macanese identity. Students will examine the multidimensional character and meanings of Macao's cultural, religious, culinary, gaming, and architectural heritage. Pre-requisite: None

#### HIST7753 ARCHITECTURE AND HISTORY

Human experience is shaped by the built environment. This course introduces students to the interrelated fields of architecture, art history, and engineering and explores great architectural monuments from the ancient to the modern period, from India across the Mediterranean and Europe to the US. The focus will be on understanding these works in their structure and function, both as products of individual ingenuity and reflections of Zeitgeist. Questioning these monuments from a present-day perspective across the cultures will be an important ingredient, as will be podium discussions, guest lectures, excursions, and all kinds of visualizations, from digital walk-throughs to practical design exercises.

Pre-requisite: None

### HIST7754 BUDDHIST SCULPTURES AND PAINTINGS

This course will offer interpretation of foundational Buddhist scriptures and paintings in their historical, literary, and philosophical contexts to trace the development of Indian Buddhism as well as its process of cultural accommodations in East Asia. Pre-requisite: None

#### HIST7755 U.S. DIPLOMATIC HISTORY SINCE 1900

This course is to study U.S. diplomatic history for the past 100 years in general and to delve into a number of major or controversial issues in international relations in particular, including the issues of imperialism and nationalism, interventionism and non-interventionism, war and peace negotiation, politics of power and new international forces, globalization and terrorism, etc. It will examine the American perceptions of world issues and the evolution of the American strategic designs for national and international security within the global context as well as its impact on the world. It will also look at the influences of ideological, economical, and international settings and elements as well as domestic politics on the foreign policy makings of the US. The course is quite demanding since it will have quiz every week and requires your active participation in class discussion.

Pre-requisite: None

#### HIST7756 DIASPORAS IN SOUTH OF CHINA

This course examines the West-East interactions through tracing the historical activities and influences of Western Diasporas who came to South of China, including Macao and Hong Kong, to see how they dealt with migration, ethnicity, displacement, identity, mobility, community development, and cultural and mental challenges, as well as how they impacted the region and their homelands.

Pre-requisite: None

#### HIST7757 LATE IMPERIAL CHINA

This course covers the Ming and Qing Dynasties, roughly the fifteenth through nineteenth centuries. We will focus on the interplay between inner Asian "barbarians" and the Chinese, as well as on the economic and political flourishing of the 18th century before turning to the turmoil of the Opium War and Taiping Rebellion eras between 1839 and 1865. We will also examine the difficulties that China faced in reform and modernization in the face of Western and Japanese imperialism at the end of the 19th century. We end with the Boxer Uprising and 1911 Revolution, which brought an end to China's last imperial dynasty.

Pre-requisite: Three Chinese History courses or permission of instructor

#### HIST7758 PIRATES IN WORLD HISTORY

This course will explore the myths and realities of piracy across the globe and throughout history. After first looking at a number of myths about pirates from movies, novels, and comics, we will then examine the nature and varying definitions of piracy, seeking to differentiate piracy from privateering and other forms of maritime violence. We will also discuss lifestyles and gender issues as they relate to pirates, as well as the impact of piracy on the economy and on state-building. Other themes include the comparison and contrast of piracy in different regional and temporal contexts.

Pre-requisite: None

#### HIST7759 CULTURAL HISTORY OF MACAO FROM THE EARLY REPUBLIC OF CHINA

This course will study cultural history of Macao within its nexus with mainland China that went through an enormous political and social transformation since the 1911 Revolution. It will explore certain cultural phenomenon of Macao in depth with a focus on the way that Macao tried to maintain its identity in response to the external impact. Students shall seek the cultural implications of Macao's historical development and the interactive movement between the tradition and the new, the foreign and the Macanese, as well as the cultural presentation and rebirth of a modern Macao.

Pre-requisite: None

#### HIST7762 LAW AND SOCIETY IN LATE IMPERIAL CHINA

This course is a survey of Chinese legal history that focuses on late imperial law and society in the Ming and Qing dynasties. The course will deal with the development of the Chinese legal tradition in the context of Confucian, Legalist and Taoist philosophy. Emphasis will be on the "Confucianization" of law. The Confucian legal tradition is at the core of the legal cultures not

only of China, but also of Japan, Korea, and much of Southeast Asia. In this course we will examine the ways in which a legal system creates and reflects a society's structures and values in a mutually interactive process. Readings are drawn from Chinese codes, cases, and "detective novels."

Pre-requisite: None

## HIST7763 SOCIAL AND CULTURAL HISTORY OF SOUTH CHINA

This course closely examines the social and cultural history of South China from ancient times to the 20th century, with an emphasis on Guangdong, Fujian, and Taiwan during the 16th through 19th centuries. Topics include class formation and changes over the past millennia; Confucianization of South China; demographic changes; village and lineage; growth of commercial and marketing networks; gender relations; bandits, pirates, and secret societies; popular movements, riots, and rebellions; and the impact of modern reforms on local society and culture.

Pre-requisite: Three Chinese History courses or permission of instructor

#### HIST7764 INDIAN, CHINESE AND JAPANESE RELIGIONS

This course will introduce students to the religious concepts and classic texts of Confucianism, Taoism, Buddhism, and Shinto in China and Japan as well as their relation to society and politics in history, including role models and paradigms for self-transformation; alchemy and meditation. Pre-requisite: History of East Asia, History of Modern South East Asia, or permission of instructor

#### HIST7765 BUDDHIST ART: THEORY AND HISTORY

A detailed presentation of Buddhist theories and practice methodologies that resulted in the various schools of Buddhist art.

Pre-requisite: Art History of Ancient China, Art History of Modern China, Chinese Painting and Calligraphy or permission of instructor

#### HIST7766 ASIAN CULTURE

This is an upper level course on the selected topics related to the cultural features and developments of ancient Asia from the Classical period to early modern times. It will challenge students' established mindset by introducing them to the complexities of various teachings of Hinduism, Buddhism, Confucianism, Taoism, and Shinto, and exposing them to the "alien" values and cultures of the Asian world as reflected in its religions, literature, films, and arts. The course will examine the main characteristics of selected Chinese and Japanese paintings and arts as well as the religious influences on them. It will help students appreciate the nuance of Asian literature and arts within a historical, social and cultural context, and to trace the intertwined flux of religious thoughts, individual sentiments, and artistic expressions.

Pre-requisite: Permission of instructor

#### HIST7767 FAMILY AND GENDER IN ASIAN HISTORY

This course will provide an overview of continuities and discontinuities of the family pattern and the gender role in Asian nations, mainly China and Japan, from the pre-modern time to the present, especially during the periods of great social transformation. It will, through analyzing historical events and personal and family stories as displayed in scholarly and fictional writings and films, trace the feminist movements and major developments of gender consciousness and relationships and the family structure in Asian history. It will fully explore the way in which class, society, and history create different life possibilities for women and in turn, how the changing gender relations and family pattern affected society, history, and individuals.

Pre-requisite: Modern Chinese History, Modern Japanese History, History of East Asia or permission of instructor

#### HIST7768 EAST-WEST INTERACTIONS AND EXCHANGES

This course examines the complex nature of the relationships and encounters between the imaginary and the real 'East' and 'West', in the present and recent past. It explores the interactions among cultural, social, economic and religious aspects of international affairs,

particularly the changes at the cultural and religious levels which have subtly altered the international relationships of the East-West. It will also re-examine the concept of interactions and exchanges both within and beyond traditional theoretical mappings such as post colonialism and post-modernism. Its focus is primarily upon the interactions between 'East Asia' and 'the West' over the past three hundred years and the art and religious world with awareness of cultural fluidity.

Pre-requisite: Permission of instructor

### HIST7769 SINO-INDIAN-SOUTHEAST ASIAN INTERACTIONS IN EARLY MODERN ASIA

This is an in-depth study of the political, economic, social, interactions between China, Southeast Asia, and India from the 16th century to the present. The course is purposely intended to bring out the pan-Asian encounters, which means Europeans and other westerners will be given only marginal coverage in the discussions. We will recount the many Chinese migrations to Southeast Asia, the trade and tribute interactions between the regions and the social, cultural, political and criminal exchanges and encounters that resulted. We will also try to retrace different ethnic groups as they migrate and interact between these regions inside Asia. Special attention will be paid to the cultural diversities of ethnic groups and reasons behind their migrations, exchanges and encounters.

Pre-requisite: Permission of instructor

#### HIST7771 SECRET SOCIETIES AND POPULAR MOVEMENTS IN MODERN CHINA

This course examines the social and cultural history of secret societies and popular movements in modern China, roughly from 1750 to 1949. The topics we will discuss include banditry, piracy, sworn brotherhoods, secret societies, and religious sects. Students are required to do weekly readings and make oral presentations, as well as write one book report, an annotated bibliography, and a research paper.

Pre-requisite: None

#### HIST7772 HISTORIOGRAPHY OF SOUTHEAST ASIA

This course is a graduate seminar on Southeast Asian history. Its aim is to survey a selection of major works published on selected topics in Southeast Asian history since approximately 1960, and in doing so, to assess the changing structure of the field. Topics to be examined will include but not limited to religion and belief systems, trade, the nature of polities, family and gender, and colonialism and post-colonialism.

Pre-requisite: None

#### HIST7773 STUDIES IN IMPERIALISM I

This course provides students with an understanding of key developments that contributed to the rise of imperialism among European nations during the long nineteenth century. Students will be introduced to some of the most important thinkers and concepts in the writing of imperial history in order to explain how European imperialism stimulated economic growth and modernization in some colonies but severely hindered development in others. Throughout the course students will be encouraged to examine the work of contemporary theorists and scholars of Empire such as J.R. Seeley, J.A. Hobson and John Stuart Mill and how their writings have been interpreted and critiqued by modern-day imperial historians such as John Gallagher and Ronald Robinson, P.J. Cain and Anthony Hopkins and C.A. Bayly.

#### HIST7774 STUDIES IN IMPERIALISM II

This course provides students with an introduction to some the principal challenges and difficulties faced by European imperial powers during the 20th century. Students will have the opportunity to examine the impact of the First and Second World War as well as the rise of protest/nationalist movements on imperial structures in considering the factors leading to decolonization later in the century. In addition, students will be introduced to some of most significant twentieth-century writers on colonialism, anti-colonialism and postcolonial theory, including the works of Franz Fanon, Edward Said and Gayatri Charakravorty Spivak. Through

an engagement with historical and literary texts, students will consider the degree to which many imperial structures survived formal processes of decolonization and continue to shape the world in which we live in today.

Pre-requisite: None

## HIST7775 WESTERN DIASPORAS IN ASIA

This course examines the West-East interactions through tracing the historical activities and phenomena of Western Diasporas who came to Asia, to see how they dealt with migration, ethnicity, displacement, identity, mobility, community development, and cultural and mental challenges, as well as how they impacted the region and their homelands. Pre-requisite: Permission of instructor

#### HIST7776 HISTORY AND ANTHROPOLOGY

Critical inquiry into historical representations of the "other" and ways in which historians have used notions of culture and other anthropological concepts to write and think about history. Students will learn about the uses and values of oral and ethnographic history through lectures, discussions, and fieldwork in Macao and China.

Pre-requisite: Permission of instructor

#### HIST7780 ADVANCED HISTORICAL THEORY AND PRACTICE

This course is required for all incoming M.A. students in History. It seeks to introduce students to the varieties of historical theories and research methods. Students will investigate theoretical models and intellectual traditions, which will be presented in terms of a series of debates between competing visions and interpretive perspectives. Guest speakers from within and without the University of Macao will be an important ongoing part of the course. Students will write several papers on scholarship, theoretical models, historiographical conventions, and so on. This course is designed to prepare graduate students for the more advanced Reading and Writing Seminars.

Pre-requisite: Historical Theory and Practice or the equivalent

#### HIST7781 ADVANCED READING SEMINAR

This is an advanced graduate-level course on a specific topic in the areas of Chinese, Asian, Western, or Comparative/World History. The course involves an in-depth analysis of primary sources and an evaluation of the secondary literature on the topic of the seminar. The focus of this course will be on the development of a bibliography and the reading and discussion of the secondary literature on specific assigned topics.

Pre-requisite: Advanced Historical Theory and Practice or permission of the instructor

#### HIST7782 ADVANCED WRITING SEMINAR

This is an advanced graduate-level course that follows-up on the Reading Seminar. It will focus on a specific topic in Chinese, Asian, Western, or Comparative/World History. Students will have to write an extensive research paper based on primary sources. As a Pre-requisite students will have to have taken the corresponding Reading Seminar

Pre-requisite: Advanced Reading Seminar or permission of the instructor

#### HIST7783 SPECIAL TOPICAL COURSES IN HISTORY I

There are special topical courses taught by visiting scholars or experimentally by FSS faculty. Pre-requisite: None

#### HIST7784 SPECIAL TOPICAL COURSES IN HISTORY II

There are special topical courses taught by visiting scholars or experimentally by FSS faculty. Pre-requisite: None

#### HIST7996 APPLIED THESIS

The course constitutes the last stage of the MA program. With the guide of supervisors, students are expected to choose an under-research topic, collect and critically analyze all available

sources, and raise some improved arguments based on a solid study. Compared with MA academic thesis, MA applied thesis is smaller in terms of scope and less theoretically involved. Pre-requisite: None

#### HIST7999 ACADEMIC THESIS

The course constitutes the last stage of the MA program. With the guide of supervisors, students are expected to choose an under-research topic, collect and critically analyze all available sources, and raise some seminal arguments based on an empirical study. Pre-requisite: None

## HIST8802 ADVANCED SPECIAL TOPICS IN HISTORY

The course seeks to involve doctoral students of history with a range of historical topics. Students will read important works done by influential historians, and engage in scholarly debates pertaining relevant topics in Chinese history. Students will also engage in scholarship of academic writing in history and in preparation of their dissertation writing. Pre-requisite: None

#### HIST8803 INDEPENDENT STUDY ON ACADEMIC WRITING IN HISTORY

The course seeks to involve doctoral students of history with a range of historical topics. Students will read important works done by influential historians, and engage in scholarly debates pertaining relevant topics in Chinese history. Students will also engage in scholarship of academic writing in history and in preparation of their dissertation writing. Pre-requisite: None

#### HIST8804 INDEPENDENT STUDY ON HISTORIOGRAPHY

This course provides advanced grounding in the methods and concerns of the modern historical discipline. Students are exposed to some of the major intellectual trends and traditions that have informed how the historians of today pursue their craft. The immediate purpose of this training is to help students begin to formulate and research their dissertation topic. Pre-requisite: None

#### HIST8805 INDEPENDENT STUDY ON HISTORY

This course allows a PhD student to work on a topic of special interest, supervised by a professor in the department. The topic should be chosen in consultation with a particular professor and with the aim of providing necessary background for researching and writing the dissertation. Pre-requisite: None

#### HIST8861 ADVANCED READING/HISTORIOGRAPHY SEMINAR

This is a joint course for PhD students, which allows MA students to enroll in as well but they will get substantially less course assignments and subject to much lower academic requirement in terms of volumes of readings and length and depth of their writing and analysis. All PhD students will have to take qualifying exam in the area this course covered in addition to passing this course. In this course, students will learn about the historiography of the traditional and modern West, mainly Western historians' approaches to and methods in studying the human past, so that they would be equipped with the updated historiography and enabled to find a good topic and appropriate research method for their master and doctoral thesis, while well prepared for the sequent course for advanced writing in the next semester. Another objective of this course is to let students get familiar with the first-class research and the existing literature in the field of modern Chinese history, to see how the approach of a historian could fundamentally affect his/her research and writing.

Pre-requisite: None

#### HIST8999 DOCTORAL THESIS

The course constitutes the last stage of the Doctoral program. With the guide of supervisors, students are expected to define an under-research topic, collect and problematize all available sources to formalize a research question, design a solid empirical study and make a theoretically

oriented conclusion, or provide seminal or essentially revised interpretations. A doctoral thesis is expected to make a significant contribution to the selected (sub) field, theme, or topic. Pre-requisite: None

#### JAPN1000 PRACTICAL JAPANESE I

This course aims to develop Japanese language ability in daily conversation, reading and writing. At the same time, it also introduces Japanese Studies, including basic cultural ideas that are needed in the acquisition of the language. At the end of this course, students acquire very basic conversation skills of Japanese.

Co-requisite: JAPN1001 or permission of instructor

#### JAPN1001 JAPANESE GRAMMAR I

This course is oriented to practical Japanese grammar. Students will learn basic sentence patterns and grammar that serve as the foundation for learning the language. Students will put this knowledge into practical use in situations from actual Japanese daily life. At the end of this course, students can recognize basic Japanese grammar.

Co-requisite: JAPN1000

#### JAPN1002 PRACTICAL JAPANESE II

This course is a continuation of Practical Japanese I and also aims at the development of Japanese language ability in daily conversation, reading and writing. At the same time, it also introduces Japanese Studies, including basic cultural ideas that are needed in the acquisition of the language. At the end of this course, students acquire basic conversation skills of Japanese Pre-requisite: JAPN1000 and JAPN1001 or with permission of instructor and confirmation of proficiency by test

#### JAPN1003 JAPANESE GRAMMAR II

This course is a continuation of Japanese Grammar I. This course is also oriented to practical Japanese grammar. Students will learn basic sentence patterns and grammar that serve as the foundation for learning the language. Students will put this knowledge into practical use in situations from actual Japanese daily life. At the end of this course, students can recognize basic Japanese grammar.

Pre-requisite: JAPN1001 or permission of instructor

#### JAPN1004 ELEMENTARY JAPANESE I (ELECTIVE COURSE)

This course will cover very basic Japanese language. This course also includes basic reading and writing. At the end of this course, students can conduct very basic daily conversation in Japanese.

Pre-requisite: None

#### JAPN1005 ELEMENTARY JAPANESE II (ELECTIVE COURSE)

This course is the continuation of Elementary Japanese I and includes basic reading and writing. At the end of this course, Students can function in daily conversations at the basic level Pre-requisite: JAPN1004 or permission of instructor

#### JAPN2000 PRACTICAL JAPANESE III

This course provides training in the comprehension and the use of conversational Japanese. The courses emphasize oral communication skills. Students will be provided different tasks focused on practical daily conversational communication in order to help build confidence in speaking Japanese. At the end of this course, students can converse at the intermediate level in spoken Japanese.

Pre-requisite: JAPN1002 and JAPN1003 or permission of instructor

#### JAPN2001 INTEGRATED JAPANESE I

This course is oriented to intermediate practical Japanese grammar. Students will learn intermediate level sentence patterns and grammar that serve as the foundation for learning the

language. Students will put this knowledge into practical use in situations from actual Japanese daily life. At the end of this course, students can recognize and use intermediate Japanese grammar.

Pre-requisite: JAPN1003 or permission of instructor

#### JAPN2002 JAPANESE READING I

This is an intermediate course focused on reading skills. Reading texts will focus on major elements of contemporary Japanese life. Various types of texts will be used in order to build a solid foundation of vocabulary and "kanji". At the end of this course, students can read intermediate Japanese reading material.

Pre-requisite: JAPN1003 or with permission of instructor and confirmation of proficiency by test

#### JAPN2003 JAPANESE COMPOSITION I

This course aims to provide instruction and intensive practice in Japanese writing skills. Students will be taught to write compositions and reports, and then evaluate and revise their work. At the end of this course, students can compose intermediate level Japanese sentences.

Pre-requisite: JAPN1003 or with permission of instructor and confirmation of proficiency by test

#### JAPN2004 PRACTICAL JAPANESE IV

This is the continuation of Practical Japanese III and provides training in the comprehension and the expression of conversational Japanese. The courses emphasize oral communication skills. Students will be provided different tasks focused on practical daily conversational communication in order to help build confidence in speaking Japanese. At the end of this course, students can conduct Japanese conversation at the intermediate level.

Pre-requisite: JAPN2000 or permission of instructor

#### JAPN2005 INTEGRATED JAPANESE II

This is the continuation of Japanese Grammar III. This course is oriented to intermediate practical Japanese grammar. Students will learn intermediate level sentence patterns and grammar that serve as the foundation for learning the language. Students will put this knowledge into practical use in situations from actual Japanese daily life. At the end of this course, students can recognize intermediate Japanese grammar.

Pre-requisite: JAPN2001 or permission of instructor

#### JAPN2006 JAPANESE READING II

This course is a continuation of Japanese Reading I. This intermediate course focuses on reading skills. Reading texts will focus on major elements of contemporary Japanese life. Various types of texts will be used in order to build a solid foundation of vocabulary and "kanji". At the end of semester, students can read intermediate Japanese reading material. Pre-requisite: JAPN2002 or permission of instructor

#### JAPN2007 JAPANESE COMPOSITION II

This course is a continuation of Japanese Composition I and also aims to provide instruction and intensive practice in Japanese writing skills. Students will be taught to write compositions and reports, and then evaluate and revise their work. At the end of this course, students can compose intermediate level Japanese sentences.

Pre-requisite: JAPN2003 or permission of instructor

## JAPN2008 ELEMENTARY JAPANESE III (ELECTIVE COURSE)

This course is a continuation of Elementary Japanese II. It also includes reading and writing. At the end of this course, students will have a basic knowledge of Japanese and will be able to conduct daily conversation at the basic level with more advanced vocabulary and syntax. Pre-requisite: JAPN1005 or permission of instructor

#### JAPN2009 ELEMENTARY JAPANESE IV (ELECTIVE COURSE)

This course is a continuation of Elementary Japanese III. It includes reading and writing skills.

At the end of this course, student can converse basic to intermediate daily conversation in Japanese.

Pre-requisite: JAPN2008 or permission of instructor

#### JAPN3000 BUSINESS JAPANESE I

This course covers intermediate business Japanese. Students learn how to conduct business in Japanese. This course also introduces specialized Japanese business language and conduct. At the end of this course, student can use business conversation at the intermediate level. Pre-requisite: JAPN2004 or permission of instructor

## JAPN3002 JAPANESE RESEARCH METHOD I

Basic research methodology is introduced and Japanese research papers are analyzed. At the end of the course, students will be prepared to conduct and then write a research paper in Japanese.

Pre-requisite: JAPN2004 or permission of instructor

#### JAPN3003 SELECTED READINGS IN MODERN JAPANESE I

These courses are designed to expose students to contemporary social topics in Japan through electronic and print media. Students will be updated with the ever-changing issues in the Japanese society, such as new words in the language, the change of Japanese political structure and society.

Pre-requisite: JAPN2006 or permission of instructor

#### JAPN3004 BUSINESS JAPANESE II

It is a continuation course of JPNB310 Business Japanese I to advance level. Pre-requisite: JAPN3000 or permission of instructor

#### JAPN3005 JAPANESE RESEARCH METHOD II

This is a continuation of Research Method I. Basic research methodology is introduced and Japanese research papers are analyzed. At the end of the course students will write a short research paper in Japanese.

Pre-requisite: JAPN3002 or permission of instructor

#### JAPN3006 SELECTED READINGS IN MODERN JAPANESE II

This course is the continuation of Selected Readings in Modern Japanese I and is designed to expose students to contemporary social topics in Japan through electronic and print media. Students will be updated with the ever-changing issues in the Japanese society, such as new words in the language, the change of Japanese political structure and society. Pre-requisite: JAPN3003 or permission of instructor

#### JAPN3007 PRACTICAL JAPANESE V

This course focuses on the listening comprehension and the use of conversational Japanese. The course emphasizes oral communication skills. Students will be provided different tasks focused on practical daily communication in order to help build confidence in speaking Japanese. Pre-requisite: JAPN2004 or permission of instructor

#### JAPN3008 PRACTICAL JAPANESE VI

This course is the continuation of Practical Japanese V and focuses on the listening comprehension and the use of conversational Japanese. The course emphasizes oral communication skills. Students will be provided different tasks focused on practical daily communication in order to help build confidence in speaking Japanese. Pre-requisite: JAPN3007 or permission of instructor

#### JAPN3009 TRANSLATION AND INTERPRETATION I

This course is the beginning course in translation and interpretation. The course introduces basic concepts and skills required to translate and interpret between Japanese and Chinese, and

Chinese and Japanese.

Pre-requisite: JAPN2006 or permission of instructor

#### JAPN3010 TRANSLATION AND INTERPRETATION II

This course is the continuation of Translation and Interpretation I. The course introduces advanced concepts and skills required to translate and interpret between Japanese and Chinese, and Chinese and Japanese.

Pre-requisite: JAPN3009 or permission of instructor

#### JAPN3011/3012/3013/3014 SPECIAL TOPICS ON JAPAN I/II/III/IV

Special courses on various topics to be developed by current faculty and visiting scholars. The course is designed to cover one topic from the areas concerning Japan, including Japanese language, literature, history, culture, philosophy, behavior, communication, journalism, economics, legal systems, political sciences, etc.

Pre-requisite: Permission of instructor

#### **INTERMEDIATE JAPANESE I (ELECTIVE COURSE) JAPN3015**

This course is the intermediate Japanese language course. It covers reading and writing skills and also provides cultural information about Japan. At the end of this course, students can conduct daily conversation at the intermediate level.

Pre-requisite: JAPN2009 or permission of instructor

#### JAPN3016 INTERMEDIATE JAPANESE II (ELECTIVE COURSE)

This course is the continuation of Intermediate Japanese I. It also covers reading and writing skills and provides cultural information about Japan. At the end of this course, students can conduct daily conversation at intermediate level with more advanced vocabulary and syntax. Pre-requisite: JAPN3015 or permission of instructor

#### **JAPN4002 BUSINESS IN JAPAN I**

This course introduces Japanese business management concepts and procedures. Students will learn general concepts of Japanese business management and how they differ from western ideas of business management. At the end of this course students are familiar with basic Japanese ideas of Japanese management.

Pre-requisite: JAPN3004 or permission of instructor

#### **JAPN4003 BUSINESS IN JAPAN II**

This course is the continuation of Business in Japanese I. This course introduces Japanese business management concepts and procedures. Students will learn general concepts of Japanese business management and how they differ from western ideas of business management. At the end of this course, students are familiar with basic Japanese ideas of Japanese management.

Pre-requisite: JAPN4002 or permission of instructor

#### **JAPN4004** SELECTED READINGS IN MODERN JAPANESE III

This course is the continuation of Selected Readings in Modern Japanese II and is designed to expose students to contemporary social topics in Japan through electronic and print media. Students will be updated with the ever-changing issues in the Japanese society, such as new words in the language, the change of Japanese political structure and society. Pre-requisite: JAPN3006 or permission of instructor

#### **JAPN4005** SELECTED READINGS IN MODERN JAPANESE IV

This course is the continuation of Selected Readings in Modern Japanese III and is designed to expose students to contemporary social topics in Japan through electronic and print media. Students will be updated with the ever-changing issues in the Japanese society, such as new words in the language, the change of Japanese political structure and society.

Pre-requisite: JAPN4004 or permission of instructor

#### **JAPN4006** MODERN JAPAN

This course introduces various aspects of modern Japan including Japanese society, business, politics, and popular culture. At the end of this course students will be familiar with some of the major social, political, popular cultural themes of modern Japan.

Pre-requisite: JAPN3006 or permission of instructor

#### **JAPN4010** ART OF JAPAN

This course introduces traditional and modern visual and performing arts in Japan. An overview of the development of visual and performing arts in Japan will be introduced. At the end of the course, students will be able to recognize various historical traditions in Japanese art and modern Japanese art.

Pre-requisite: JAPN3006 or permission of instructor

#### JAPN4015 JAPANESE LITERATURE I

This course introduces students to selected modern Japanese literature. Early to late 20th Century short stories, poetry and novels will be read and discussed in the course. At the end of the course, students will be familiar with selected Japanese writers.

Pre-requisite: JAPN3006 or permission of instructor

#### **JAPN4016 JAPANESE LITERATURE II**

This is a continuation of Japanese Literature I. Selected modern Japanese literature will be introduced with an emphasis on recent Japanese literature. At the end of the course, students will have read several current Japanese writers and be familiar with current themes in Japanese literature.

Pre-requisite: JAPN4015 or permission of instructor

#### JAPN4018/4019/4020/4021/4022/4023 SPECIAL TOPICS IN HUMANITIES I/II/III/IV/V/VI

Special courses on various topics to be developed by current faculty and visiting scholars. The course is designed to cover one topic from the areas of humanities taught in Japanese language, including literature, language studies and methodology, philosophy, behavior science, communication, journalism, history, culture, law and political economy etc.

Pre-requisite: Permission of instructor

#### JAPN4024/4025/4026/4027/4028/4029 SPECIAL TOPICS IN SOCIAL SCIENCES I/II/III/IV/V/VI

Special courses on various topics to be developed by current faculty and visiting scholars. The course is designed to cover one topic from the areas of social sciences taught in Japanese language, such as history, politics and law, education, journalism, business administration, international relation, sociology, psychology, economics and management, political sciences etc. Pre-requisite: Permission of instructor

#### **ADVANCED PRACTICAL JAPANESE I JAPN4030**

This course emphasizes oral and written communication skills. Students will be provided different tasks focused on practical daily communication in order to help build confidence in speaking and writing Japanese.

Pre- requisite: None

#### **JAPN4031** ADVANCED PRACTICAL JAPANESE II

This course is the continuation of Advanced Practical Japanese I and emphasizes oral and written communication skills. Students will be provided different tasks focused on practical daily communication in order to help build confidence in speaking and writing Japanese. Pre-requisite: None

#### JAPANESE SOCIETY AND CULTURE I **JAPN4032**

This course is to expose students to various areas of Japanese society. The content will be updated with the ever-changing issues in Japanese society and culture, such as new words in

the language, new fashion, social events in daily life, the change of Japanese political structure, etc.

Pre-requisite: None

## JAPN4033 JAPANESE SOCIETY AND CULTURE II

This course is the continuation of Japan Society and Culture I and is to expose students to various areas of Japanese society. The content will be updated with the ever-changing issues in Japanese society and culture, such as new words in the language, new fashion, social events in daily life, the change of Japanese political structure, etc. Pre-requisite: None

## PHIL1000 INTRODUCTION TO WESTERN PHILOSOPHY

This course attempts to provide an encompassing introduction to philosophy by looking at some of the fundamental problems philosophers discuss in a number of different areas of Western philosophy, such as general metaphysics, ontology, epistemology, philosophy of mind, philosophy of religion, and ethics. The classic materials are selected to provide a basis for understanding some of the central debates within each of these fields. Pre-requisite: None

## PHIL1001 INTRODUCTION TO ASIAN PHILOSOPHY

Asia is an area not only rich in culture, but serves as the cradle of various major civilizations of the world too. It takes thousands of years for them to shape up as we see it today. A study of Asian philosophy will reveal to us this crystallization process and will also inspire on us the way to shape our future. The course does not focus only on philosophy. Their associated origins, i.e., the corresponding beliefs, religious traditions, and the social functions of each tradition will also be discussed. It is interesting to learn through this course the differences in objectives and methodologies between different traditions, and how they interact or influence with one another, and in the end, the society. For better discussion, the course shall restrict the discussion on four major traditions: Shinto, Buddhism, Taoism, and Hinduism, since these are dominating philosophy in Asia for over thousands of years.

## Fie-requisite. None

## PHIL1002 CRITICAL THINKING

This course introduces students to logic. Topics include the concept of critical thinking, the nature and modes of reasoning, the structure of argument, premises and conclusions, validity, inference, fallacy, argumentation, deductive and inductive reasoning, and causal arguments. Prerequisite: None

## PHIL1003 ANCIENT AND MEDIEVAL WESTERN PHILOSOPHY

The course will focus on the major themes of Ancient Greek philosophy and on major philosophers of Medieval Christianity. The question with which the Ancient Greek philosophy starts—What does the universe consist of?—will be discussed in the context of pre-Socratic philosophy as well as Plato's, Aristotle's and Plotinus' as well as Epicurean thought. The question—What can we know?—will be discussed in the context of Plato's and Plotinus' theory of ideas and Aristotle's and Stoics' epistemological doctrines. The question—What is good (and evil)?—will be discussed in the context of Plato's, Aristotle, Stoic and Epicurean thought. The influence of Ancient Greek philosophy will be traced in the teaching of the two great Christian thinkers – St. Augustine and St. Thomas Aquinas. The difference in their approach to philosophy to that of Ancient Greek thinkers will be a separate topic of discussion.

## PHIL1004 MODERN WESTERN PHILOSOPHY

Modern philosophy in Europe developed under the influence of the original masterpieces of Ancient Greek Philosophy (in particular, Plato) and of discoveries in natural sciences and mathematics. The topics to be discussed in this are: 1.What kind of substances are there in the world and how do they interact? 2. What is the scope and subject of human knowledge? 3.

What is the nature of good conduct? 4. How to achieve a good and efficient government? The first and second question will be discussed in the context of works of Descartes, Locke, Berkley, Hume, Kant and Hegel. The third question will be discussed in the context of the teachings of Hume, Kant, Mill and Hegel. The fourth question is the subject of discussion of Machiavelli, Hobbes, Locke, Kant and Hegel.

Pre-requisite: None

#### PHIL1005 CONTEMPORARY WESTERN PHILOSOPHY

In the twentieth century, in Europe and the USA philosophy developed in two separate directions. The analytic tradition was developed in the UK and USA primarily as a response to the 19th century idealism and to the development of mathematical logic. In this tradition, a systematic analysis of concepts, particularly in epistemology and semantics, dominates over any other approach to philosophy. From this tradition, the works of Russell, Wittgenstein, Austin as well the more recent works of Quine. Kripke and Davidson will be discussed. The non-analytic tradition built on the teachings of Kant and Hegel focuses on the questions of being and the possibility of transcendental knowledge. From this tradition, the works of Heidegger, Sartre, Lukacs and more recent works of Foucault and Habermas will be discussed. Pre-requisite: None

#### PHIL1006 THE HISTORY OF CHINESE PHILOSOPHY

Philosophy provides a framework that teaches people how to think logically and critically. Through this framework, philosophy helps people to look for answers for questions like. "What is the origin and meaning of life?" and "How to build a happy world?" Even Chinese philosophy and Western philosophy share these common concerns. Chinese philosophy is still very different from the west, particularly in the way that it structures the cosmos, and the relation of the human and the universe. The course shall give an introduction to Chinese philosophy, alongside with its history of development. The historical approach to philosophical studies allows students to understand how different schools of philosophy in China are solidified out of the vast, vague, and sometimes appearing contradicting assumptions and hypotheses. Pre-requisite: None

#### **PHIL1007** BUDDHIST PHILOSOPHY

A study of Buddhist views of the human predicament and its solution, covering different teachings and forms of practice from India, Southeast Asia, Tibet, China, and Japan. Pre-requisite: None

#### PHIL1008 **COMPARATIVE ETHICS**

What is the good life and how do human beings achieve it? What makes us distinct from other species and how do we best relate to our environment? How do our relationships to our own death and the death of others influence our conceptions of living well? This course provides a comparative introduction to Asian and Western responses to these questions. By interpreting and comparing conceptions of the self, action, and the good in Buddhism, Confucianism, and Daoism, on the one, and selected Western philosophers on the other hand, a nuanced account of the morally good and happy life will be developed.

Pre-requisite: None

#### PHIL1009 HUMAN RIGHTS AND CULTURAL VALUES

Does the claim to the universality of human rights offer a groundwork for cross-cultural human values or is it itself an integral part of "global capitalism" or "Western hegemony"? What is the place of human rights in a society shaped by a non-Western frame of mind, for instance, by Confucian principles? What has been the political impact of recent human rights campaigns on non-Western societies? In this course we will seek to address these timely questions by focusing on the contemporary clash of Western notions of human rights with the cultural orientations of Asian societies, especially China. Substantial issues to be covered throughout the course include: universalism and multiculturalism, justice and virtue, the core/periphery distinction and globalization, cultural identity and class differentiation, religion and modes of modernity.

#### Pre-requisite: None

#### PHIL1010 PHILOSOPHY OF RELIGION

This course examines the main issues and themes in the relations of philosophy and religion from a comparative perspective. Topics include the concept of 'religion', the relation between religion and philosophy, the nature of the sacred, the reality of God, belief and rationality, the problem of evil, theories of theodicy, afterlife, and the plurality of religious traditions. Particular attention will be given to the implications of God's existence or non-existence for moral judgment and action.

Pre-requisite: None

#### PHIL1011 PHILOSOPHY OF MIND

This course considers theories in contemporary philosophy of mind, which is concerned with fundamental questions about the nature of the mind, and its place in the natural and social worlds. It explores various theories of the mind, the relationship between mind and body, the self, the conception of consciousness, the human vs. non-human mind, introspection, and the knowledge of other minds.

Pre-requisite: None

#### PHIL1012 POLITICAL PHILOSOPHY

This course engages central topics in political philosophy including the nature of justice, forms of governance, the public-private distinction as well as conceptions of political power and legitimacy. These topics will be addressed by studying seminal texts written by classical and contemporary political philosophers. The goal is to better understand the ways different political philosophies have given expression to various forms of political institutions and shape the lives of those people affected by them.

Pre-requisite: None

## PHIL1014 SPECIAL TOPICS IN PHILOSOPHY

Special courses on various philosophy topics Pre-requisite: None

## PHIL1015 DAOIST PHILOSOPHY

This course explores the ancient Chinese philosophy of Daoism. It focuses on the texts Laozi (Lao Tzu) and Zhuangzi (Chuang Tzu) in order to arrive at a general understanding of crucial issues, concepts, and notions of "classical" Daoism. The course will present a general overview of the history of philosophical Daoism and focus on analyses of core Daoist images and allegories. On the basis of these images and allegories, major issues of Daoist philosophy will be discussed. The course will also include comparative outlooks to contemporary Chinese and Western philosophy.

Pre-requisite: None

#### PHIL1016 MASS MEDIA PHILOSOPHY

This course introduces several theories on the Mass Media. The media theoreticians W. Benjamin, M. McLuhan, and N. Chomsky are introduced. The debate on the socio-political role of TV between H.-M. Enzensberger and his "postmodernist" critic J. Baudrillard will be discussed. The second half of the course will focus on N. Luhmann's description of the "Reality of the Mass Media".

Pre-requisite: None

#### PHIL1017 PHILOSOPHY OF LANGUAGE

This course is an introduction to contemporary philosophy of language. Philosophy of language is concerned with many topics, of syntactic, semantic, and pragmatic nature, such as: meaning, truth, reference, epistemology of language understanding and language learning, ontology of languages, mental and psychological basis of communication, indeterminacy of translation, speech acts, metaphors, indeterminacy of translation, and so on. The course will offer an

overview of these topics, with a special focus on their pragmatic features and on implicit communication.

## Pre-requisite: None

#### PHIL2000 CULTURAL VALUES AND GLOBAL JUSTICE

Does the claim to global justice offer a groundwork for transnational values or is it itself an integral part of "global capitalism" or "Western hegemony"? Is our moral vision a mere reflection of our cultural preferences and biases? If not, what may serve as the grounds on which the moral judgments of distinct civilizations can be rationally assessed, criticized or justified? In this course we will seek to address these timely questions by focusing on contemporary debates over globalization, global justice, and the "clash of civilizations." Pre-requisite: None

#### PHIL2001 CAPITALISM AND MORALITY

This course investigates the relationship between capitalism and morality. After tracing the religious roots of capitalism, central features such as the free exchange of products, private property, ideology, and alienation will be systematically elaborated. Different forms such as corporate, free markets, and casino capitalism will be distinguished and related to questions of legitimation, justice and the good life. During the second half of the course we will analyze the impact of global capitalism on culture and politics. Finally, we will pursue the question whether it is still possible to conceive of reasonable alternatives to capitalist modes of production. Pre-requisite: None

#### PHIL3000 PHILOSOPHY AND FILM

Since its emergence at the turn of the 20th century, film has made possible a new way of encountering the world. On the one hand, its ability to record, magnify, and reframe aspects of our world allows it to interrogate, narrate, and disclose the world – along with our modes of inhabiting it – in distinctive ways. On the other hand, being pledged to the plurality of individual lives in an intransigently material world, film holds out an irreducibly democratic promise. Understanding these large epistemic, aesthetic, and socio-political claims of the medium is the object of a philosophical analysis of film.

Pre-requisite: None

#### PHIL8004 SPECIAL TOPICS IN PHILOSOPHY AND RELIGION I

This is an advanced course for PhD students focusing on some specific topic of research depending on the interests and competence of the instructor. Contents may include such methodologies as critical theory, deconstructive hermeneutics, postcolonial theory, identity politics, comparative religions, philological versus philosophical textual analysis, or history of ideas.

Pre-requisite: None

#### PHIL8005 SPECIAL TOPICS IN PHILOSOPHY AND RELIGION II

This is an advanced course for PhD students focusing on some specific topic of research depending on the interests and competence of the instructor. Contents may include methodologies as critical theory, deconstructive hermeneutics, postcolonial theory, identity politics, comparative religions, philological versus philosophical textual analysis, or history of ideas.

Pre-requisite: None

#### PHIL8006 RESEARCH WRITING IN PHILOSOPHY AND RELIGIOUS STUDIES

This is an advanced course for PhD students focusing on the development of the students' critical understanding of primary and secondary source texts in Philosophy and Religious Studies, and, in particular, on enhancing the students' capacity to analyze and discuss these source texts in the form of academic writing. Selection of specific topics and texts depends on the research field and area of expertise of the instructor.

Pre-requisite: None

#### PORT1000 PORTUGUESE LANGUAGE I - INTRODUCTORY PORTUGUESE

Basic Portuguese. Principles of written and oral language. The comprehension and conversation through exercises in the class and language laboratory. The grammar fundamentals obtained through the use of simple pronunciation and reading materials. Pre-requisite: None

#### PORT1001 PORTUGUESE LANGUAGE II

Development of the programme and principles introduced in Portuguese Language I, aimed at applied Portuguese. Simple problems and written materials. Pre-requisite: None

#### PORT1002 ORAL COMPREHENSION AND PRODUCTION SKILLS I

A course designed for the development of appropriate and accurate pronunciation of the Portuguese sounds, involving their training and practice. Students will actively work on the recognition and production of oral texts through simulation of different communication contexts and other role play activities.

Pre-requisite: None

## PORT1003 WRITTEN COMPREHENSION AND PRODUCTION SKILLS I

Practical introduction to Portuguese concerning elements of all language skills and selection of cultural topics. The course will give particular interest to the use and comprehension of basic Portuguese structures and lexicon in context.

Pre-requisite: None

#### PORT1004 ORAL COMPREHENSION AND PRODUCTION SKILLS II

This course will reinforce and further develop the students skills in the recognition and production of the sounds of Portuguese learned during the first semester. Students will produce short dialogues on everyday topics, draft different communication situations and perform it in the class. It is expected that students may be able to discuss actuality themes, that they are familiar with, developing their vocabulary and a more accurate pronunciation. Pre-requisite: PORT1002

## PORT1005 WRITTEN COMPREHENSION AND PRODUCTION SKILLS II

A practical more advanced course involving the comprehension and use of basic structures and lexicon of Portuguese. Students work with exercises and activities involving the use of structures and lexicon in context.

Pre-requisite: PORT1003

## PORT1006 PORTUGUESE LANGUAGE AND CULTURE I

For learners to develop their communicative competences through the study of selected short videos and simple texts, as well as written and oral tasks, with the purpose of offering a view of contemporary life and culture in Portuguese-speaking countries. Pre-requisite: None

#### PORT1007 PORTUGUESE LANGUAGE AND CULTURE II

Further development their communicative competences through the study of selected short videos and texts, as well as written and oral tasks, with the purpose of offering a wider view of contemporary life and culture in Portuguese-speaking countries. Pre-requisite: PORT1006

#### PORT1008 ELEMENTARY SPANISH I

This is a basic course to introduce the students into the Spanish pronunciation, and to recognize the basic Spanish grammar and usage. Readings and conversations are in the "Present Tense". Pre-requisite: None

#### PORT1009 ELEMENTARY SPANISH II

To foster an interest to continue learning Spanish, allowing the students to express themselves and read and write present, past and future events. Pre- requisite: PORT1008

#### PORT1010 INTERMEDIATE SPANISH I

To continue to learn how to speak, understand, read and write idiomatic Spanish in a way the student can feel confident to use Spanish as an instrument of communication. Pre- requisite: PORT1009

#### PORT1011 INTERMEDIATE SPANISH II

This courses builds on PORT1010 extends the students' knowledge of the spoken and written language, as well as exposing them to a greater range of cultural materials. Pre- requisite: PORT1010

#### PORT1013 ADVANCED SPANISH FOR SPECIFIC PURPOSES I

This course aims to introduce students to the basic knowledge and study of specific selected topics and issues. The course will cover topics such as development and construction of Hispanic culture and civilization (history, geography, literature, art and other cultural manifestations), Spanish for specific purposes (job applications, resumes, interviews, business meetings, cross-cultural differences between Spanish speaking and Chinese business environments, commercial correspondence, Spanish for hotels and restaurants/hospitality, Spanish for law enforcement). Though a series of readings from magazines, newspapers, internet articles and audiovisual materials, students will be exposed to a new specialized business-oriented vocabulary which will help them to communicate effectively in their field and to practice new grammatical skills.

Pre-requisite: PORT1010

#### PORT1014 ADVANCED SPANISH FOR SPECIFIC PURPOSES II

This course is built on the subjects and skills covered in the previous course "Advanced Spanish for Specific Purposes I" but at a more advanced level. The main target is to provide students with the chance to apply their newly acquired knowledge in a wide variety of situations through realistic tasks, oral interaction in pairs and group work, role playing, presentations, etc. Authentic reading and audiovisual materials are also used throughout the course. In addition, students will analyze and practice advanced grammatical skills in order to develop a higher proficiency in speaking and writing. By the end of the course, students should be able to understand long articles related to cultural and business topics, to use Spanish effectively and precisely for social and professional purposes, and to develop an understanding of Hispanic culture, society, and business practices.

Pre-requisite: PORT1010

#### PORT1015 SPECIAL TOPICS IN SPANISH STUDIES I

This course is designed to offer students the chance to explore a variety of topics related to the Spanish-speaking countries. The contents will vary from year to year. Pre-requisite: PORT1010

#### PORT1016 SPECIAL TOPICS IN SPANISH STUDIES II

This course is designed to offer students the chance to explore a variety of topics related to the Spanish-speaking countries. The contents will vary from year to year. Pre-requisite: PORT1010

#### PORT2000 PORTUGUESE III

Improvement of written comprehension and expression. The different levels of written and spoken Portuguese. Reading and interpretation of text from the press. Pre-requisite: PORT1001

## PORT2001 PORTUGUESE LANGUAGE IV

Development of the programme and principles introduced in Portuguese Language I, aimed at perfecting the written and spoken Portuguese. Reading and interpretation of cultural and social texts from the press

Pre-requisite: PORT2000

#### PORT2006 ORAL COMPREHENSION AND PRODUCTION SKILLS III

The course is designed to develop an intermediate language level training and practice in accurate pronunciation and production of oral texts. From students it is expected a good fluency and knowledge of vocabulary increasing their capacity of self-correction of production and pronunciation. The course will also involve the study and comprehension of short videos of contemporary life and culture in Portuguese-speaking countries. Pre-requisite: PORT1004

#### PORT2007 WRITTEN COMPREHENSION AND PRODUCTION SKILLS III

An introduction to the structuring and writing of different types of texts (letters – private or business – memoranda and basic essays). Students are expected to use Regular and Irregular verbs and learn the Subjunctive mode. They will work with exercises and activities involving the use of structures in context and write different types of texts for presentation and discussion. Pre-requisite: PORT1005

#### PORT2012 ORAL COMPREHENSION AND PRODUCTION SKILLS IV

Continuation of content and themes of *Oral Comprehension and Production Skills III*. Development of fluency, pronunciation and comprehension of oral texts. Students are expected to have fluency and communicative competence through the study of video (discussion of films, news items and interviews), simulation of situations and improvisation of dialogues. Pre-requisite: PORT2006

#### PORT2013 WRITTEN COMPREHENSION AND PRODUCTION SKILLS IV

A detailed revision of the use of structures learned by students during the previous three semesters and the reinforcement of new structures. Students are expected to write essays on different topics, to practice summary and abstract writing. Pre-requisite: PORT2007

#### PORT3000 PORTUGUESE V

Reading interpretation of literary, scientific and technical texts. Writing of critical essays. Debates aimed at perfecting the oral expression and vocabulary. Pre-requisite: None

#### PORT3002 PRACTICAL WRITING FOR PROFESSIONAL PURPOSES I

A practical course in which students are trained in the writing of texts for professional purposes: official and commercial correspondence, memoranda, declarations, summary reports, applications, and advertisements.

Pre-requisite: PORT2012, PORT2013

#### PORT3004 TRANSLATION I (PORTUGUESE TO CHINESE)

This course deals with the basic skills of written translation from Portuguese to Chinese, considering aspects of contrastive language structure, semantics, pragmatics and style. The type of text to be translated will comprise texts in Portuguese for administrative, legal, commercial and journalistic purposes.

Pre-requisite: None

## PORT3005 INTRODUCTION TO LINGUISTICS

The course introduces basic concepts of the morphology, lexicon and syntax of Portuguese, with the purpose of developing the student's knowledge of the grammatical system of Portuguese and the ability to describe and analyse the language for learning and pedagogical applications.

Pre-requisite: None

#### PORT3006 INTRODUCTION TO THE STUDY OF THE LITERATURE OF THE PORTUGUESE-SPEAKING WORLD I

This course studies representative contemporary texts from the literatures of the Portuguesespeaking world, including short stories and plays. Students will be introduced to basic terminology and analytical methods, and will write short essays in response to the readings. Pre-requisite: None

#### MODERN AND CONTEMPORARY HISTORY OF THE PORTUGUESE-PORT3007 SPEAKING COUNTRIES I

An overview of the History of the Portuguese-speaking nations, with emphasis on recent and contemporary issues. This course concerns Portugal and aspects of the African Portuguesespeaking nations.

Pre-requisite: None

#### PORT3008 SPECIAL TOPICS I

This course is designed to permit visiting scholars, or existing staff, to offer introductory courses in their particular areas of specialization. The topic and content of the courses will vary from year to year depending on the availability of specialized staff. Examples of specialized topics that may be offered include: Portuguese Language and Culture in Cinema, Portuguese History, History of Macao, Portuguese Literature, Brazilian Literature, Interpretation, Linguistics, etc. Pre-requisite: None

#### PORT3009 SPECIAL TOPICS II

This course is designed to permit visiting scholars, or existing staff, to offer introductory courses in their particular areas of specialization. The topic and content of the courses will vary from year to year depending on the availability of specialized staff. Examples of specialized topics that may be offered include: Portuguese Language and Culture in Cinema, Portuguese History, History of Macao, Portuguese Literature, Brazilian Literature, Interpretation, Linguistics, etc. Pre-requisite: None

#### PRACTICAL WRITING FOR PROFESSIONAL PURPOSES II PORT3011

Students are trained in the writing of texts for professional purposes: administration correspondence, business correspondence, reports.

Pre-requisite: PORT3002

#### PORT3013 TRANSLATION II (CHINESE TO PORTUGUESE)

This course deals with the basic skills of written translation from Chinese to Portuguese, considering aspects of contrastive language structure, semantics, pragmatics and style. The type of text to be translated will comprise texts in Portuguese for administrative, legal, commercial and journalistic purposes.

Pre-requisite: PORT3004

#### PORT3014 PORTUGUESE LINGUISTICS: GRAMMAR

This course provides a linguistic overview of the grammar of the Portuguese language, and includes references to characteristics of the different varieties of the Portuguese language. Pre-requisite: PORT3005

#### PORT3015 INTRODUCTION TO THE STUDY OF THE LITERATURE OF THE PORTUGUESE-SPEAKING WORLD II

This course studies representative contemporary texts from the literatures of the Portuguesespeaking world. Texts may include short stories, essays, plays and novels. Students will write short essays in response to the readings. Pre-requisite: PORT3006

#### PORT3016 MODERN AND CONTEMPORARY HISTORY OF THE PORTUGUESE-SPEAKING COUNTRIES II

An overview of the History of the Portuguese-speaking nations, with emphasis on recent and contemporary issues. This course concerns Brazil and aspects of the African Portuguese-speaking nations.

Pre-requisite: PORT3007

## PORT3017 SPECIAL TOPICS III

This course is designed to permit visiting scholars, or existing staff, to offer courses in their particular areas of specialization. The topic and content of the courses will vary from year to year depending on the availability of specialized staff. Examples of specialized topics that may be offered include: Portuguese Language and Culture in Cinema, Portuguese History, History of Macao, Portuguese Literature, Brazilian Literature, etc.

Pre-requisite: Special Topic courses in the areas of Linguistics, History and Literature will have as pre-requisites a pass in a previous year's course in the corresponding area. Special topics in the areas of Interpreting and Language and Culture in Cinema, will require a pass in the previous year's required courses.

#### PORT3018 SPECIAL TOPICS IV

This course is designed to permit visiting scholars, or existing staff, to offer courses in their particular areas of specialization. The topic and content of the courses will vary from year to year depending on the availability of specialized staff. Examples of specialized topics that may be offered include: Portuguese Language and Culture in Cinema, Portuguese History, History of Macao, Portuguese Literature, Brazilian Literature, etc.

Pre-requisite: Special Topic courses in the areas of Linguistics, History and Literature will have as pre-requisites a pass in a previous year's course in the corresponding area. Special topics in the areas of Interpreting and Language and Culture in Cinema, will require a pass in the previous year's required courses.

#### PORT3019 ADVANCED ORAL COMPREHENSION AND PRODUCTION SKILLS I

Language Laboratory practice in comprehension of real-life audio and video texts in different varieties of Portuguese, focusing on areas of current affairs, diplomacy, legal language, and business. Transcription and oral and written report of audio and video texts. Advanced production through simulation activities.

Pre-requisite: PORT3011

#### PORT3020 ADVANCED ORAL COMPREHENSION AND PRODUCTION SKILLS II

Language Laboratory practice in comprehension of real-life audio and video texts in different varieties of Portuguese, focusing on areas of current affairs, diplomacy, legal language, and business in the context of the Portuguese-speaking world. Transcription and oral and written summary report. Advanced production through simulation activities. Pre-requisite: PORT3019

#### PORT4001 RESEARCH AND REPORT WRITING SKILLS

An advanced course in the writing of academic or administrative texts for professional purposes. The course provides training in the planning, structure and composition of texts of an academic nature.

Pre-requisite: PORT3011

#### PORT4002 ADVANCED TRANSLATION I (PORTUGUESE TO CHINESE)

This course trains the student in written translation from Chinese to Portuguese, with emphasis in the areas of business, legal writing, socio-political affairs, science and technology. Pre-requisite: PORT3013

#### PORT4003 INTERPRETING I (PORTUGUESE TO CHINESE)

This course will concentrate on basic interpreting skills covering note taking, memory span

improvement, sight translation and the basics of consecutive and simultaneous interpreting. The student will work with a range of basic topics in the areas of business, socio-political affairs, and science and technology. Students will undertake practical training in the language laboratory. Pre-requisite: None

#### PORT4004 TEACHING PORTUGUESE AS A FOREIGN LANGUAGE I

Introduction to the theories of second language acquisition and the methodologies of teaching of a foreign language. The course focuses on current internationally recognized theories and methods.

Pre-requisite: None

#### PORT4006 SPECIAL TOPICS V

This course is designed to permit visiting scholars, or existing staff, to offer courses in their particular areas of specialization. The topic and content of the courses will vary from year to year depending on the availability of specialized staff. Examples of specialized topics that may be offered include: History of Culture of the Portuguese-speaking nations, Portuguese Language and Culture in Cinema, Portuguese History, Literary Translation, Business Translation, Legal Translation, Business interpreting, Portuguese Literature, Brazilian Literature, etc.

Pre-requisite: Special Topic courses in the areas of Linguistics, History and Literature will have as pre-requisites a pass in a previous year's course in the corresponding area. Special topics in the areas of Interpreting and Language and Culture in Cinema, will require a pass in the previous year's required courses.

#### PORT4007 SPECIAL TOPICS VI

This course is designed to permit visiting scholars, or existing staff, to offer courses in their particular areas of specialization. The topic and content of the courses will vary from year to year depending on the availability of specialized staff. Examples of specialized topics that may be offered include: History of Culture of the Portuguese-speaking nations, Portuguese Language and Culture in Cinema, Portuguese History, Literary Translation, Business Translation, Legal Translation, Business interpreting, Portuguese Literature, Brazilian Literature, etc.

Pre-requisite: Special Topic courses in the areas of Linguistics, History and Literature will have as pre-requisites a pass in a previous year's course in the corresponding area. Special topics in the areas of Interpreting and Language and Culture in Cinema, will require a pass in the previous year's required courses.

#### PORT4008 GRADUATION PROJECT

This course is a practical seminar intended to provide training in the formulation of advanced research projects in the student's area of interest. Students will be required to identify and develop relevant research questions and conduct systematic and creative assignments from a theoretical and practical framework to a well develop, cohesive and coherent short thesis. Students will need to understand and apply methods for drawing and developing arguments as well as to provide evidence for scientific statements. Attention will be also given to relevant aspects of academic writing conventions.

Pre-requisite: PORT3019

#### PORT4011 ADVANCED TRANSLATION II (CHINESE TO PORTUGUESE)

This course trains the student in written translation from Chinese to Portuguese, with emphasis in the areas of business, legal writing, socio-political affairs, science and technology. Pre-requisite: PORT4002

#### PORT4012 INTERPRETING II (CHINESE TO PORTUGUESE)

This course will concentrate on basic interpreting skills covering note taking, memory span improvement, sight translation and the basics of consecutive and simultaneous interpreting. The student will work with a range of basic topics in the areas of business, socio-political affairs, and science and technology. Students will undertake practical training in the language laboratory. Pre-requisite: PORT4003

## PORT4013 TEACHING PORTUGUESE AS A FOREIGN LANGUAGE II

Current methodologies and practices in the teaching of a foreign language, with emphasis on the teaching of Portuguese. The course emphasizes the need for research-based approaches, and stresses the importance of following international best practice. Pre-requisite: PORT4004

Pre-requisite: POR14004

#### PORT4015 SPECIAL TOPICS VII

This course is designed to permit visiting scholars, or existing staff, to offer courses in their particular areas of specialization. The topic and content of the courses will vary from year to year depending on the availability of specialized staff. Examples of specialized topics that may be offered include: History of Culture of the Portuguese-speaking nations, Portuguese Language and Culture in Cinema, Portuguese History, Literary Translation, Business Translation, Legal Translation, Business interpreting, Portuguese Literature, Brazilian Literature, etc.

Pre-requisite: Special Topic courses in the areas of Linguistics, History and Literature will have as pre-requisites a pass in a previous year's course in the corresponding area. Special topics in the areas of Interpreting and Language and Culture in Cinema, will require a pass in the previous year's required courses.

#### PORT4016 SPECIAL TOPICS VIII

This course is designed to permit visiting scholars, or existing staff, to offer courses in their particular areas of specialization. The topic and content of the courses will vary from year to year depending on the availability of specialized staff. Examples of specialized topics that may be offered include: History of Culture of the Portuguese-speaking nations, Portuguese Language and Culture in Cinema, Portuguese History, Literary Translation, Business Translation, Legal Translation, Business interpreting, Portuguese Literature, Brazilian Literature, etc.

Pre-requisite: Special Topic courses in the areas of Linguistics, History and Literature will have as pre-requisites a pass in a previous year's course in the corresponding area. Special topics in the areas of Interpreting and Language and Culture in Cinema, will require a pass in the previous year's required courses.

#### PORT7000 LINGUISTICS METHOD I

A course covering the analytic linguistic description of the following key areas of Portuguese: morphology and lexicon and phonetics-phonology, with special application to the acquisition and teaching of Portuguese as a Foreign Language. Students will be introduced to data collection purposes and procedures.

Pre-requisite: None

#### PORT7001 LINGUISTICS METHOD II

A course covering the analytic linguistic description of the following key areas of Portuguese: syntax and semantics-pragmatics, with special application to the acquisition and teaching of Portuguese as a Foreign Language. Students will be introduced to data collection purposes and procedures.

Pre-requisite: PORT7000

#### PORT7002 PORTUGUESE FOR PROFESSIONAL PURPOSES I

A discipline that is designed to develop Advanced Specialized Professional Level Proficiency in foreign language speakers of Portuguese who have attained advanced general proficiency. The course is for persons who require a very high degree of linguistic accuracy for professional purposes. It is designed to develop an acute awareness of self-evaluation and critique in order to identify and resolve diverse types of performance inaccuracy in both the spoken and written languages.

Pre-requisite: None

## PORT7003 PORTUGUESE FOR PROFESSIONAL PURPOSES II

A second and more advanced level discipline for the development and consolidation of Advanced Specialized Professional Level Proficiency in foreign language speakers of

Portuguese who have attained advanced general proficiency. The course is for persons who require a very high degree of linguistic accuracy for professional purposes. It is designed to develop an acute awareness of self-evaluation and critique in order to identify and resolve diverse types of performance inaccuracy in both the spoken and written languages. Pre-requisite: PORT7002

## PORT7004 THE PROCESS OF LANGUAGE ACQUISITION (L1 AND L2)

This course covers current theories of language acquisition. The course will first outline current concerns in first language acquisition. Subsequently, it will concentrate on second language acquisition theories, attending to acquisition processes, phases in development, and external conditioning factors, including first language, age, motivation and instructional mode and context. At all times, specific attention will be addressed to acquisition involving Portuguese. Pre-requisite: None

#### PORT7005 METHODOLOGY OF TEACHING PORTUGUESE AS A SECOND LANGUAGE

This course addresses the application of current methodologies in the teaching of Portuguese as a Second Language. Developments in linguistics, educational and psychological studies lead to constant new input to foreign language teaching methodology and practice. The course introduces the student to major current practices and how research-driven innovations are developed in current practice.

Pre-requisite: None

#### PORT7006 CURRICULUM PLANNING AND MATERIALS EVALUATION FOR PORTUGUESE AS A FOREIGN LANGUAGE

This is a course covering principles and procedures in the design of the Portuguese Foreign Language curriculum, and in the design of Portuguese foreign language materials. The student will develop a critical sense for the evaluation of both curricula and materials, while also developing skills with respect to the creation of new materials and resources. Pre-requisite: None

# PORT7007 DEVELOPING READING SKILLS IN PORTUGUESE AS A FOREIGN LANGUAGE

The course surveys critically current major concepts and approaches to the teaching and acquisition of reading in a foreign language. The course will give particular attention to the application of current approaches in the teaching of Portuguese as a Foreign Language, and the incorporation of these approaches in pedagogical practice.

Pre-requisite: None

#### PORT7008 SUPERVISED TEACHING PLANNING AND PRACTICE IN PORTUGUESE AS A SECOND LANGUAGE

In this course the student is supervised in the planning and delivery of class teaching sessions in Portuguese as a second Language within the framework of specific curricula. Students will prepare and present lesson plans, class activities and procedures to the instructor and fellow students, and receive critical evaluations of their performances.

Pre-requisite: None (for MA in Portuguese Language and Culture and Portuguese Language and Intercultral Studies); PORT7005 (for MA in Second Language Acquisition)

#### PORT7009 PORTUGUESE SOCIOLINGUISTICS

The course covers the topic of language variation in Portuguese, introducing some of the major theories thereon, and descriptive analytic practices. The course is configured to address sociolinguistic topics of particular relevance to the future Portuguese language professional, giving special attention to social and regional linguistic variation, and registers. The course also addresses the application of sociolinguistic variation in the context of Portuguese Foreign Language instruction.

Pre-requisite: None

## PORT7010 SPECIAL TOPIC IN PORTUGUESE APPLIED LINGUISTICS I

A course designed to permit visiting scholars, or existing staff, to offer postgraduate level courses in particular areas of specialization that do not already figure in the programme. The topic and content of the course will vary from year to year depending on the availability of specialized staff. Examples of topics that might be offered include: Testing in Portuguese as a Foreign Language, Technology in the Portuguese Foreign Language Class, Interactional Sociolinguistics in Portuguese, Clinical Linguistics applications in Portuguese as a Foreign Language, Patuá – the Creole Portuguese Language of Macao, Computational Linguistics Applications, etc.

## PORT7011 SPECIAL TOPIC IN PORTUGUESE APPLIED LINGUISTICS II

A course designed to permit visiting scholars, or existing staff, to offer postgraduate level courses in particular areas of specialization that do not already figure in the programme. The topic and content of the course will vary from year to year depending on the availability of specialized staff. Examples of topics that might be offered include: Testing in Portuguese as a Foreign Language, Technology in the Portuguese Foreign Language Class, Interactional Sociolinguistics in Portuguese, Clinical Linguistics applications in Portuguese as a Foreign Language, Patuá – the Creole Portuguese Language of Macao, Computational Linguistics Applications, etc.

#### PORT7012 LITERARY STUDIES THEORY

The course provides an introduction to the major principles of contemporary literary theory and criticism and to established methods and materials of literary research, stressing the interactions between language, literature, and culture.

Pre-requisite: None

#### PORT7013 THESIS AND RESEARCH WRITING SEMINAR

This is a practical seminar designed to train students in the formulation of research projects, and is intended to serve as a platform for the formulation and development of the dissertation project. The student will be required to identify relevant research questions and conduct systematic research from theoretical and practical perspectives, presenting stage papers on the development of the dissertation project.

Pre-requisite: PORT7112

#### PORT7105 MODERN LUSOPHONE LITERATURE

The discipline surveys the literature of the modern Portuguese speaking nations, including Portugal, Brazil, the African Portuguese-speaking nations and Timor Lorosa'e, touching upon the colonial period yet paying particular attention to the literature of the 20<sup>th</sup> and 21<sup>st</sup> centuries. Pre-requisite: None

#### PORT7107 IMAGES OF THE EAST IN PORTUGUESE LANGUAGE LITERATURE

The discipline is dedicated principally to the study of the representation of the East in Portuguese narratives in early and modern periods. It addresses travel literature, including that of Fernão Mendes Pinto, and the topics of the imaginary East and the specific representation of Macao. Pre-requisite: None

#### PORT7108 MACAO LITERATURE IN PORTUGUESE

This course studies diverse literary texts produced in Portuguese in Macao which present interesting, very different and sometimes controversial insights and perspectives on life in Macao society. As Portugal administrated Macao for more than 450 years, in addition to the literary texts of Portuguese residents and of the local Luso-Asian community, there is a corpus of literary texts written by short time visitors. The authors were Portuguese civil servants, lawyers, military officers and teachers who served in the territory, as well as Portuguese writers invited by the Macao government. Pre-requisite: None

276

## PORT7111 LITERARY & CULTURAL STUDIES METHOD I

The course covers the basic issues in research methodology and theories relevant to literature and cultural studies in the Portuguese area. Basic issues of literary and cultural analyses will be covered. These will be approached specifically in relation to the study of the Portuguese presence in Asia.

Pre-requisite: None

## PORT7112 LITERARY & CULTURAL STUDIES METHOD II

A more advanced course covering procedures involved in conducting research involving various types of document sources. Components may include cultural, historical-demographic research procedures, perspectives on cultural flows, and literary analysis. Pre-requisite: PORT7111

#### PORT7113 SPECIAL TOPIC IN LITERARY AND CULTURAL STUDIES I

A course designed to permit visiting scholars, or existing staff, to offer postgraduate level courses in particular areas of specialization relating to Literary and Cultural Studies, History or Creative Writing, that do not already figure in the programme. The topic and content of the course will vary from year to year depending on the availability of specialized staff. Examples of topics that might be offered include: Advanced theories of Research, Advanced Theories of Literary analysis, Children's Literature in the Portuguese language, the Modern History of a specific Portuguese speaking nation, Portuguese Creative writing for television and film, Macao Literature in Patuá (Macao Creole Portuguese), The Portuguese in the Indian Ocean, Relations between Macao and Siam, The Manila-Macao connection, the Luso-Asian Family, Luso-Asian writing, Travel writing in Portuguese colonial times, the Portuguese historical cultural view of Asian Societies.

Pre-requisite: None

#### PORT7114 SPECIAL TOPIC IN LITERARY AND CULTURAL STUDIES II

A course designed to permit visiting scholars, or existing staff, to offer postgraduate level courses in particular areas of specialization relating to Literary and Cultural Studies, History or Creative Writing, that do not already figure in the programme. The topic and content of the course will vary from year to year depending on the availability of specialized staff. Examples of topics that might be offered include: Advanced theories of Research, Advanced Theories of Literary analysis, Children's Literature in the Portuguese language, the Modern History of a specific Portuguese speaking nation, Portuguese Creative writing for television and film, Macao Literature in Patuá (Macao Creole Portuguese), The Portuguese in the Indian Ocean, Relations between Macao and Siam, The Manila-Macao connection, the Luso-Asian Family, Luso-Asian writing, Travel writing in Portuguese colonial times, the Portuguese historical cultural view of Asian Societies.

Pre-requisite: None

## PORT7115 INTERCULTURAL COMMUNICATION

Intercultural Communication addresses the situation of languages and cultures in the contemporary globalized world. It aims at understanding the frames of identity formation and coexistence and their influence in the modern cultural means of artistic expressions. The seminar includes an introduction to the diversity of the Portuguese language in the world, its cultural environment and particularities in order to clearly address the challenges of globalization and multicultural stereotypes in the age of post-colonialism. Pre-requisite: None

#### PORT7116 GRAMMAR AND COMMUNICATION

Grammar and Communication for Foreign Language aims at providing a full description of the functions of language from the point of view of communicative grammar. Its goal is to study language as it is really used in social practice and everyday life. Pre-requisite: None

## PORT7117 LITERATURE AND OTHER ARTS

This course/seminar aims to consider the aesthetic debate on the relationship betweenliterature and other forms of art in different historical periods, as well as to address diverse instances and variations of this relationship - from the "mutual illumination of the arts" to forms of direct transposition, transformation and even the emergence of relatively novel modes of expression - through the study of concrete examples. Special attention will be given to both the content and the physical, technological and material aspects of the artistic object(s). Discussion on the notion of Art in general will be central as well.

Pre-requisite: None

### PORT7800 PORTUGAL IN THE ASIA-PACIFIC REGION

A discipline covering aspects of the history of the Portuguese in Asia and Southeast and East Asia, beginning in the 16th century and covering the establishment of the Estado da Índia, and the foundation of Macao and its development during four centuries. Pre-requisite: None

#### PORT7801 HISTORY OF PORTUGUESE MARITIME EXPANSION

This course is concerned with the dynamics and nature of Portuguese overseas expansion in the 15th, 16th and 17th centuries. It covers aspects of navigation, maritime trade, missionary activities and migration.

Pre-requisite: None

#### PORT7802 HISTORY OF MACAO UNDER THE PORTUGUESE

This discipline deals with a range of topics in relation to the history of Macao under the Portuguese, including demographic composition, interethnic relations, trade links, diplomacy, migration and manifestations of cultural expression.

Pre-requisite: None

## PORT7803 RELATIONS BETWEEN CHINA AND THE PORTUGUESE-SPEAKING COUNTRIES

This discipline covers aspects of history of the relations between the modern Portuguesespeaking countries and China, attending to the historical origins of these links, covering pre-20th century links within the Portuguese colonies and the development and the nature of 20th century and current links.

Pre-requisite: None

#### PORT7990 THESIS

Under the supervision of a professor, each student designs, carries out and writes up a substantial piece of theoretical research based on an in-depth study of a particular research area, a review of the research literature, the formulation of relevant research questions, and the development of a method of addressing these questions. The master programme is finished in the fourth semester with an Academic Thesis in which academic results from the students' own research are presented. The thesis is written in Portuguese and should have between 17 000 and 30 000 words.

Pre-requisite: None

# PORT8008 ADVANCED RESEARCH AND ACADEMIC WRITING IN PORTUGUESE STUDIES

The seminar aims to provide students with a toolkit of writing strategies in Portuguese and to enhance their research skills. To build critical thinking and to observe academic conventions in different kinds of textual practice (abstracts, conference papters, journal articles, essays, dissertations, project drafting) are main goals of this course, where students will also learn to access resources such as library websites and online databases. Students will be encouraged to present their own research projects and to engage in reflexive approaches to reading, planning, drafting, revising and reviewing activities, while perfecting their mastery of Portuguese for academic purposes. Pre-requisite: None

#### PORT8009 CROSS-LANGUAGE TOPICS IN APPLIED LINGUISTICS

This seminar offers an advanced approach to general principles and practices in the field of applied linguistics, by covering its connections to other related disciplinary areas and addressing current debates in language acquisition, language pedagogy, pragmatics, sociolinguistics, multilingualism, and creolistics. A particular emphasis will be given to language transfer phenomena and interlinguistic issues in Portuguese language-based contexts. Pre-requisite: None

# PORT8010 NEW TRENDS IN PORTUGUESE LITERARY AND INTERCULTURAL STUDIES

This course aims at studying current developments in Portuguese Studies in light of recent postcolonial debates. By addressing the diversity of cultural and artistic production in Portuguese within different geocultural frames (Europe, South America, Africa and the East), the course will stress the symbolic capital of Portuguese as a world language in times of expanding globalization and multicultural complexity.

Pre-requisite: None

## PROGRAMMES OF STUDY Faculty of Business Administration

## **Doctoral Degree Programmes**

## AREAS OF STUDY

- Accounting
- Business Economics
- Decision Sciences
- Finance
- Gaming Management
- Hospitality Management
- Information Systems
- Management
- Marketing

## FACULTY OF BUSINESS ADMINISTRATION **Doctoral Degree Programmes**

# Doctor of PhilosophyBusiness Administration

		Credits
UNIVERSITY	WIDE COURSES	
BAGC8001	Research Ethics	
BAGC8000	Research Writing	3
DISCIPLINAR	Y COURSES	
Discipline: A	ccounting	
ACCT8012	Contemporary Research in Accounting	3
Select one of	the following:	
ACCT8011	Accounting Research Methods and Seminar	3
FINC8011	Research Methods in Finance and Business Economics	3
Discipline: B	usiness Economics	
FINC8012	Advanced Topics in Finance and Business Economics	3
FINC8011	Research Methods in Finance and Business Economics	3
Discipline: D	ecision Sciences	
ISOM8012	Advanced Topics in Decision Sciences and Information Systems	3
Select one of	the following:	
ISOM8011	Quantitative Research Methods in Decision Sciences and	3
FINC8011	Information Systems Research Methods in Finance and Business Economics	3
MGMT8011	Advanced Research Methods in Management and Marketing	3
Discipline: F	inance	
FINC8012	Advanced Topics in Finance and Business Economics	3
FINC8011	Research Methods in Finance and Business Economics	3
Discipline: C	aming Management	
IRTM8012	Contemporary Research in Hospitality and Gaming Management	3
Select one of	the following:	
IRTM8011	Advanced Research Methods in Hospitality and Gaming	3
MGMT8011	Management Advanced Research Methods in Management and Marketing	3

Doctoral Thesis Total Credits:		27
		18
Select one of 1 MKTG8012 MGMT8013 MGMT8014	Doctoral Seminar in Marketing Theories Doctoral Seminar in Strategic Management Doctoral Seminar in Organizational Behavior/Human Resource Management	3 3 3
MGMT8011	Advanced Research Methods in Management and Marketing	3
Discipline: N		
Select one of MKTG8012 MGMT8013 MGMT8014	the following: Doctoral Seminar in Marketing Theories Doctoral Seminar in Strategic Management Doctoral Seminar in Organizational Behavior/Human Resource Management	3 3 3
MGMT8011	Advanced Research Methods in Management and Marketing	3
Discipline: N	lanagement	
FINC8011 MGMT8011	Information Systems Research Methods in Finance and Business Economics Advanced Research Methods in Management and Marketing	3 3
Select one of ISOM8011	Quantitative Research Methods in Decision Sciences and	3
ISOM8012	Advanced Topics in Decision Sciences and Information Systems	3
Discipline: Ir	formation Systems	
MGMT8011	Management Advanced Research Methods in Management and Marketing	3
Select one of IRTM8011	Advanced Research Methods in Hospitality and Gaming	3
IRTM8012	Contemporary Research in Hospitality and Gaming Management	3
Discipline: H	lospitality Management	

In additional to the above courses and thesis requirement, every student is also required to complete the following requirements:

- ٠
- Qualifying Examination Thesis Proposal Assessment •
- International Conference Paper Presentation and International Journal Publication •

Note:

- 1. If necessary, supervisors may advise their students to enroll additional courses which are not listed above in order to make up their deficiency.
- 2. Unless otherwise specified, the above information is accurate as at 21 June 2022. The University has the right from time to time to make changes in its regulations, rules and procedures as it sees fit.

FACULTY OF BUSINESS ADMINISTRATION

## **Doctoral Degree Programmes**

## **Doctor of Business Administration**

Courses		Credits
BAGC8300	Research Method for Business and Management Research	3
BAGC8301	Research Writing and Ethics	3
ISOM8300	Technology Advancement and Application for Business Management	3
MGMT8300	Leadership and Organizational Change	3
BAGC8321	Residential Workshop I	4
BAGC8322	Residential Workshop II	4
BAGC8397	Doctoral Thesis	18
FINC8350	e required to take 4 of the following elective courses to earn 12 cre Contemporary Issues in International Financial Management	3
FINC8351	Project Management	3
IRTM8350	Contemporary Issues in International Integrated Resort Management	3
ISOM8350	Statistical Analysis for Business and Management Research	3
MGMT8350	Cross-cultural Business Strategy	3
MKTG8350	International Marketing	3
Total Credits:		

Note:

1. Unless otherwise specified, the above information is accurate as at 21 June 2022. The University has the right from time to time to make changes in its regulations, rules and procedures as it sees fit.

## **Executive Master of Business Administration**

Courses		<b>Credits</b>		
Compulsory Cou	Compulsory Courses			
ACCT7300	Financial Statement Analysis	2		
ACCT7301	Corporate Financial Strategy	2		
MGMT7300	Management of Organizations and Culture	2		
BAGC7300	Innovation and Entrepreneurship	2		
MKTG7300	International Marketing Management	2		
ISOM7300	Project Management Strategy	2		
MGMT7301	Strategic Management	2		
BAGC7301	Study Trip Group Report I	2		
MGMT7302	Study Trip Group Report II	2		
BAGC7998	Project Report	3		
Students are recearn 10 credits*	quired to take 5 of the following list of required elective cou	irses to		
ISOM7350	Digital Strategy for Blockchain and Fintech Development	2		
ACCT7350	Corporate Governance Strategy	2		
ACCT7351	International Financial Management Strategy	2		
MGMT7351	Global Business And Strategy	2		
MGMT7350	Leadership and Organizational Changes	2		
IRTM7350	Strategic Practice in Integrated Resort Management	2		
ISOM7351	Logistics and Supply Chain Management	2		

### **Total Credits:**

BECO7350

BAGC7350

Note:

Unless otherwise specified, the above information is accurate as at 21 June 2022. The University has the right from time to time to make changes in its regulations, rules and procedures as it sees fit.

**Regional Economies and Development Strategy** 

Risk and Crisis Management Strategy

2 2

33

## Master's Degree Programmes

## **Master of Business Administration**

Courses		Credits
Compulsory Co	urses	
BECO7011	Economics for Business	3
ISOM7012	Statistical Analysis and Applications	1.5
ACCT7018	Accounting for Decision Making	3
ISOM7013	Information Management and Digital Innovation	3
FINC7011	Managerial Finance	3
MKTG7010	Marketing Management	3
MGMT7032	Human Resources Management	3
MGMT7011	Strategic Management	3
MGMT7012	Ethics and Leadership in Organizations	3
MGMT7013	Entrepreneurship	1.5
MGMT7014	Business Consultancy Methods	3
MGMT7010	Organizational Behavior	3
BAGC7998	Project Report	6

## Students are required to take 2 of the following list of required elective courses to earn 6 credits\*

MKTG7030	Consumer Behavior	3
MGMT7037	Global Business	3
ISOM7030	Service Operations	3
MKTG7032	Advances in Marketing Studies	3
MGMT7036	Advances in Management Studies	3
BAGC7011	Research Methods	3
MKTG7033	Marketing Analytics	3

### Total Credits:

45

\* The above courses will be offered subject to the number of student enrolment and the availability of instructors.

Note:

- 1. <u>ALL</u> courses listed in this programme must be successfully completed for graduation. Failure to complete any compulsory course will require that course to be successfully completed in the subsequent year.
- 2. Unless otherwise specified, the above information is accurate as at 21 June 2022. The University has the right from time to time to make changes in its regulations, rules and procedures as it sees fit.

### **Master of Science**

• Accounting

Courses		Credits
Compulsory	y Courses	
ACCT7012	Fundamentals of Accounting	3
ACCT7013	Financial Reporting	3
ACCT7015	Management Accounting	3
ACCT7017	Financial Management	3
ACCT7055	Auditing and Assurance	3
ACCT7056	Taxation	3
ACCT7998	Project Report	6

## Students are required to take 4 courses from the following required elective courses to obtain 12 credits:

ACCT7014	Business Law	3
ACCT7050	Advanced Financial Reporting	3
ACCT7051	Corporate Governance and Social Responsibility	3
ACCT7052	Performance Management and Control Systems	3
ACCT7053	Financial Risk Management	3
ACCT7060	Financial Statement Analysis for Decision Making	3
FINC7054	Introduction to Modern Financial Technology	3
ISOM7011	Management Information Systems	3
	-	

### **Total Credits:**

Note:

- 1. Students can find out more about the professional accounting qualifications on the FBA website (<u>https://fba.um.edu.mo/departments/aim/accreditations/</u>).
- 2. Unless otherwise specified, the above information is accurate as at 21 June 2022. The University has the right to make changes in its regulations, rules and procedures from time to time as it sees fit.

36

### **Master of Science**

• Finance

Courses		Credits
Compulsory	Courses	
FINC7010	Corporate Finance	3
BECO7010	Statistics and Financial Econometrics	3
FINC7024	Investments and Portfolio Management	3
FINC7057	Financial Markets and Institutions	3
Finance Elec	tives* (choose 6 out of the following 9)	
FINC7058	International Finance and Derivatives	3
FINC7026	International Banking and Bank Management	3
FINC7035	Financial Risk Management	3
FINC7041	Advanced Topics in Finance	3
FINC7054	Introduction to Modern Financial Technology	3
FINC7055	Wealth Management	3
FINC7056	Macao's Economy	3
ACCT7051	Corporate Governance and Social Responsibility	3
MGMT7012	Ethics and Leadership in Organizations	3
FINC7998	Project Report	6
Total Credits	:	36

\* These courses will be offered subject to the number of student enrolment and the availability of instructors.

### Note:

1. Unless otherwise specified, the above information is accurate as at 21 June 2022. The University has the right from time to time to make changes in its regulations, rules and procedures as it sees fit.

FACULTY OF BUSINESS ADMINISTRATION

## Master's Degree Programmes

## Master of Science

### • International Integrated Resort Management

Courses		Credits
Compulsory	Courses	
IRTM7010	International Integrated Resorts Management	3
IRTM7011	International Hospitality Marketing Management	3
IRTM7035	Gaming and Casino Operation Management	3
IRTM7013	Managerial Finance in Integrated Resorts	3
IRTM7014	Integrated Resorts Management Internship*	3
IRTM7051	Research Methods	3
IRTM7998	Project Report	6
Elective Cou	urses** (choose 4 out of the following 17)	12
IRTM7030	Meeting, Incentive, Convention and Exhibition Management	
IRTM7031	Event and Entertainment Management	
IRTM7032	Food and Beverage Management	
IRTM7033	Lodging Management	
IRTM7034	Hotel Revenue Management	
IRTM7012	Managing Human Resources and Personnel Psychology in	
	Integrated Resorts	
IRTM7036	Cross Cultural Gambling Psychology	
IRTM7037	Travel and Tourism Management	
IRTM7038	Retail Management in Integrated Resorts	
IRTM7039	Service Quality Management in Integrated Resorts	
IRTM7040	Special Topics in Integrated Resorts	
IRTM7041	Strategic Management in Hospitality Industry	
IRTM7042	Direct Marketing and Customer Relationship Management in	
	Integrated Resorts	
IRTM7052	Information Technology in Tourism and Hospitality Industries	
ACCT7013	Financial Reprting and Analysis***	
ISOM7030	Service Operations***	
MGMT7037	Global Business***	

### **Total Credits:**

36

\* For students who have less than 2 years supervisory or managerial working experiences, they are required to undertake at least 560 hours internship programme. Students who are working full time with at least 2 years supervisory or managerial experience at the time of application may be able to exempt the internship course upon showing adequate justification to do so to the University. Students who are working full time but without 2 years of supervisory or managerial experience at the time of application may be able to exempt the time of application may be able to waive from the internship course upon showing adequate justification to do so to the University. All other exempt or waive cases will be subjected to special approval on a case by case basis.

- \*\* The elective courses are offered subject to the number of student enrolment and the availability of instructors.
- \*\*\* Students may enrol either one of these MBA or MSc in Accounting courses as electives, and it is subject to class quota upon course enrolment and availability of instructors.

Note:

- 1. All courses must be successfully completed and students are required to achieve a cumulative GPA of 2.7 or above in order to graduate.
- 2. Unless otherwise specified, the above information is accurate as at 21 June 2022. The University has the right from time to time to make changed in its regulations, rules and procedures as it sees fit.

## **Bachelor of Business Administration**

Year I		Credits
BECO1000	Principles of Microeconomics	3
BECO1001	Principles of Macroeconomics	3
GEST1001	Quantitative Reasoning for Business	3
ISOM1001	Contemporary Information Systems for Organizations	3
MGMT1000	Principles of Business Management	3
Community and Peer Education Courses		2
Language an	d Skills – English Language Courses or Free Electives*	6
Language an	d Skills – Chinese/Portuguese Language Course or Free Electives*	3
Language an	d Skills – Information Technology Course	3
Two General Education courses		6
Total Credits	:	35

### Total Credits:

Year II		Credits
ACCT1000	Principles of Financial Accounting	3
ACCT2000	Management Accounting I	3
FINC2000	Financial Management	3
ISOM1005	Introduction to Business Intelligence and Information	3
ISOM2002	Statistics and Data Analysis	3
MGMT2000	Business Communications	3
MGMT2001	Organizational Behavior	3
MKTG2000	Principles of Marketing	3
Community and Peer Education Courses		1
Language and Skills – English Language Courses or Free Electives*		3
One General Education course		3
Total Credits:		31

Year III		Credits
ISOM3030	Quantitative Decision Analysis	3
MGMT3000	Global Business Environment	3
MGMT3003	Strategic Management	3
MGMT3004	Research Methods	3
MGMT3009	Business Ethics and Corporate Social Responsibility	3
Two General	Education courses	6
Two courses	selected from the Bachelor of Business Administration Required	6
Electives List	A. List B or List C	

One course selected from the Bachelor of Business Administration Required	3
Electives List	

30

### Total Credits:

Year IV	Credits
ISOM4006 Project and Quality Management	3
Two General Education courses	6
Four courses selected from the Bachelor of Business Administration Required Electives List	12
Three bachelor's degree courses	
Total Credits:	30

#### **Bachelor of Business Administration Required Electives**

BECO3004 BECO4005 BECO4015 FINC4004 FINC4004 FINC4008 MGMT3007 MGMT3008 MGMT4001 MGMT4002 MGMT4003 MGMT4006	Economics of Tourism Money and Banking Applied Economics for Leisure Industries International Banking Managerial Economics for Small and Medium-sized Retailing Enterprises Mergers and Acquisitions International Finance and Global Issues Organizational Change and Development Quality Management Global Human Resource Management Asian Business Cross-Cultural Communication in Business Entrepreneurship Management
MGMT3008	
MGMT4002	
MGMT4003	Cross-Cultural Communication in Business
MGMT4006	Entrepreneurship Management
MGMT4011	Employee Relations, Safety and Health
MGMT4012	Strategic Human Resource Management
MGMT4015	Leadership
MKTG4003	Services Marketing
MKTG4005	Retail Strategy
MKTG4012	Customer Relationship Management
MKTG4014	Brand Management
MKTG4018	Leisure and Lifestyle Marketing

- \* A student can test out of some of the courses if he/she obtains certain examination scores/qualifications, please visit the Registry homepage for more information (https://reg.um.edu.mo/current-students/curriculum-model/ug-curriculummodel/languages-and-skills/).
- § Subject to the actual courses offered, study plan arrangement of that academic year will be announced in the FBA website (<u>https://fba.um.edu.mo/students/study-plans/</u>).
- □ Unless otherwise specified, the above information is accurate as at 21 June 2022. The University has the right from time to time to make changes in its regulations, rules and procedures as it sees fit.

## **Bachelor of Business Administration**

### • Business Economics

BECO4000

BECO4003

ISOM3030

MGMT3003

MGMT3009

**Total Credits:** 

Two General Education courses

Veerel		Quedite
Year I BECO1000	Principles of Microeconomics	Credits 3
BECO1000	Principles of Macroeconomics	3
GEST1001	Quantitative Reasoning for Business	3
ISOM1001	Contemporary Information Systems for Organizations	3
MGMT1000	Principles of Business Management	3
	nd Peer Education Courses	2
	Skills – English Language Courses or Free Electives*	6
	Skills – Chinese/Portuguese Language Course or Free Electives*	3
Language and	Skills – Information Technology Course	3
Two General I	Education courses	6
Total Credits		35
Total Credits		55
Year II		Credits
ACCT1000	Principles of Financial Accounting	3
ACCT2000	Management Accounting I	3 3 3
FINC2000	Financial Management	3
ISOM1005	Introduction to Business Intelligence and Information	3
ISOM2002	Statistics and Data Analysis	3 3
MGMT2000	Business Communications	3
MGMT2001	Organizational Behavior	3
MKTG2000	Principles of Marketing	3
Community ar	nd Peer Education Courses	1
	I Skills – English Language Courses or Free Electives*	3
5 5		
One General	Education course	3
Total Credits:		31
Year III		Credits
BECO3008	Intermediate Microeconomics	3
BECO3009	Intermediate Macroeconomics	3
BECO3010	Global Economic Issues and Business Implications	3
<b>DEOO</b> (000		•

Business Ethics and Corporate Social Responsibility

Analysis of Economic Indicators

Introduction to Econometrics

Strategic Management

**Quantitative Decision Analysis** 

3

3

3 3

3

6

30

Year IV		Credits
BECO4004	Applied Econometrics	3
BECO4006	The Economics of Development	3
BECO4018	Economic Analysis of Investment Projects	3
Two General Education courses		6
Two courses selected from the Business Economics Required Electives		6
Three bachelor's degree courses		9
Total Credits	S:	30

### **Business Economics Required Electives**

Select one from the following:

- BECO3001 Public Economics and Finance
- BECO4007 History of Economic Thought
- BECO4008 Financial Economics

Select one from the following:

- BECO3004 Economics of Tourism
- BECO4005 Applied Economics for Leisure Industries
- BECO4015 Managerial Economics for Small and Medium-sized Retailing Enterprises
- \* A student can test out of some of the Languages and Skills courses if he/she obtains certain examination scores/qualifications, please visit the Registry homepage for more information (<u>https://reg.um.edu.mo/current-students/curriculum-model/ug-curriculum-model/ug-curriculum-model/ug-curriculum-model/ug-curriculum-model/languages-and-skills/</u>).
- § Subject to the actual courses offered, study plan arrangement of that academic year will be announced in the FBA website (<u>https://fba.um.edu.mo/students/study-plans/</u>).
- Unless otherwise specified, the above information is accurate as at 21 June 2022. The University has the right from time to time to make changes in its regulations, rules and procedures as it sees fit.

## **Bachelor of Business Administration**

### • Financial Controllership

Total Credits:

Year I		<b>Credits</b>
BECO1000	Principles of Microeconomics	3
BECO1001	Principles of Macroeconomics	3
GEST1001	Quantitative Reasoning for Business	3
ISOM1001	Contemporary Information Systems for Organizations	3
MGMT1000	Principles of Business Management	3
Community a	nd Peer Education Courses	2
Language and	d Skills – English Language Courses or Free Electives*	6
Language and	d Skills – Chinese/Portuguese Language Course or Free Electives*	3
Language and	d Skills – Information Technology Course	3
Two General	Education courses	6
Total Credits	:	35
Year II		Credits
ACCT1000	Principles of Financial Accounting	3
ACCT2000	Management Accounting I	3
FINC2000	Financial Management	3
ISOM1005	Introduction to Business Intelligence and Information	3
ISOM2002	Statistics and Data Analysis	3
MGMT2000	Business Communications	3

Year III		Credits
ACCT2004	Intermediate Accounting	3
ACCT3002	Management Accounting II	3
FINC2001	Advanced Financial Management	3
FINC3002	Theory of Finance	3
ISOM3030	Quantitative Decision Analysis	3
MGMT3000	Global Business Environment	3
MGMT3003	Strategic Management	3
MGMT3009	Business Ethics and Corporate Social Responsibility	3
Two General Education courses		6

Year IV		Credits
ACCT3009	Financial Statement Analysis	3
ISOM3031	Forecasting Models in Business	3
ISOM4006	Project and Quality Management	3
Two General Education courses		6
Two courses selected from the Financial Controllership Required Electives		6
Three bachelor's degree courses		9
Total Credit	S:	30

### **Financial Controllership Required Electives**

Select **two** from the following:

FINC3003	Financial Markets and Institutions
FINC4008	International Finance and Global Issues
ISOM3035	Operations Management
ISOM3038	Financial Technology
MGMT4001	Global Human Resource Management

- \* A student can test out of some of the Languages and Skills courses if he/she obtains certain examination scores/qualifications, please visit the Registry homepage for more information (<u>https://reg.um.edu.mo/current-students/curriculum-model/ug-curriculum-model/ug-curriculum-model/languages-and-skills/</u>).
- § Subject to the actual courses offered, study plan arrangement of that academic year will be announced in the FBA website (<u>https://fba.um.edu.mo/students/study-plans/</u>).
- □ Unless otherwise specified, the above information is accurate as at 21 June 2022. The University has the right from time to time to make changes in its regulations, rules and procedures as it sees fit.

## **Bachelor of Business Administration**

## • Global Business Management

Year I		Credits
BECO1000	Principles of Microeconomics	3
BECO1001	Principles of Macroeconomics	3
GEST1001	Quantitative Reasoning for Business	3
ISOM1001	Contemporary Information Systems for Organizations	3
MGMT1000	Principles of Business Management	3
Community and Peer Education Courses		2
Language and	Skills – English Language Courses or Free Electives*	6
	Skills – Chinese/Portuguese Language Course or Free Electives*	3
Language and	Skills – Information Technology Course	3
Two General E	Education courses	6
Total Credits:		35
Year II		Credits
ACCT1000	Principles of Financial Accounting	3
ACCT2000	Management Accounting I	3
FINC2000	Financial Management	3
ISOM1005	Introduction to Business Intelligence and Information	3
ISOM2002	Statistics and Data Analysis	3
MGMT2000	Business Communications	3
MGMT2001	Organizational Behavior	3
MKTG2000	Principles of Marketing	3
Community ar	nd Peer Education Courses	1
Language and Skills – English Language Courses or Free Electives*		3
One General Education course		3
Total Credits:		31
Year III ^		Credits
ISOM3030	Quantitative Decision Analysis	3
MGMT3000	Global Business Environment	3
MGMT3003	Strategic Management	3
MGMT3004	Research Methods	3
Three General Education courses		9
Two courses selected from the Global Business Management Required Electives		6
One bachelor's degree course		3
Total Credits:		30

Year IV		Credits
ISOM4006	Project and Quality Management	3
MGMT3001	International Management	3
MGMT3002	Competitive Advantage	3
MGMT3009	Business Ethics and Corporate Social Responsibility	3
MGMT4000	Global Strategic Management	3
MGMT4002	Asian Business	3
MKTG4000	International Marketing	3
One General Education course		3
Two bachelor's degree courses		6
Total Credits	:	30

#### **Global Business Management Required Electives**

Select two from the following:MGMT4001Global Human Resource ManagementMGMT4003Cross-Cultural Communication in BusinessMGMT4005Management of Foreign AffiliatesMGMT4006Entrepreneurship ManagementMGMT4016Innovation Management

- \* A student can test out of some of the Languages and Skills courses if he/she obtains certain examination scores/qualifications, please visit the Registry homepage for more information (<u>https://reg.um.edu.mo/current-students/curriculum-model/ug-curiculum-model/ug-curriculum-model/</u>
- Students are required to participate in exchange programme in the second semester of their third year of study. Courses for exemption should be pre-approved.
- § Subject to the actual courses offered, study plan arrangement of that academic year will be announced in the FBA website (<u>https://fba.um.edu.mo/students/study-plans/</u>).
- □ Unless otherwise specified, the above information is accurate as at 21 June 2022. The University has the right from time to time to make changes in its regulations, rules and procedures as it sees fit.

## **Bachelor of Business Administration**

## • Human Resource Management

Year I		Credits
BECO1000	Principles of Microeconomics	3
BECO1001	Principles of Macroeconomics	3
GEST1001	Quantitative Reasoning for Business	3
ISOM1001	Contemporary Information Systems for Organizations	3
MGMT1000	Principles of Business Management	3
Community ar	nd Peer Education Courses	2
	I Skills – English Language Courses or Free Electives*	6
	Skills – Chinese/Portuguese Language Course or Free Electives*	3
Language and	I Skills – Information Technology Course	3
Two General I	Education courses	6
Total Credits		35
Year II		<b>Credits</b>
ACCT1000	Principles of Financial Accounting	3
ACCT2000	Management Accounting I	3
FINC2000	Financial Management	3
ISOM1005	Introduction to Business Intelligence and Information	3
ISOM2002	Statistics and Data Analysis	3
MGMT2000	Business Communications	3
MGMT2001	Organizational Behavior	3
MKTG2000	Principles of Marketing	3
Community ar	nd Peer Education Courses	1
Language and Skills – English Language Courses or Free Electives*		
One General Education course		
Total Credits:		31
Year III		Credits
ISOM3030	Quantitative Decision Analysis	3
MGMT3000	Global Business Environment	3
MGMT3003	Strategic Management	3
MGMT3004	Research Methods	3
MGMT3005	Human Resources Management	3
MGMT3006	Human Resources Planning and Staffing	3
MGMT3009	Business Ethics and Corporate Social Responsibility	3
MGMT4009	Training and Development	3
Two General Education courses		6
Total Credits:		30

Year IV		Credits
ISOM4006 MGMT4010	Project and Quality Management Performance and Compensation Management	3 3
Two General	Education courses	6
Three courses selected from the Human Resource Management Required Electives		s 9
Three bachel	or's degree courses	9
Total Credits	:	30

### Human Resource Management Required Electives

Select three from the following:

- MGMT3007 Organizational Change and Development
- MGMT3008 Quality Management
- MGMT4001 Global Human Resource Management
- MGMT4003 Cross-Cultural Communication in Business
- MGMT4011 Employee Relations, Safety and Health
- MGMT4012 Strategic Human Resource Management
- MGMT4014 Contemporary Issues in Human Resource Management
- MGMT4015 Leadership
- IRTM4003 Professional Development in Convention and Hospitality Industry
- \* A student can test out of some of the Languages and Skills courses if he/she obtains certain examination scores/qualifications, please visit the Registry homepage for more information (<u>https://reg.um.edu.mo/current-students/curriculum-model/ug-curriculum-model/ug-curriculum-model/ug-curriculum-model/languages-and-skills/</u>).
- § Subject to the actual courses offered, study plan arrangement of that academic year will be announced in the FBA website (<u>https://fba.um.edu.mo/students/study-plans/</u>).
- Unless otherwise specified, the above information is accurate as at 21 June 2022. The University has the right from time to time to make changes in its regulations, rules and procedures as it sees fit.

## **Bachelor of Business Administration**

## • Marketing

Year I		Credits
BECO1000	Principles of Microeconomics	3
BECO1001	Principles of Macroeconomics	3
GEST1001	Quantitative Reasoning for Business	3
ISOM1001	Contemporary Information Systems for Organizations	3
MGMT1000	Principles of Business Management	3
Community ar	nd Peer Education Courses	2
Language and Skills – English Language Courses or Free Electives*		6
Language and	Skills – Chinese/Portuguese Language Course or Free Electives*	3
Language and	I Skills – Information Technology Course	3
Two General Education courses		6
Total Credits:		35

Year II		Credits
ACCT1000	Principles of Financial Accounting	3
ACCT2000	Management Accounting I	3
FINC2000	Financial Management	3
ISOM1005	Introduction to Business Intelligence and Information	3
ISOM2002	Statistics and Data Analysis	3
MGMT2000	Business Communications	3
MGMT2001	Organizational Behavior	3
MKTG2000	Principles of Marketing	3
Community and Peer Education Courses		1
Language and Skills – English Language Courses or Free Electives*		3
One General Education course		3
Total Credits:		31

Year III		Credits
ISOM3030	Quantitative Decision Analysis	3
MGMT3000	Global Business Environment	3
MGMT3003	Strategic Management	3
MGMT3009	Business Ethics and Corporate Social Responsibility	3
MKTG3000	Consumer Behavior	3
MKTG3002	Marketing Research	3
MKTG4000	International Marketing	3
Three General Education courses		9

2	n	
J	υ	

Year IV		Credits
ISOM4006	Project and Quality Management	3
MKTG4001	Integrated Marketing Communications	3
MKTG4002	Marketing Strategy	3
One General	Education course	3
Three courses selected from the Marketing Required Electives		9
Three bachelor's degree courses		9
Total Credits	<u>.</u>	30

#### **Marketing Required Electives**

Select three from the following:

- MKTG3001 Business-to-business Marketing
- MKTG4003 Services Marketing
- MKTG4005 Retail Strategy
- MKTG4011 Pricing Strategy
- MKTG4012 Customer Relationship Management
- MKTG4013 Digital Marketing
- MKTG4014 Brand Management
- MKTG4017 Special Topics in Marketing
- MKTG4019 Analytics for Marketing Decisions
- \* A student can test out of some of the Languages and Skills courses if he/she obtains certain examination scores/qualifications, please visit the Registry homepage for more information (<u>https://reg.um.edu.mo/current-students/curriculum-model/ug-curriculum-model/ug-curriculum-model/ug-curriculum-model/languages-and-skills/</u>).
- § Subject to the actual courses offered, study plan arrangement of that academic year will be announced in the FBA website (<u>https://fba.um.edu.mo/students/study-plans/</u>).
- □ Unless otherwise specified, the above information is accurate as at 21 June 2022. The University has the right from time to time to make changes in its regulations, rules and procedures as it sees fit.

## **Bachelor of Science**

## Accounting

Year I		Credits
ACCT1000	Principles of Financial Accounting	3
BECO1000	Principles of Microeconomics	3
BECO1001	Principles of Macroeconomics	3
GEST1001	Quantitative Reasoning for Business	3
MGMT1000	Principles of Business Management	3
Community ar	nd Peer Education Courses	2
Language and Skills – English Language Courses or Free Electives*		6
Language and	Skills – Chinese/Portuguese Language Course or Free Electives*	3
Language and	I Skills – Information Technology Course	3
Two General Education courses		6
Total Credits:		35

Year II		Credits
ACCT2000	Management Accounting I	3
ACCT2003	Business Law	3
ACCT2004	Intermediate Accounting	3
ACCT3002	Management Accounting II	3
FINC2000	Financial Management	3
FINC2001	Advanced Financial Management	3
FINC3003	Financial Markets and Institutions	3
ISOM2002	Statistics and Data Analysis	3
Community a	nd Peer Education Courses	1
Languages a	nd Skills Courses- English Language Courses or Free Electives*	3
One General Education course		3
One bachelor's degree course		3
Total Credits:		34

Year III		Credits
ACCT3004	Advanced Financial Accounting	3
ACCT3005	Accounting Information Systems	3
ACCT3009	Financial Statement Analysis	3
ISOM3000	Database Management	3
MGMT3009	Business Ethics and Corporate Social Responsibility	3
MKTG2000	Principles of Marketing	3

Total Credits:	30
One course selected from the Accounting Required Electives Group A	3
Three General Education courses	9

Year IV		Credits
ACCT4000	Auditing I	3
ACCT4006	Auditing II	3
ACCT4007	Corporate Governance	3
ACCT4010	Taxation in Macao and Hong Kong	3
ACCT4011	International Taxation	3
MGMT3003	Strategic Management	3
One General	Education course	3
One course s	elected from the Accounting Required Electives Group B	3
Two bachelor's degree courses		6
Total Credits:		30

#### **Accounting Required Electives Group A**

ACCT3006	Internship for Accounting Function I and
ACCT3007	Internship for Accounting Function II #
ACCT4001	Accounting Theory
ACCT4008	Management Control Systems

#### Accounting Required Electives Group B

ACCT4004	Financial Accounting in Hospitality and Gaming
ACCT4009	China Tax
ISOM3038	Financial Technology

- \* A student can test out of some of the Languages and Skills courses if he/she obtains certain examination scores/qualifications, please visit the Registry homepage for more information (<u>https://reg.um.edu.mo/current-students/curriculum-model/ug-curiculum-model/ug-curriculum-model/</u>
- § Subject to the actual courses offered, study plan arrangement of that academic year will be announced in the FBA website (<u>https://fba.um.edu.mo/students/study-plans/</u>).
- □ Unless otherwise specified, the above information is accurate as at 21 June 2022. The University has the right from time to time to make changes in its regulations, rules and procedures as it sees fit.
- # Paired courses ACCT3006 and ACCT3007 carry 1.5 credit each. Both courses must be completed to satisfy the Required Electives requirement.

### **Bachelor of Science**

#### **Business Intelligence and Data Analytics** •

Year I		Credits
ACCT1000	Principles of Financial Accounting	3
BECO1000	Principles of Microeconomics	3
GEST1001	Quantitative Reasoning for Business	3
MGMT1000	Principles of Business Management	3
ISOM1005	Introduction to Business Intelligence and Information	3
Community ar	nd Peer Education Courses	2
Language and	I Skills – English Language Courses or Free Electives*	6
Language and	Skills – Chinese/Portuguese Language Course or Free Electives*	3
Language and	I Skills – Information Technology Course	3
One General I	Education course	3
Total Credits:		32

### **Total Credits:**

Year II		Credits
FINC2000	Financial Management	3
ISOM2002	Statistics and Data Analysis	3
ISOM2007	Programming for Business Analytics	3
ISOM3000	Database Management	3 3
ISOM3016	Computer Networking for Business	3
ISOM3028	Advanced Computer Programming	3
MKTG2000	Principles of Marketing	3
Community a	nd Peer Education Courses	1
Language and	d Skills – English Language Courses or Free Electives*	3
Two General	Education courses	6
One course se Elective List 1	elected from the Business Intelligence and Data Analytics Required	3
<b>Total Credits</b>		34

dits:

Year III		Credits
ISOM3015	Big Data Management	3
ISOM3018	Business Data Mining and Visualization	3
ISOM3030	Quantitative Decision Analysis	3
ISOM3035	Operations Management	3
ISOM3036	Cyber Security and Blockchain	3
ISOM4005	Business Project Management	3

One course selected from the Business Intelligence and Data Analytics Required

Total Credits:	30
One bachelor's degree course	3
Two General Education courses	6
Elective List 2	3

Year IV		<b>Credits</b>
ISOM3031	Forecasting Models in Business	3
ISOM4007	Graduation Project	3
ISOM4008	Machine Learning for Business Intelligence	3
One course se Elective List 2	elected from the Business Intelligence and Data Analytics Required	3
Two General E	Education courses	6
Two bachelor'	s degree courses	6
Total Credits:		24

#### **Business Intelligence and Data Analytics Required Electives List 1**

- ISOM2006 E-Commerce and M-Commerce Strategies
- ISOM3002 Analysis and Design of Information Systems

### **Business Intelligence and Data Analytics Required Electives List 2**

ISOM3011	Mobile Application Development
ISOM3012	Website Design and Internet Business Applications
ISOM3014	Advanced Computer Networking for Business
ISOM3025	Business Modeling and Simulation
ISOM3037	Internet of Things and Cloud Computing

- \* A student can test out of some of the Languages and Skills courses if he/she obtains certain examination scores/qualifications, please visit the Registry homepage for more information (<u>https://reg.um.edu.mo/current-students/curriculum-model/ug-curriculum-model/ug-curriculum-model/ug-curriculum-model/ug-curriculum-model/languages-and-skills/</u>).
- § Subject to the actual courses offered, study plan arrangement of that academic year will be announced in the FBA website (<u>https://fba.um.edu.mo/students/study-plans/</u>).
- □ Unless otherwise specified, the above information is accurate as at 21 June 2022. The University has the right from time to time to make changes in its regulations, rules and procedures as it sees fit.

## **Bachelor of Science**

• Finance

Year I		Credits
ACCT1000	Principles of Financial Accounting	3
BECO1000	Principles of Microeconomics	3
BECO1001	Principles of Macroeconomics	3
GEGA1000	Macao and Chinese Civilization	3
GEST1001	Quantitative Reasoning for Business	3
MGMT1000	Principles of Business Management	3
ISOM1004	Applied Calculus	3
Community ar	nd Peer Education Courses	2
Language and	I Skills – English Language Courses or Free Electives*	6
Language and	Skills – Chinese/Portuguese Language Course or Free Electives*	3
One General I	Education course	3
Total Credits		35

Year II		Credits
BECO2000	Intermediate Economics	3
FINC2003	Corporate Finance	3
FINC3004	Portfolio Management	3
MGMT2000	Business Communications	3
MKTG2000	Principles of Marketing	3
ISOM2002	Statistics and Data Analysis	3
ISOM2005	Linear Algebra	3
Language and	d Skills – Information Technology Course	3
Community a	nd Peer Education Courses	1
Language and	d Skills – English Language Courses or Free Electives*	3
One General	Education course	3
Total Credits	:	31

Year III		Credits
BECO2001	Econometrics I	3
FINC3000	Derivative Securities	3
FINC3001	Financial Statement Analysis and Valuation	3
FINC4008	International Finance & Global Issues	3
MGMT3003	Strategic Management	3
ISOM3029	Computer Programming Using C++	3
GELH1000	Chinese Language and Culture	3

Total Credits:	33
One bachelor's degree course	3
One General Education course	3
Two courses selected from the Finance Required Electives	6

Year IV		Credits
FINC4009	Financial Modeling	3
FINC4011	Graduation Project on Applied Finance (one-year course	with 6 credits)6
Two courses	selected from the Finance Required Electives	6
Two General	Education Courses	6
Two bachelo	r's degree courses	6
Total Credits	8:	27

#### **Finance Required Electives**

BECO3006	Money and Banking
BECO3011	<b>Financial Econometrics</b>

- Financial Econometrics BECO3011 BECO4014 International Banking
- FINC3002 Theory of Finance
- Financial Markets and Institutions FINC3003
- FINC4001 Case Studies in Corporate Finance
- **Risk and Insurance**
- FINC4003
- FINC4004 Mergers and Acquisitions
- **Fixed Income Securities** FINC4005
- Real Estate Investment and Financing FINC4006
- FINC4007 **Behavioral Finance**
- FINC4010 **Bank Management**
- FINC4012 **Financial Risk Management**
- Advanced Financial Mathematics FINC4013
- FINC4014 Exotic Options and Structured Products
- Advanced Calculus ISOM3033
- A student can test out of some of the Languages and Skills courses if he/she obtains certain examination scores/qualifications, please visit the Registry homepage for more (https://reg.um.edu.mo/current-students/curriculum-model/ua-curriculuminformation model/languages-and-skills/).
- § Subject to the actual courses offered, study plan arrangement of that academic year will be announced in the FBA website (https://fba.umac.mo/students/study-plans/).
- Unless otherwise specified, the above information is accurate as at 21 June 2022. The ٦ University has the right from time to time to make changes in its regulations, rules and procedures as it sees fit.

## **Bachelor of Science**

## • Finance with Specialization in Financial Engineering

Year I		Credits
ACCT1000	Principles of Financial Accounting	3
BECO1000	Principles of Microeconomics	3
BECO1001	Principles of Macroeconomics	3
GEGA1000	Macao and Chinese Civilization	3
GEST1001	Quantitative Reasoning for Business	3
MGMT1000	Principles of Business Management	3
ISOM1004	Applied Calculus	3
Community ar	nd Peer Education Courses	2
Language and	I Skills – English Language Courses or Free Electives*	6
Language and	Skills – Chinese/Portuguese Language Course or Free Elective*	3
One General Education course		3
Total Credits		35

Year II		Credits
BECO2000	Intermediate Economics	3
FINC2003	Corporate Finance	3
FINC3004	Portfolio Management	3
MGMT2000	Business Communications	3
MKTG2000	Principles of Marketing	3
ISOM2002	Statistics and Data Analysis	3
ISOM2005	Linear Algebra	3
Language and	d Skills – Information Technology Course	3
Community a	nd Peer Education Courses	1
Language and	d Skills – English Language Courses or Free Electives*	3
One General Education course		3
Total Credits:		31

Year III		Credits
BECO2001	Econometrics I	3
BECO3011	Financial Econometrics	3
FINC3000	Derivative Securities	3
FINC4005	Fixed Income Securities	3
FINC4008	International Finance & Global Issues	3
MGMT3003	Strategic Management	3
ISOM3029	Computer Programming Using C++	3
GELH1000	Chinese Language and Culture	3
ISOM3033	Advanced Calculus	3

One General Education course	3
One bachelor's degree course	3
Total Credits:	33

Year IV		Credits
FINC4011	Graduation Project on Applied Finance (one-year course with 6 c	redits)6
FINC4012	Financial Risk Management	3
FINC4014	Exotic Options and Structured Products	3
One course selected from the Finance Required Electives 3		3
Two General Education courses		6
Two bachelor's degree courses		6

27

## Total Credits:

#### **Finance Required Electives**

- BECO3006 Money and Banking BECO4014 International Banking FINC3002 Theory of Finance Financial Markets and Institutions FINC3003 FINC4001 Case Studies in Corporate Finance FINC4003 **Risk and Insurance** Mergers and Acquisitions FINC4004 FINC4006 Real Estate Investment and Financing FINC4007 **Behavioral Finance** FINC4010 **Bank Management** FINC4013 Advanced Financial Mathematics
- \* A student can test out of some of the Languages and Skills courses if he/she obtains certain examination scores/qualifications, please visit the Registry homepage for more information (<u>https://reg.um.edu.mo/current-students/curriculum-model/ug-curiculum-model/ug-curriculum-model/</u>
- § Subject to the actual courses offered, study plan arrangement of that academic year will be announced in the FBA website (<u>https://fba.umac.mo/students/study-plans/</u>).
- □ Unless otherwise specified, the above information is accurate as at 21 June 2022. The University has the right from time to time to make changes in its regulations, rules and procedures as it sees fit.

## **Bachelor of Science**

• International Integrated Resort Management with Specialization in Gaming Management

Year I		Credits
ACCT1000	Principles of Financial Accounting	3
BECO1000	Principles of Microeconomics	3
GEST1001	Quantitative Reasoning for Business	3
IRTM1000	Introduction to Integrated Resort Management	3
IRTM2000	Introduction to Gaming Management	3
MGMT1000	Principles of Business Management	3
One General I	Education courses	3
Community ar	d Peer Education Courses	2
Language and Skills – English Language Courses or Free Electives *		6
Language and Skills – Chinese/Portuguese Language Course or Free Electives *		3
Language and	Skills – Information Technology Course	3

**Total Credits:** 

Year II		Credits
ACCT2000	Management Accounting I	3
BECO1001	Principles of Macroeconomics	3
FINC2000	Financial Management	3
IRTM2001	Psychology of Gambling	3
IRTM3004	The Macao Gaming and Hospitality Industries	3
IRTM4001	Resort Marketing and Promotion	3
ISOM2002	Statistics and Data Analysis	3
MGMT2000	Business Communications	3
Community a	nd Peer Education Courses	1
Language and	d Skills – English Language Course or Free Electives *	3
Three Genera	al Education courses	9
Total Credits	:	37

35

VeerIII		Cradita
Year III	Figure del Assessmentione in 11 and 11 and 0 and 10	Credits
ACCT4004	Financial Accounting in Hospitality and Gaming	3
IRTM3003	Casino Management	3
IRTM3006	Human Resource Management in Integrated Resort	3
IRTM3012	Gaming Law	3
IRTM3016	Casino Marketing	3
IRTM3018	Casino Mathematics	3
IRTM4002	Global Issues in Resort and Gaming Management	3
One Gaming	Management Required Elective	3
One General	Education course	3
Three bachelor's degree courses		9
Total credits		36

Year IV		Credits
IRTM4000	Strategic Management for the Resort and Gaming Industries	3
IRTM4004	Gaming Management Internship **	3
IRTM4005	Graduation Project on Gaming Management ***	3
One Commo	n Required Elective	3
Two General Education course		6
Total Credits	3:	18

### Total Credits:

### **Gaming Management Required Electives List**

IRTM3001	Quality Service Management
IRTM3005	Festival and Event Management

IRTM3009 Food and Beverage Management

### **Common Required Electives List**

BECO4005 IRTM3000 IRTM3007 IRTM3008 IRTM3010 IRTM3015	Applied Economics for Leisure Industries Social and Economic Impacts of Gambling Technology and Innovation in the Resort and Gaming Industries Travel and Tourism Management Selected Topics in Human Resource Management Revenue Management
IRTM3015 IRTM4008	
IRTM4008	Questionnaire Design and Survey Data Analysis Special Topics in Hotel and Resort Management

A student can test out of some of the Languages and Skills courses if he/she obtains \* certain examination scores/qualifications, please visit the Registry homepage for more (https://reg.um.edu.mo/current-students/curriculum-model/ug-curriculuminformation

#### model/languages-and-skills/).

- \*\* Internship course
- \*\*\* Research course
- § Subject to the actual courses offered, study plan arrangement of that academic year will be announced in the FBA website (https://fba.um.edu.mo/programmes/bachelor/study-plans-and-self-graduation-check/).
- Unless otherwise specified, the above information is accurate as at 21 June 2022. The University has the right from time to time to make changes in its regulations, rules and procedures as it sees fit.

## FACULTY OF BUSINESS ADMINISTRATION

## **Bachelor's Degree Programmes**

## **Bachelor of Science**

## • International Integrated Resort Management with Specialization in Convention and Hospitality Management

Year I		Credits
ACCT1000	Principles of Financial Accounting	3
BECO1000	Principles of Microeconomics	3
GEST1001	Quantitative Reasoning for Business	3
IRTM1000	Introduction to Integrated Resort Management	3
IRTM2000	Introduction to Gaming Management	3
MGMT1000	Principles of Business Management	3
One General Education courses		3
Community and Peer Education Courses		2
Language and Skills – English Language Courses or Free Electives *		6
Language and Skills – Chinese/Portuguese Language Course or Free Electives *		3
Language and	Skills – Information Technology Course	3
-		

35

### **Total Credits:**

Year II		Credits
ACCT2000	Management Accounting I	3
BECO1001	Principles of Macroeconomics	3
FINC2000	Financial Management	3
IRTM3002	Convention and Exhibition Management	3
IRTM3004	The Macao Gaming and Hospitality Industries	3
IRTM4001	Resort Marketing and Promotion	3
ISOM2002	Statistics and Data Analysis	3
MGMT2000	Business Communications	3
Community and Peer Education Courses		1
Language and Skills – English Language Course or Free Electives *		3
Two General Education courses		6
One bachelor's degree course		3
Total Credits		37

Year III		Credits
IRTM3001	Quality Service Management	3
IRTM3005	Festival and Event Management	3
IRTM3006	Human Resource Management in Integrated Resort	3
IRTM3009	Food and Beverage Management	3
IRTM3014	Hospitality and Tourism Law	3
IRTM3017	Accommodation, Facilities and Security Management	3
IRTM4002	Global Issues in Resort and Gaming Management	3
One Convention and Hospitality Management Required Elective		3
Two General Education courses		6
Two bachelor's degree courses		6
Total Credits:		36

Year IV		Credits
IRTM4000	Strategic Management for the Resort and Gaming Industries	3
IRTM4006	Convention and Hospitality Management Internship **	3
IRTM4007	Graduation Project on Hospitality Management ***	3
One Common Required Elective		3
Two General Education courses		6
Total Credits:		18

### **Convention & Hospitality Management Required Electives List**

Psychology of Gambling
Casino Management
Professional Development in Convention and Hospitality Industry
Quantitative Decision Analysis

### **Common Required Electives List**

BECO4005	Applied Economics for Leisure Industries
IRTM3000	Social and Economic Impacts of Gambling
IRTM3007	Technology and Innovation in the Resort and Gaming Industries
IRTM3008	Travel and Tourism Management
IRTM3010	Selected Topics in Human Resource Management
IRTM3015	Revenue Management
IRTM4008	Questionnaire Design and Survey Data Analysis
IRTM4009	Special Topics in Hotel and Resort Management

\* A student can test out of some of the courses if he/she obtains certain examination scores/qualifications, please visit the Registry homepage for more information (https://reg.um.edu.mo/current-students/ugmodel/lang\_skills/).

- \*\* Internship course
- \*\*\* Research course
- § Subject to the actual courses offered, study plan arrangement of that academic year will be announced in the FBA website (https://fba.um.edu.mo/programmes/bachelor/studyplans-and-self-graduation-check/).
- □ Unless otherwise specified, the above information is accurate as at 21 June 2022. The University has the right from time to time to make changes in its regulations, rules and procedures as it sees fit.

## **Course Description**

### ACCT1000 PRINCIPLES OF FINANCIAL ACCOUNTING

This course introduces students financial accounting by covering accounting concepts and their applications. Course contents include double entry bookkeeping, transaction analysis, accounting cycle, preparation of financial statements including income statement, balance sheet and cash flow statement, analysis of special accounts such as cash, accounts receivable, inventories, property, plant and equipment, liabilities and shareholders' equity, and the applications of the International Financial Reporting Standards (IFRS) to financial reporting. It focuses on conceptualizing and critically assessing important accounting techniques and theoretical knowledge through this course. Real business practices will be introduced by guest lecturers from Big4 accounting firms.

Pre-requisite: None

### ACCT2000 MANAGEMENT ACCOUNTING I

This is the first course in the Cost/Managerial sequence for Accounting and Financial Controllership students. It provides an introduction and detailed discussion of Cost Accounting topics such as: Cost terminology, job order and process costing, cost assignment systems, maser budgets and flexible budgets.

Pre-requisite: ACCT1000 Principles of Financial Accounting

### ACCT2001 INTERMEDIATE ACCOUNTING I

This is the first course in a three course sequence on Financial Accounting for Accounting and Financial Controllership students. This course provides a presentation and examination of topics introduced Principles of Financial Accounting. The emphasis is on the conceptual foundations of accounting principles and translating them into procedural treatments of financial information. Topics covered in this course will include coverage of the following: financial accounting standards, the conceptual framework, qualitative characteristics of accounting, the accounting cycle, and a detailed discussion of the preparation and use of financial statements. There will also be an in-depth analysis of specific accounts such as cash, accounts receivable, inventories, property, plant and equipment and intangibles.

Pre-requisite: ACCT1000 Principles of Financial Accounting

### ACCT2003 BUSINESS LAW

This course aims to familiarize students with the fundamental concepts of the legal environment of business, so they will be able to take legal dimensions into account when making business decisions and to understand the main similarities of, and differences between, Macao civil law, Hong Kong and general common law and China business law. Topics to be covered include: Legal persons and companies; contracts, rights and business torts especially negligence; constraints on business from employment and environmental protection laws; and basic trade law.

Pre-requisite: MGMT1000 Principles of Business Management

### ACCT2004 INTERMEDIATE ACCOUNTING

This course is intended to equip students with knowledge and skills of intermediate accounting and apply the theoretical concepts to the accounting treatments of specific financial statement elements as required by International Financial Reporting Standards (IFRSs). Topics include intangibles, impairment of assets, provisions, contingent liabilities, non-current liabilities, equity, investments, leases, deferred taxation, revenue recognition, accounting changes and error analysis. Applications of IFRSs in financial reporting and international cases are demonstrated throughout the course to enable students to acquire the specific knowledge and skills being developed in the course.

Pre-requisite: ACCT1000 Principles of Financial Accounting

### ACCT3000 INTERMEDIATE ACCOUNTING II

This is the second course in a three course sequence on Financial Accounting for Accounting and Financial Controllership students. This course continues an examination of the liability and equity accounts. Topics will include current liabilities and contingencies, long-term liabilities and leases, stockholders' equity including coverage of the issuance and repurchase of shares, dividend policy, and the impact of dilutive securities on earnings per share. The effect of share conversions, warrants, stock options and compensation plans will also be discussed. Pre-requisite: ACCT2001 Intermediate Accounting I

## ACCT3001 INTERNATIONAL FINANCIAL REPORTING STANDARDS AND THE GLOBAL ENVIRONMENT

This course is to provide students the basic concepts of the development of IFRS that will receive broad consensus support, regulators have been active in developing further requirements concerning corporate governance. It also focuses on the international accounting scandals in the US or Europe and by shareholder activism fueled by the apparent lack of any relation between increases in directors' remuneration and company performance.

Pre-requisite: ACCT1000 Principles of Financial Accounting and ACCT2001 Intermediate Accounting I

### ACCT3002 MANAGEMENT ACCOUNTING II

This is the second course in the Cost Managerial sequence for Accounting and Financial Controllership students. It addresses topics more closely associated with the use of accounting date for decision making within the company. It includes topics such as: decision making and relevant information, pricing decisions, cost allocations for service departments and joint products, transfer pricing and responsibility accounting.

Pre-requisite: ACCT2000 Management Accounting I

#### ACCT3003 INTERMEDIATE ACCOUNTING III

This is the third course in a three course sequence on Financial Accounting for Accounting and Financial Controllership students. This course examines issues in financial reporting for both the perspectives of both the preparer and the user. The course makes reference to the US accounting standards and the International financial accounting standards. Topics will include investments, accounting for derivative financial instruments, foreign currency issues, revenue recognition, accounting for deferred taxes, accounting changes and error analysis, statement of cash flows and basic financial statement analysis.

Pre-requisite: ACCT3000 Intermediate Accounting II

### ACCT3004 ADVANCED FINANCIAL ACCOUNTING

This course provides students with a comprehensive understanding of business combinations and inter-corporate ownership. It covers the preparation of consolidated financial statements, beginning with the basic consolidation process and continuing through a variety of inter-company transactions. It will also cover multinational operations including the treatment of transactions denominated in foreign currencies.

Pre-requisite: ACCT2001 Intermediate Accounting I

### ACCT3005 ACCOUNTING INFORMATION SYSTEMS

This course provides a detailed study of accounting as an information system. It will examine the documentation tools used in the collection, storage and usage of information in common business processes. Control issues will also be discussed with reference to computerized information environments and manual systems. Students will also learn about the system development cycle.

Pre-requisite: ACCT1000 Principles of Financial Accounting and ISOM1001 Contemporary Information Systems for Organizations or ACCT1000 Principles of Financial Accounting and any course from GE science and technology area

### ACCT3006 INTERNSHIP FOR ACCOUNTING FUNCTION I

This course is designed to provide a broad exposure to the operations of Accounting and knowledge of the structure, goals and work procedures participating in guided observations and activities. This course with internship component is limited to year three students who are majoring in the Professional Accountancy and Accounting and Information Systems. Students of the course are supervised directly by professionals in organizations who communicate directly with the course coordinator.

Pre-requisite: ACCT2001 Intermediate Accounting I with a cumulative GPA of 3.0 or above and approval from the course coordinator

### ACCT3007 INTERNSHIP FOR ACCOUNTING FUNCTION II

This course is designed to provide a broad exposure to the operations of Accounting and knowledge of the structure, goals and work procedures participating in guided observations and activities. This course with internship component is limited to year three students who are majoring in the Professional Accountancy and Accounting and Information Systems. Students of the course are supervised directly by professionals in organizations who communicate directly with the course coordinator.

Pre-requisite: ACCT2001 Intermediate Accounting I with a cumulative GPA of 3.0 or above and approval from the course coordinator

### ACCT3008 PUBLIC SECTOR ACCOUNTING

This course will cover fundamental concepts of accounting principles and practices in government and not-for-profit organizations. Concepts of budgeting, fund accounting, encumbrances and value of money in the public sector will be important topics in this class. Pre-requisite: ACCT1000 Principles of Financial Accounting

### ACCT3009 FINANCIAL STATEMENT ANALYSIS

The course focuses on the most salient aspects of accounting, analysis, and valuation. Students are taught to analyse, critically assess and interpret financial statement data of real companies to make informed business decisions. The course makes financial statement analysis engaging, relevant to business world and contemporary to international accounting standards. To that end, it consistently incorporates real company data and international business cases throughout teaching to reinforce the specific knowledge and skills being developed in the course. Pre-requisite: ACCT3004 Advanced Financial Accounting

### ACCT4000 AUDITING I

This course will discuss Generally Accepted Auditing Standards (GAAS) and International Standards on Auditing (ISA). The student will learn about the role of the auditing in a modern corporate setting. This will include the demand for auditing services, ethical dimensions of the auditing function and the responsibilities and legal liabilities of auditors.

The student will also learn the importance and process of many audit functions including: planning audits, collection of audit evidence, assessing risk and internal controls, understanding audit sampling and analytical procedures, constructing the audit report.

Pre-requisite: ACCT3000 Intermediate Accounting II AND ACCT3005 Accounting Information Systems

### ACCT4001 ACCOUNTING THEORY

This course will address current controversies in Accounting, Auditing and Tax Accounting. It will focus on issues of current interest to the profession and/or accounting research. This course will generally be available to year four Accounting and Financial Controllership students only. If the topic permits, the instructor may open the course to year three Accounting and Financial Controllership students also.

Pre-requisite: ACCT3000 Intermediate Accounting II

### ACCT4002 SPECIAL TOPICS IN ACCOUNTING

This course will address current controversies in Accounting, Auditing and Tax accounting It will

focus on issues of current interest to the profession and/or accounting research. This course will generally be available to year four Accounting and Financial Control students only. If the topic permits, the instructor may open the course to your three Accounting and Financial Control students also.

Pre-requisite: ACCT2000 Management Accounting I

### ACCT4004 FINANCIAL ACCOUNTING IN HOSPITALITY AND GAMING

This course introduces a brief background of accounting and auditing technique within the casino gaming industry. It discusses the unique accounting and auditing aspects of the casino floor, specifically the casino cage, table games and slot operations, along with all of the new technology in these departments. It also discusses the accounting and auditing of treasury, receivable, payable, tax and financial reporting cycles, which touches many aspects of casino operations in the industry.

Pre-requisite: none

### ACCT4005 MANAGERIAL ACCOUNTING IN HOSPITALITY AND GAMING

The main purpose of the subject is to learn how to use accounting as a managerial tool to improve operational efficiency and profitability of gaming and hospitality firms through revenue enhancement and cost reduction.

Pre-requisite: ACCT2000 Management Accounting I or ACCT2002 Principles of Managerial Accounting

### ACCT4006 AUDITING II

This is the second course in Auditing. The course covers knowledge and intellectual skills including: 1) the appropriate audit procedures for different audit cycles, 2) internal control structures and test of transactions, 3) tests of details of balances for each cycle, 4) audit of subsequent events and post balance sheet transactions, and 5) finalize audit reports for management review. International auditing standards and business cases are demonstrated throughout the course to enable students to acquire the specific knowledge and skills being developed in the course.

Pre-requisite: ACCT4000 Auditing I

### ACCT4007 CORPORATE GOVERNANCE

This course provides an advanced level of knowledge of the theories, models and practice of accounting and finance, together with the ability to relate this knowledge to wider issues of management and corporate strategy. It also provides the ability to critically analyse and use relevant information to offer interpretations and solutions to problems. Students have the opportunity to focus in depth on a specific area of the business finance function. The course also relates the real world examples to illustrate the existing problems.

Pre-requisite: ACCT1000 Principles of Financial Accounting

### ACCT4008 MANAGEMENT CONTROL SYSTEMS

This course covers knowledge in advanced management control systems and contemporary research in management accounting. It focuses on management accounting practices and research throughout the course. The course takes a broad approach to current issues and contemporary research in management accounting with extensive coverage of new management accounting practices being adopted by innovative international companies around the world, including activities based management, kaizen, target costing and balanced scorecard. International cases and critical analysis of management control systems are covered in the course. Cases require the balanced application of skills and knowledge of contemporary research in management accounting.

Pre-requisite: ACCT3002 Management Accounting II

### ACCT4009 CHINA TAX

This course provides comprehensive coverage of the tax system in China. It introduces the context in which China's laws operate and the many significant issues that are required for

business and investment activities on the mainland. The course covers specifically on the taxation laws of mainland China including Individual Income Tax, Enterprise Income Tax, Value-Added Tax, Business Tax, the various indirect taxes, tax reforms, tax treaties and so on. Pre-requisite: None

#### ACCT4010 TAXATION IN MACAO AND HONG KONG

This course introduces the various taxes, direct and indirect, currently levied in Macao and Hong Kong. Both computational and conceptual understanding are stressed. At the conclusion of this course, the students should be able to apply tax principles, ordinances and procedures in evaluating tax cases in order to provide proper computations for tax returns and to present supporting arguments and thoughts in a logical manner.

Pre-requisite: ACCT2001 Intermediate Accounting I

#### ACCT4011 INTERNATIONAL TAXATION

This course provides an introduction to tax systems in other (not Hong Kong and Macao) selected tax jurisdictions. It also provides additional coverage on selected Hong Kong and Macao taxes such as Tourism tax, Excise tax, Motor Vehicle Tax, Stamp Tax and other taxes. Pre-requisite: ACCT4010 Taxation in Macao and Hong Kong

#### ACCT7012 FUNDAMENTALS OF ACCOUNTING

This course aims at introducing the conceptual foundation of accounting principles and translating them into procedural treatments of accounting information. The focus is on asset, liability and owners' equity measurement and timing of recognition issues, together with accounting theory issues such as standard setting and development, conceptual framework of accounting, controversies in accounting as well as ethical decision making models. This is a basic to intermediate level course and the emphasis will be put on International Financial Reporting Standards.

Pre-requisite: None

#### ACCT7013 FINANCIAL REPORTING

This course provides students with substantial knowledge in financial accounting and reporting. Major topics include financial statement disclosures, accounting for shareholders' equity, provisions, contingent liabilities and contingent assets, income taxes, financial instruments, property, plant and equipment, intangible assets, and impairment of assets. The applications of IFRSs for the treatments and preparations of financial statements are emphasized throughout the course.

Pre-requisite: ACCT7012 Fundamentals of Accounting

## ACCT7014 BUSINESS LAW

This course introduces the legislative system and commercial law in Macao. Topics include liability of commercial contracts, product liability and compensation, forms and liability of agents, legislation concerning limited liability companies, share limited companies and group corporations, commercial instruments, carriage of goods and insurance and commercial arbitration.

Pre-requisite: None

#### ACCT7015 MANAGEMENT ACCOUNTING

This course is about the managerial use of accounting data to plan and control personnel and operations in the firm. The focus is on planning, decision-making and control by organizations, and on the accounting systems that managers have to assist them in their decisions about resource allocation and performance evaluation. Major topics included are product costing, costing approaches used in today's business environments, relevant costs for decision analysis, variance analysis, divisional performance evaluation and transfer pricing. Pre-requisite: None

#### ACCT7017 FINANCIAL MANAGEMENT

This course offers students a more advanced understanding of important concepts and theories in the field of corporate finance. It covers basic topics including capital budgeting, alternative valuation methods, capital structure decisions, corporate payout policy, securities offering decisions, as well as more advance topics (optional) such as options, futures, and corporate risk management. The objective of this course is to provide students with essential tools to study more advanced courses in finance.

Pre-requisite: None

### ACCT7018 ACCOUNTING FOR DECISION MAKING

This course introduces the fundamental concepts and analytical techniques of financial and managerial accounting. It includes the concepts associated with the information for external users, such as the basic elements of IFRS, the financial statements, etc. It also includes concepts and technologies associated with the information for managers within the firms, such as costs concepts, CVP, budgeting, etc. This course enables students to have better understanding financial and managerial accounting information and utilize them to analyze company's financial positions, resolve management problems, and enhance financial and managerial decision-making.

Pre-requisite: None

#### ACCT7050 ADVANCED FINANCIAL REPORTING

This is an advanced level financial accounting course. Topics covered will include business combinations and impairment of goodwill, group, associate and joint venture reporting as well as accounting for foreign currency translation. The analysis of a company's quality of earnings and earnings management will also be discussed. Emphasis will be placed on the application of International Financial Reporting Standards.

Pre-requisite: ACCT7013 Financial Reporting and Analysis or equivalent

#### ACCT7051 CORPORATE GOVERNANCE AND SOCIAL RESPONSIBILITY

This course aims at imparting an ethical mindset to the students in the conduct of business and the treatment of accounting information. Topics include the concept of corporate governance and accountability, the role and value of effective corporate governance, the role of directors and officers, ethics in and out of the boardroom, competition and compliance in trade practices, international corporate governance and corporate social responsibility in action. Pre-requisite: None

#### ACCT7052 PERFORMANCE MANAGEMENT AND CONTROL SYSTEMS

This is an advanced management accounting course with an organizational and strategic focus. Topics include how to create value through management control systems, organizational analysis and value chain, strategic performance measurement and benchmarking, continuous quality improvement, project management and analysis and organizational strategies. Pre-requisite: ACCT7015 Management Accounting or equivalent

#### ACCT7053 FINANCIAL RISK MANAGEMENT

This course aims at introducing the techniques of managing various types of financial risks which may be encountered by an organization. Topics covered include an introduction to financial risk management and accounting for financial instruments, sourcing and management of funds, cash flow and working capital management, investment evaluation and capital budgeting, accounting for financial instruments, hedge accounting, interest rate risk management, foreign exchange and how to control risks including SOX requirements.

Pre-requisite: ACCT7017 Financial Management or equivalent

#### ACCT7055 AUDITING AND ASSURANCE

This course aims at introducing the nature and diversity of auditing and assurance services and the environment in which audit practitioners operate. Topics include assurance services framework, engagement acceptance, and communication with governance, assessing audit risk,

the audit process, internal control, and auditor's responsibility to consider fraud, auditor's responsibility to consider going concern, performance audits, other assurance services and internal audit.

Pre-requisite: None

#### ACCT7056 TAXATION

This course aims at introducing the various direct and indirect taxes currently in force in the Macao and Hong Kong Special Administrative Regions as representative examples of taxation from both continental and common law systems. The taxes will include those levied on goods, properties, personal income and corporate earnings. Some discussions on tax planning issues will also be covered.

Pre-requisite: None

#### ACCT7060 FINANCIAL STATEMENT ANALYSIS FOR DECISION MAKING

The course aims to demonstrate how financial statements can be reformulated, analysed and interpreted for decision making. It further examines how accounting information is used to assess and manage credit, liquidity, operating risks in the market.

Pre-requisite: ACCT7013 Financial Reporting

#### ACCT8011 ACCOUNTING RESEARCH METHODS AND SEMINAR

This course is designed for PhD students and young post-doctoral researchers in accounting who would like to extend and deepen their knowledge on current research issues in accounting. This course will examine accounting theory with an emphasis on analytical modeling of accounting issues. First part of the course will stress the relation between economics and accounting, as income measurement and costing issues will be analyzed. Subsequently market valuation and accounting valuation will be contrasted and investigated. Finally the course will emphasize the relation between performance evaluation and the information content in accounting numbers.

Pre-requisite: ACCT712 Financial Accounting and Theory & ACCT715 Management Accounting or equivalent (master level)

#### ACCT8012 CONTEMPORARY RESEARCH IN ACCOUNTING

The course covers contemporary methodologies for empirical research in Finance and Accounting. Through the study and analysis of contemporary research, it highlights the role of financial and other information in setting equity prices.

Pre-requisite: None

#### BAGC7011 RESEARCH METHODS

This course prepares students to design and conduct academic and applied research in business. It aims to provide essential knowledge and skills to the students for mastering the research process. Major topics include problem identification, literature review, research design, data collection, analytical methods and report writing.

Pre-requisite: ISOM7012 Statistical Analysis and Applications (for students of MBA Programme).

None [for students of Master of Science in Data Science (Marketing Analytics)]

#### BAGC7998 PROJECT REPORT

This course intends to cultivate analytical and problem-solving skills among students through the design and implementation of a business project. Students are required to identify a real business issue faced by companies and provide a data driven solution in the project report. The issue, which can be local or international in scope, may come from any business area and industry sector.

Pre-requisite: None

#### BAGC8000 RESEARCH WRITING

Academic writing is a critical skill for academics. This course is thus developed to introduce the principles of good academic writing to business PhD students. The primary purpose is to educate

student on the art and science of writing a PhD-level research proposal and dissertation. Specifically, students will learn basic issues to improve their micro and macro writing skills. In addition, this course will introduce students to the process of submitting and publishing in peerreviewed journals and to academic conferences. Students will also learn more about ethical issues in academic writing, the art of paraphrasing, and how to avoid plagiarism. Pre-requisite: None

#### **BAGC8001 RESEARCH ETHICS**

The course provides students with an understanding of the following issues:

- The need for research ethics and the responsibility of the researcher (the student)

- The most common types of academic dishonesty (such as fabrication and plagiarism)

- How to avoid committing acts of academic dishonesty (such a through using citations and references)

- How the University deals with students who have been proven to have committed acts of academic dishonesty (The University's 'Rules on Handling Student Academic Dishonesty' will be outlined)

Pre-requisite: None

## BAGC8300 RESEARCH METHOD FOR BUSINESS AND MANAGEMENT RESEARCH

Research competencies and skills are essential for the effective conduct and understanding of research and ultimately for evidence-based decision-making, whether in business, government or civil society. The development of research competencies is particularly relevant for junior academics whose career is increasingly dependent on their research output. When embarking on a DBA program, students also need to have a solid understanding of what constitutes good research, how to design and execute empirical studies and how to present and discuss research results in a convincing and effective manner.

Pre-requisite: None

#### BAGC8301 RESEARCH WRITING AND ETHICS

This course is the warm-up course for students to understand more about research writing and ethics before they choose their research topic and supervisor. Professors (also potential supervisors), and outstanding visiting scholars who know qualitative method (interview, case method), experimental method (ANOVA, MONOVA), and quantitative method (modelling, regression, SEM, multi-level modulation and algorithm, etc.) from different areas will teach in different sessions. Some guest speakers from industry will also share their viewpoints and insights about business operation and management. This is also a very critical and fundamental part of DBA learning and upcoming thesis writing.

Pre-requisite: None

#### BAGC8321 RESIDENTIAL WORKSHOP I

Residential Workshop I would be held outside Macau. It consists of lectures from professors in leading universities, site visits to renowned companies, social events, and intensive discussion among students on one selected topic for the workshop. Pre-requisite: None

#### BAGC8322 RESIDENTIAL WORKSHOP II

Residential Workshop II would be held outside Macau. It consists of lectures from professors in leading universities, site visits to renowned companies, social events, and intensive discussion among students on one selected topic for the workshop. Pre-requisite: None

#### BAGC8397 DOCTORAL THESIS

The course is the most significant learning experience of the programme. Students have the opportunity to apply theories learned in the taught courses and to conduct an independent research project examining an important issue. The systematic investigation process will confirm

for the participants their ability to conduct independent research, demonstrate their expertise in a chosen area of interest and make an intellectual contribution to the practice of management.

#### BECO1000 PRINCIPLES OF MICROECONOMICS

The course enables students to understand the behaviour of different economic agents in the economy and their interactions in the market. It introduces to students the patterns of different market structures and their associated impacts, enabling students to understand the role of the government and the degree of efficiency in different market structures. The course also enables students to apply basic economic theories and models to explain real world economic phenomena.

The course covers the concepts of the demand, supply, their elasticity and market equilibrium. Consumer choices, production process, the costs of production and different market structures and their patterns will also be discussed in the classes.

Pre-requisite: None

#### BECO1001 PRINCIPLES OF MACROECONOMICS

The course enables students to understand how the economy operates as a whole. It introduces to students the basic economic indicators, the underlining economic forces and the roles of the public and private sectors, enabling students to apply basic economic theories and models to explain contemporary economic issues.

The course introduces to students the basic economic indicators such as gross domestic products, inflation, unemployment interest rate and their measurement. Concepts such as money supply and demand, the stock market, aggregate demand, fiscal and monetary policies and macroeconomic theories, including the Monetarism and New Classical theory will be discussed in the course.

Pre-requisite: None

#### BECO2000 INTERMEDIATE ECONOMICS

This course covers topics on both the Macro- and Micro-economics sides at the intermediate level. On the macroeconomics side, the Keynesian IS-LM model in the close and open economy, various exchange rate regimes and their implications to the economy will be discussed. In addition, the AD-AS model will be derived and employed to perform policy analyses. On the microeconomics side, quantitative models in relation to consumer's choice, budget constraints and utility maximization will be focused. The concepts of profit maximization, cost minimization, firm's and industry's supply as well as the market structures of perfect competition, oligopoly and monopoly will also be addressed in the course. After this course, student would have a stronger quantitative background in economics. Besides, students are expected to be able to apply more sophisticated macro- and micro- economic models to conduct empirical economic analyses. Pre-requisites: BECO1000 Principles of Microeconomics AND BECO1001 Principles of

Macroeconomics

#### BECO2001 ECONOMETRICS I

With the growing complexity of financial markets and their relations with the emerging economy, in-depth understanding of empirical relations postulate by economic theory is of paramount importance. This course highlights of the emergence of econometrics and its relation with finance. With a minimum level of theoretical discussion, it introduces econometric models. It focuses on the basics of econometric methods in the finance area and covers the statistical tools needed to understand (empirical) economic research, and to plan and execute independent research projects required in other quantitative subjects. Topics include statistical inference, regression, least squares, spherical error, dummy variables, panel data and non-spherical error. This course required you to have knowledge of economics, mathematics and statistics.

Pre-requisite: ISOM2002 Statistics and Data Analysis

#### BECO3000 ECONOMIC POLICY AND PLANNING

This course aims to introduce to students the political, social and economic considerations on the making of economic policies and planning. It delivers to students the analytical skills necessary in making policy suggestions to deal with the contemporary economic issues in Macao and the nearby regions.

In this course, topics such as the general principles of public policies, economic rationales for the state, market failure, the distributional and other goals of economic policies, fiscal and monetary policies and external shocks and domestic policy responses will be covered. Pre-requisite: BECO3009 Intermediate Macroeconomics

#### BECO3001 PUBLIC ECONOMICS AND FINANCE

This course introduces to students the tools for analyzing the role of state (government) in the economy. It discusses the justification for government intervention in a market economy, analyzes the key area of government policy in public finance.

The topics covered in this course are Efficiency and market, Rationales for Government Intervention, Market Failure, Cost-Benefit Analysis, Equity and Rationale for Income Redistribution, Income Support for the Poor, Social Insurance and Tax Incidences.

Pre-requisite: BECO3008 Intermediate Microeconomics

#### BECO3002 THE CHINESE ECONOMY

The course aims to provide students with comprehensive coverage of various aspects of the contemporary Chinese economy. Students could learn how to employ different analytical approaches to understand the functioning of China's reform period, its economic transition and development.

In this course, topics such as the geographical setting, socialist economic background, economic reforms and transitions, various production factors, ownership structure, different production sectors, township and village enterprises, foreign trade and foreign investment, macroeconomics and fiscal system, financial development and financial system reform and the environmental quality of China will be discussed.

Pre-requisite: BECO3008 Intermediate Microeconomics AND BECO3009 Intermediate Macroeconomics

#### BECO3003 INTERNATIONAL TRADE AND COMMERCIAL POLICY

This course is to familiarize students with the basic theories and fundamental concepts used by economists/policy makers working in the field of international economics. It enables students to understand the nature, rationales, applications, implications and welfare distributions of different trade and commercial policies.

The topics covered in this course are foundations of modern trade theory, international equilibrium, trade model extensions and applications, economic growth and international trade, tariffs and non-tariff Barriers, trade regulations and industrial policies, trade policies for developing country, regional trading arrangements, international factor movements and multinational Enterprise.

Pre-requisite: BECO3008 Intermediate Microeconomics

#### BECO3004 ECONOMICS OF TOURISM

This course introduces to students the environmental, social, cultural and economic conditions, as well as public policy issues which are necessary to the success and sustainable growth in the tourism industry. The merits and defects of a tourism-based economy, and the current structure and prospects of tourism in Greater China and other East Asian countries will also be discussed. It enables students to understand both the demand- and supply-side factors in the tourism industry.

The topics covered by this course are the dynamics and effects of tourism evolution, the concepts, definitions and global trend in tourism, the market for tourism, the composition of the domestic and international tourism industry, the structure and economic role of tourism in the East Asia, the development of tourism in China, the growing interaction and evolving interrelationship between gaming and tourism and the tourism in the Great Pearl River Delta and Macao.

Pre-requisite: BECO1000 Principles of Microeconomics AND BECO1001 Principles of Macroeconomics

### BECO3005 ECONOMICS OF E-COMMERCE

The course introduces to students what is E-commerce and its importance in "New Economy". It gives students economic insights to understand e-commerce and make better decisions in e-commerce, enabling them to understand how products are sold electronically, and the digitalization of conventional business processes and their impacts.

Pre-requisite: BECO3008 Intermediate Microeconomics AND BECO3009 Intermediate Macroeconomics

#### BECO3006 MONEY AND BANKING

This course introduces to students the nature and functions of money and the principal institutions involved in the money or financial side of our macroeconomy. After this course, students would be able to gain skill and practice in the analysis of economic situations, events, and policies, particularly those directly involve in money, banking and financial market. Pre-requisite: BECO1001 Principles of Macroeconomics

#### BECO3007 ASIAN FINANCIAL MARKET

The course aims to introduce to students the composition and institutional framework of the Asian Financial Market. It discusses the basic structure of the money and banking system and the capital market of the major Asian and South-East Asian economies. It enables students to understand the causes and implications of the Asian Financial Turmoil. Pre-requisite: None

#### BECO3008 INTERMEDIATE MICROECONOMICS

The course introduces to students the concepts and techniques of microeconomic analysis, with an objective of delivering students a rigorous knowledge on modern microeconomic theories, and to enable them to apply modern microeconomic theories to analyze individual's behaviour. The course covers topics such as budget constraint, preferences, utility, choice, demand and consumer surplus, market demand and equilibrium, technology and profit maximization, cost minimization and cost curves, firm supply and industry supply, monopoly and oligopoly. Pre-requisite: BECO1000 Principles of Microeconomics

#### BECO3009 INTERMEDIATE MACROECONOMICS

This course enables students to understand how the economy operates in a complex world, and how macroeconomic policies operate to affect the domestic and foreign economies. After this course, students could be able to utilize these models to analyze various economic issues in a systematic and scientific way.

Fundamental and essential macroeconomic models, such as the goods and financial markets, the IS-LM and AD-AS model, their theoretical background and applications in the closed and open economy, the labor market, exchange rate regimes and the unemployment issue will be discussed in this course.

Pre-requisite: BECO1001 Principles of Macroeconomics

#### BECO3010 GLOBAL ECONOMIC ISSUES AND BUSINESS IMPLICATIONS

This course is a combination of economics and real world. It applies various basic economic theories to analyze various contemporary global economic issues which enables students to better understand the relation between economic knowledge and the goal of mankind: achieving prosperity. The lecture topics include Economic Growth, Poverty, Financial Crisis, Resources, Environment, Climate Change, Trade and the emerging of China.

Pre-requisite: BECO1000 Principles of Microeconomics AND BECO1001 Principles of Macroeconomics

#### BECO3011 FINANCIAL ECONOMETRICS

The unprecedented development of financial markets, complexity of financial products, their dynamic relations of the markets with households, individuals and our economy – all leads to the necessity of in-depth understanding of relations posit by economic theory. This course highlights (i) the economic theory with statistics and mathematics, (ii) the emerging, perhaps the

fastest growing field of econometrics and finance. With a minimum level of theoretical discussion, we introduce econometric models. We focus on the basics of econometric methods in asset pricing, risk management and corporate finance such as volatility processes, endogeneity, microstructure of financial markets and executive compensation. We cover the statistics and mathematics in need to understand (empirical) economic research, to plan and execute independent research projects. Topics include cross-sectional regression, (non-) spherical error, time-series models and panel data regression.

Pre-requisites: BECO2001 Econometrics I AND FINC2000 Financial Management or FINC2003 Corporate Finance

## BECO4000 ANALYSIS OF ECONOMIC INDICATORS

This course introduces to students the major economic indicators and their use in describing the state of an economy. It studies how economic indicators are measured, how they behave under different economic environments, what they tell and how different decision makers, including the government, business, investors, and consumers, make decisions based on economic indicators. Topics include: introduction; economic growth and business cycle; economic indicators in the areas of production, employment, consumption, investment, price and wage, money and interest rate, financial market, government, balance of payment, exchange rate; decision making and economic indicators; economic derivatives.

Pre-requisite: BECO1000 Principles of Microeconomics AND BECO1001 Principles of Macroeconomics

#### BECO4001 GAME THEORY AND ECONOMIC APPLICATION

This course introduces to students the basics of game theory relevant to economic analysis and their applications in various fields of business and economics.

Topics include: static games of complete information and Nash equilibrium; dynamic games of complete information and subgame-perfect Nash equilibrium; static games of incomplete information and Bayesian Nash equilibrium; dynamic games of incomplete information, perfect Bayesian equilibrium and its refinements; applications of game theory in business and economics.

Pre-requisite: None

#### BECO4002 ECONOMETRICS II

This course is the extension of Econometrics I (ECIF310) with in-depth discussion of econometric modeling and its application in finance in academic and practice. It provides theoretical discussion of advance econometric models needed for financial economics research. Topics include error structure, panel data with non-spherical error, simultaneous equation and time-series modelling. This course required you to have Econometrics I and strong knowledge of economics, mathematics and statistics.

Pre-requisite: BECO2001 Econometrics I

#### BECO4003 INTRODUCTION TO ECONOMETRICS

The course aims to define and analyze variables and data set for particular statistical investigation, to familiarize students with the statistical estimation and inference in linear regression model and its application to problems in economics and the social sciences. In the course, students will learn how to carryout statistical estimation, and the methods in interpreting econometric results carried out and reported by others.

The course will cover topics such as the scope and limitations of econometrics, introduction to EViews and SAS, the nature of regression analysis, the foundation of different regression models, the normality assumption of the CLRM, interval estimation and hypothesis testing, multiple regression analysis and the problems associated in different estimation methods.

Pre-requisite: ISOM2002 Statistics and Data Analysis or FINC2002 Statistics for Finance or ISOM2004 Data Analysis and Modeling

#### BECO4004 APPLIED ECONOMETRICS

The course teaches students how to formulate and solve complex econometric problems and to

conduct applied research using econometric tools. It provides students with a good understanding of econometric models for discrete and limited dependent variables, enabling students to develop practical skills necessary to perform independent research using empirical data.

Pre-requisite: BECO4003 Introduction to Econometrics

#### BECO4005 APPLIED ECONOMICS FOR LEISURE INDUSTRIES

Broadly speaking, leisure include the provision of such services as recreation, tourism and gaming, etc. The course examines the similarities and differences between the leisure industries and the traditional industries. Factors determining demand, supply and market structure of the leisure industries would be investigated. In addition, global and regional issues associated with future growth and development of these industries will also be explored. Various practical cases will be discussed to enhance students' understanding of the economic foundation of the leisure industries, as well as to elevate their decision making skills for these service sectors.

Pre-requisite: BECO1000 Principles of Microeconomics AND BECO1001 Principles of Macroeconomics

#### BECO4006 THE ECONOMICS OF DEVELOPMENT

This course is to strengthen our ability to think analytically about the problems faced by developing economies. Students are encouraged to consider how barriers to development emerge and what policy can be designed to remove them.

This course is a research-oriented one, focusing on development problems faced by Macao, Hong Kong, Taiwan, and the rest of China. Students are required to undertake research projects on many real-world issues. They will see many new articles uploaded to the course-web, which go well beyond textbook discussions.

Pre-requisite: BECO3008 Intermediate Microeconomics AND BECO3009 Intermediate Macroeconomics

#### BECO4007 HISTORY OF ECONOMIC THOUGHT

This course introduces to students the philosophical principles of the history of economic thought, and discusses economists' changing ideologies in revealing the economic societies across the different eras. It enables students to possess the ability to judge if and how an economic principle/theory can possibly be applied to evaluate contemporary economic phenomena.

Topics to be covered in the course are Ancient and Medieval economic thought, Pre-Classical Economics, the Classical Economic thought and its decline, the Marxian Economic thought, Marginalism and Neoclassical Economics, the rationale of General Equilibrium analysis, Keynesian and Post-Keynesian economics, Monetarism and Rational expectation, institutional economics, the Austrian School of economic thought, and the methodological development in economics.

Pre-requisite: BECO3008 Intermediate Microeconomics AND BECO3009 Intermediate Macroeconomics

#### BECO4008 FINANCIAL ECONOMICS

This course enables students to develop analytical and quantitative skills in the Economics of Finance whose analysis is broader and deeper than that of Corporate Finance. After this course, students are expected to understand concepts such as Expected Utility, State Preference, Stochastic Dominance in Financial Economics.

Topics to be covered include a review of probability and statistics, expected utility theory, the capital asset pricing model (CAPM), consumption-based asset pricing theory, arbitrage pricing theory (APT), state preference theory, option pricing theory, market efficiency, the term structure of interest rates, forward contracts and futures contracts.

Pre-requisite: BECO3008 Intermediate Microeconomics AND BECO3009 Intermediate Macroeconomics AND ISOM2002 Statistics and Data Analysis

#### BECO4009 THE EUROPEAN ECONOMY

This course aims to introduce to students the theory of economic integration and the history,

development, structure and objectives of the European Union (EU). Students are expected to understand the basic concepts of economic integration and the economic performance and prospects of the EU, its common policies, external and internal trade development and enlargement.

In this course, topics such as the fundamental concepts of economic integration, the history, institutions and economic issues of European integration, the Single European market, European Union's Common Policies, the Maastricht and the other treaties and the enlargement process of the EU will be discussed.

Pre-requisite: BECO3009 Intermediate Macroeconomics

## BECO4010 ECONOMIC DEVELOPMENT IN ASIA PACIFIC

This course aims to enable students to understand the economic development process of the Asia-Pacific region. It entails to develop students' interest and knowledge on regional economic issues. It is expected to enhance students' independent learning ability in mastering the future regional development trend, as well as to relate the knowledge and learning to the regional business environment.

Applying fundamental economic theories, it focuses on comparing economies in the region from various dimensions, including basic economic strengths and weaknesses, growth dynamics, trade and investment patterns, financial system development, as well as economic cooperation initiatives.

Pre-requisite: None

#### BECO4011 INVESTMENT AND PROJECT ANALYSIS

This course studies basic issues in the evaluation of business and public projects and decisions. Topics include: evaluation of business projects and decisions-capital budgeting, cash flow, risk, strategic options, and valuation by ratio; cost and benefit analysis of public projects and decisions–investment/decision criteria, identification and measurement of costs and benefits, discount rate, risk, cost effectiveness analysis, and income distribution.

Pre-requisite: BECO3008 Intermediate Microeconomics AND FINC2000 Financial Management

#### BECO4012 CHINA'S FINANCIAL SYSTEM

This course introduces the changing features and structure of China's financial system since economic reforms. Topics include formation and characteristics of China's modern financial system in the first half of the twentieth century; its settings in the dawn of economic reforms; major changes in the 1980s and 1990s; interrelationship between industrial reforms and financial system reforms; changing roles and functions of the banking system in the domestic and world economy; issues associated with the progress of non-banking financial system and the its outlooks. In addition, implications of China's WTO accession to its financial system would also be explored.

Pre-requisite: BECO3008 Intermediate Microeconomics AND BECO3009 Intermediate Macroeconomics

#### BECO4013 ECONOMICS OF GLOBALIZATION

This course aims to enable students to understand the process of globalization. It entails to develop students' interest and knowledge on global economic issues. It is expected to enhance students' independent learning ability in mastering the future development trend of the global economy, as well as to relate the knowledge and learning to the global business environment.

Applying fundamental economic theories, it investigates the global economy from various dimensions, including economic development, international trade, international finance and international capital flows. The role of international organizations in shaping the global economy is also addressed.

Pre-requisite: BECO1000 Principles of Microeconomics AND BECO1001 Principles of Macroeconomics

#### BECO4014 INTERNATIONAL BANKING

The course provides an overview of the theory and practice of banking. Key topics include the

meaning of banking, different types of banks, diversification of banking activities, bank structure and regulation in developed and emerging economies, and financial crises. This course is to develop an understanding of the basic principles of international banking; an ability to successfully apply analytical decision making skills and solve problems; and an appreciation for the relevance of banking theory and its linkage with practice.

Pre-requisite: FINC2000 Financial Management

#### BECO4015 MANAGERIAL ECONOMICS FOR SMALL AND MEDIUM-SIZED RETAILING ENTERPRISES

The course provides comprehensive discussions and examinations of the economic and business aspects of retail SMEs. It discusses the factors leading to the success and failure of SMEs, introduces issues such as market behavior, business finance, and internal management, associated with SMEs in the global economy, and examines the SMEs in Macao, Hong Kong and the Pearl River Delta.

Pre-requisite: BECO3008 Intermediate Microeconomics

#### BECO4016 THE SERVICE SECTORS OF MACAO AND THE PAN PEARL RIVER DELTA

This course introduces to students the major aspects of the Macao economy, particularly the service sector, and its economic roles in the Pan Pearl River Delta. It focuses on the economic integration between Macao and the Pan Pearl River Delta, and studies the structural transition process of Macao toward a service-oriented economy and the implications. After this course, students are expected to be able to apply basic economic theories to analyze the development process of Macao and the Pan Pearl River Delta, particularly in the service industries.

Pre-requisite: BECO1000 Principles of Microeconomics AND BECO1001 Principles of Macroeconomics

#### BECO4017 INDUSTRIAL ORGANIZATION AND BUSINESS STRATEGY

This course studies different market structures of one or several identical or similar products in one or multi-periods; firm decision making and strategies, profitability and market efficiency under different market structures; and effects of firm behavior on market structure. Topics include: basic theory – firm and cost; different market structures – competition, monopoly, cooperative oligopoly, non-cooperative oligopoly, and monopolistic competition; price discrimination; strategic behavior; vertical integration and vertical restrictions; information and advertising; durable good; research and development; government policies.

Pre-requisite: BECO3008 Intermediate Microeconomics

#### BECO4018 ECONOMIC ANALYSIS OF INVESTMENT PROJECTS

This course aims to introduce to students the basic concerns and techniques used in evaluating business and public projects. Concepts to be covered are capital budgeting, cash flow, risk, strategic options, valuation by ratios, costs and benefit analysis of public projects and decision criterions. The methods in costs and benefits identification and measurement, cost effectiveness analysis for business and public projects and the selection of discount rate are going to be addressed as well. Students are expected to be able to apply the analytical skills learned in this course to evaluate real world business and public projects.

Pre-requisite: BECO1000 Principles of Microeconomics AND BECO1001 Principles of Macroeconomics

#### BECO7010 STATISTICS AND FINANCIAL ECONOMETRICS

This course introduces the basic tools with the aid of data for decision making in finance. It covers introductory probability, decision analysis, basic statistics, regression, simulation, linear and nonlinear optimization, and discrete optimization. Computer Programming exercises, cases, and examples, deliver in SAS<sup>®</sup> (by the SAS Institute Inc.) are drawn from asset pricing, market microstructure, derivatives, and other functions.

Pre-requisite: None

#### BECO7011 ECONOMICS FOR BUSINESS

This course attempts to introduce postgraduate students to the core economic concepts and fundamental principles, with an emphasis on deriving practical implications for real-life managerial decisions. It covers the microeconomics theories of consumer and producer behaviours, market structures and corporate strategies, as well as the macroeconomic analyses on key indicators, government policies, and global issues. The objective is to equip students with a firm grip on economic reasoning, and an enhanced understanding on important contemporary economic topics.

Pre-requisite: None

#### FINC2000 FINANCIAL MANAGEMENT

This course, designed for non-finance students, covers basic principles of financial management in business. It provides students with a scientific framework for evaluating assets and investment opportunities. The course is divided into three parts. The first part discusses about the institutional settings and the relationship among different players in the financial markets. The second part focuses on capital budgeting. Here, different types of investment evaluation techniques will be discussed and compared. The last part discusses the determinants of the cost of capital – a key variable of capital budgeting.

Pre-requisite: ACCT1000 Principles of Financial Accounting

#### FINC2001 ADVANCED FINANCIAL MANAGEMENT

This course provides students with a working ability to make financing decisions. It begins with the discussion on dividend and debt policy and how they affect a firm's value. Then, financial statement analysis and financial planning will be presented. Given the importance of the latter, both long-term and short-term planning will be discussed in greater details. While short-term planning concerns with a firm's ability to pay its bills, working capital management focuses on the credit policy, inventory and cash management of a company. Finally, special topics including mergers and acquisitions, international financial management and options will be discussed. Pre-requisite: FINC2000 Financial Management

#### FINC2002 STATISTICS FOR FINANCE

This course introduces statistic analysis tools to be used as a basis for developing finance theory. Various statistics models widely used in the financial industry for will be presented. Topics include probabilistic background, point and interval estimation, sample spaces, random variables, independence, discrete and continuous distributions, expectation, correlation, moment generating function, distributions of function of random variables, law of large numbers and limit theorems, sampling theory, order statistics, limiting distributions, point estimation, confidence intervals, hypothesis testing, non-parametric methods, data analysis and implementation of statistical tools in a statistical computational package.

Pre-requisite: ISOM1002 Business Mathematics or GEST1001 Quantitative Reasoning for Business

#### FINC2003 CORPORATE FINANCE

This course, designed for finance students, introduces basic principles of financial management in business. It provides students with a scientific framework for valuing assets, evaluating investment opportunities, and choosing proper financing methods. The course is divided into three parts. The first part focuses on capital budgeting. Here, different types of investment evaluation techniques will be discussed and compared. The second part discusses the determinants of the cost of capital – a key variable of capital budgeting. The last part overviews corporate financing decision including capital structure decision and dividend policy. Pre-requisite: ACCT1000 Principles of Financial Accounting

#### FINC3000 DERIVATIVE SECURITIES

This course is designed for senior undergraduate students to understand and price the basic derivative instruments, with major emphasis on options and futures. The course will start by introducing basic operations of these markets. Students will then apply the knowledge of

mathematics of finance to the pricing of derivatives such as options, futures, and swaps. Discussions will then be extended to concepts of risk management such as Value at Risk and the Greeks of derivatives. General topics covered are pricing models, investment strategies and risk management involving the derivatives.

Pre-requisite: FINC2001 Advanced Financial Management or FINC3002 Theory of Finance or FINC3004 Portfolio Management

#### FINC3001 FINANCIAL STATEMENT ANALYSIS AND VALUATION

This course details financial statement analysis and valuation framework that integrates corporate strategies, financial reporting and analysis, and valuation. Fundamental analysis techniques are also examined with particular emphasis on the application of these techniques in equity valuation. This course is designed primarily for students who expect to be frequent users of financial statements or be involved in equity valuation as part of their profession. Pre-requisite: FINC3004 Portfolio Management or FINC3002 Theory of Finance

#### FINC3002 THEORY OF FINANCE

The course aims to provide students with solid theoretical frameworks in asset pricing, corporate finance and other areas in finance. The course will equip students with both conceptual and analytical skills necessary to advance to more specialized courses. For asset pricing, concepts of risk and return are analyzed in the context of formal pricing models such as the Capital Asset Pricing Model and the Arbitrage Pricing Theory. Aspects of efficient market theory and anomalies are considered. For corporate finance, business decisions such as capital budgeting, financing, and corporate restructurings will be covered in depth.

Pre-requisite: FINC2000 Financial Management or FINC2003 Corporate Finance

#### FINC3003 FINANCIAL MARKETS AND INSTITUTIONS

This course covers the structure, functions, operations and regulations of financial markets and institutions. Topics include money market; bond market; stock market; foreign exchange market; commercial banks; mutual funds; pension funds; investment banks; insurance companies and venture capital firms. Upon completion of the course, student will have developed a comprehensive understanding of the fundaments of various financial markets and financial institutions.

Pre-requisite: FINC2000 Financial Management or FINC2003 Corporate Finance

#### FINC3004 PORTFOLIO MANAGEMENT

This course focuses on the design and management of investment portfolios that meet the targeted investor's objectives. Both passive and active strategies are examined together with an in-depth review of pricing efficiency in securities markets and the implications for portfolio managers. Additional topics include strategies for managing security analysis and stock valuation, international diversification, and portfolio performance evaluation. The aim of this course is to help students:

- To develop an understanding of the basic principal of capital market theories.
- To develop an understanding of the nature and function of derivative instruments.
- To develop an ability to understand the linkage between the capital market theories and investment strategies.
- To develop an ability to apply the capital market theories and investment strategies in planning and administrating investment portfolios.

Pre-requisite: FINC2000 Financial Management or FINC2003 Corporate Finance

#### FINC4000 INTERNATIONAL FINANCE

The objective of the course is to provide a conceptual framework within which the key financial decisions of multinational company can be analyzed. It builds on and extends the principles provided by domestic corporate finance. In addition to the traditional areas of financial management, other decision elements that are peculiar to multinational firm will be discussed. These elements include multiple currencies with frequent exchange rate changes, multiple money markets, economic exposure measurement and management, segmented capital

markets, and country risk.

Pre-requisite: FINC2001 Advanced Financial Management

### FINC4001 CASE STUDIES IN CORPORATE FINANCE

This is a case-method course in Corporate Finance. Students will learn to make investment and financing decisions in the financial manager perspective and focus on maximizing shareholders' value. This course provides an in-depth study of financial decision making and the process of value creation.

The course objectives are:

- To develop practical knowledge by applying corporate finance theory in setup of cases.
- To widen perspective through analyzing real-life monumental corporate finance cases.
- To learn effective usage of spreadsheet programmes in compiling data, generate statistical results, and produce concise reports.
- To develop essential skills to construct case study reports and to deliver effective presentations.

Pre-requisite: FINC2001 Advanced Financial Management or FINC2003 Corporate Finance

#### FINC4002 FINANCIAL MANAGEMENT SIMULATION

This is a capstone course in financial management. It is intended to provide an opportunity for students to demonstrate their understanding of the principles of financial management as well as accounting, economics, marketing and production management. The primary focus of the course is on a sophisticated online simulation programme FinGame Online: The Financial Management Decision Game. This interactive tool would enhance students' experiences in applying financial theories.

The course objectives are:

- To develop techniques to link financial theories with practices.
- To apply principles of financial management through active management of simulated companies.
- To understand and appreciate the interrelationships among various types of financial decisions as well as between finance, production and marketing decisions
- To experience the excitement and challenges of managing a simulated company.

Pre-requisite: FINC2001 Advanced Financial Management

#### FINC4003 RISK AND INSURANCE

This course provides an overview of the principles of risk management and insurance. The focus is on the management of risks by businesses and organizations. However, personal risks are also discussed. Topics on insurance covers the operation of insurance markets, insurance pricing, insurance regulations, insurance products, legal principles of insurance. An introduction of insurance industry in Macao and Hong Kong is covered.

In order to minimize the overlap with other finance courses, this course will not cover derivative instruments and there will be minimal coverage of exchange rate risk and interest rate risk. Objectives:

- Provide students a conceptual framework for making risk management and insurance decisions to increase business value.
- · Acquaint students with the essential details of insurance markets and insurance products.
- Enhance students' ability to apply risk management tools and techniques to solve risk management problems.

Pre-requisite: FINC2000 Financial Management or FINC2003 Corporate Finance

#### FINC4004 MERGERS AND ACQUISITIONS

This course examines various aspects of mergers and acquisitions (M&A) and corporate restructurings. It surveys the drivers of success and failure in the transactions. Issues regarding motive and strategy will be discussed, with economic implications the main focus of discussions. Students will also apply necessary skills and tools to evaluate and form an opinion about a proposed transaction, from both the acquirer's and the target's points of view. The course will be demanding and assume ability to understand financial statements, as well as familiarity with

valuation analysis.

Pre-requisite: FINC2001 Advanced Financial Management or FINC2003 Corporate Finance

#### FINC4005 FIXED INCOME SECURITIES

This course provides an overview of the techniques available for valuing riskless and risky fixed income securities and their derivatives. Topics include fixed income mathematics, price sensitivity measures, securitization, and interest rate models. This course involves the use of a financial calculator and the development of Excel spreadsheets for solving complex problems. Pre-requisite: FINC3002 Theory of Finance or FINC3004 Portfolio Management

#### FINC4006 REAL ESTATE INVESTMENT AND FINANCING

This course aims at enhancing knowledge on real estate investment and financing. Topics on real estate investments include investment and risk analysis, income property valuation and alternative real estate investment vehicles, such as real estate investment trust (REIT) and mortgage-backed securities. Topics on real estate finance include an introduction of mortgage markets, residential mortgage analysis (including Mortgage Pricing, Underwriting, Prepayments and Refinancing) and different types of home mortgage tools. An overview of the Macao Real Estate Markets, with particular emphasis on its development, transaction costs and transaction procedure, will be presented.

Pre-requisite: FINC2000 Financial Management or FINC2003 Corporate Finance

#### **FINC4007** BEHAVIORAL FINANCE

Behavioral finance is motivated by various financial anomalies that cannot be explained by traditional economic and finance theories. The course introduces extensive experimental evidence on psychological bias in peoples' belief and preferences. It also employs the theory of limits to arbitrage to analyze why irrationality lives. It further discusses the implication of behavioral biases on the financial market, including the aggregate stock market, cross-section of stock returns, individual investors, and corporate finance.

Pre-requisite: FINC3002 Theory of Finance or FINC3004 Portfolio Management

#### **FINC4008** INTERNATIONAL FINANCE AND GLOBAL ISSUES

The objective of the course is to provide a conceptual framework within which the key financial decisions and multinational company can be analyzed. Topics include exchange rates and currency markets, international money markets, international capital markets, economic exposure measurement and management, country risk, and other global issues.

Pre-requisite: FINC2000 Financial Management or FINC2003 Corporate Finance

#### FINC4009 FINANCIAL MODELING

This hands-on courses focus on how to use Microsoft Excel to implement the various financial models taught in the finance programme. Topics include financial statement analysis, leasing, efficient frontier estimation, beta estimation, bond pricing and duration, option pricing, Monte Carlo simulation, Risk models such as Value at Risk (VaR). Students will also learn how to use Macro and VBA in the course.

Pre-requisite: FINC3000 Derivative Securities AND FINC3004 Portfolio Management or FINC3002 Theory of Finance

#### FINC4010 BANK MANAGEMENT

This course focuses on the advanced techniques of commercial bank management. Topics include bank performance analysis, asset/liability management techniques, investments and liquidity management, deposits and liability management, business lending, consumer lending, loan pricing, bank regulation and capital adequacy requirements.

Pre-requisite: FINC2000 Financial Management or FINC2003 Corporate Finance

#### FINC4011 GRADUATION PROJECT ON APPLIED FINANCE

This is a capstone course for the 4th year BSc in Finance students. Students will work in groups on a topic of their choice, under the supervision of academic staff members in the department.

The nature of the project can be theoretical, empirical or case studies on applied financial problems. The goal is to provide students with opportunities to develop independent thinking and problem solving skills to academic or practical financial problems.

Pre-requisite: BECO2001 Econometrics I AND FINC3004 Portfolio Management

# FINC4012 FINANCIAL RISK MANAGEMENT

This course will focus on the identification, quantification and management of market risk, credit risk and operational risk of financial institutions. Besides covering Value at Risk (VaR) models, the course also deals with issues such as financial regulation and capital adequacy including Basel II. Topics include volatility models, value at risk for stocks, currencies, bonds and derivatives such as futures, forwards, swaps and options; expected and unexpected loss due to credit risks, operational risk measures.

Pre-requisite: FINC3000 Derivative Securities AND FINC3004 Portfolio Management or FINC3002 Theory of Finance

# FINC4013 ADVANCED FINANCIAL MATHEMATICS

This course aims to introduce important ideas in theory of probability and differential equations, and their applications to mathematical finance. Topics include: Finite Probability Spaces, Continuous probability theory, the Laplace transform, the Fourier transform, the diffusion equation, measure and integration, Brownian motion, Ito's Lemma, derivation of the Black-Scholes equation.

Pre-requisite: ISOM3033 Advanced Calculus

# FINC4014 EXOTIC OPTIONS AND STRUCTURED PRODUCTS

The first part of the course deals with non-standard options such as Asian options, asset or nothing options, binary options, barrier options, quantoes, cliquets, shout options, compound options, rainbow options. The 2<sup>nd</sup> part of the course deals with how to combine various derivatives with stocks and bonds to create structured products in order to meet the changing needs of customers.

Pre-requisite: FINC3000 Derivative Securities

# FINC7010 CORPORATE FINANCE

This course offers students a more advanced understanding of important concepts in the field of corporate finance. It covers basic topics including capital budgeting, alternative valuation methods, capital structure decisions, corporate payout policy, securities offering decisions, as well as more advanced topics (optional) such as corporate governance, mergers and acquisitions, and corporate risk management. The objective of this course is to provide students with essential tools to study more advanced courses in finance. Pre-requisite: None

# FINC7011 MANAGERIAL FINANCE

This course introduces the principles and practices of financial management. It describes financial decision making processes for firms where the desired outcome is the creation of wealth for shareholders. The first objective is to develop an appreciation for the relevance of financial theory and its empirical validation. The second objective is to provide a set of opportunities to productively link theory with practice. The third and last objective is to let the students understand the process of value creation and the principles of "value based" management. Topics in this course include the time value of money, financial analysis and planning, cost of capital, capital budgeting, capital structure, working capital management, long-term financing decisions, dividends policy, mergers and acquisitions and the international dimensions of finance. Pre-requisite: BECO7011 Economics for Business

# FINC7024 INVESTMENTS AND PORTFOLIO MANAGEMENT

This course focuses on designing and managing investment portfolios for investors. It introduces students to investment media and techniques. It analyzes capital market theories, the pricing efficiency of security markets, investment strategies, and investment performance evaluation.

Topics therefore include investor risk preferences, modern diversification theory, securities analysis, asset pricing models derivative instruments (models and real would behavior), investment strategies. Investment strategies include both the passive and active strategies, technical trading strategies and trading strategies arose from market anomalies. Pre-requisite: None

#### FINC7026 INTERNATIONAL BANKING AND BANK MANAGEMENT

This course is structured around the microeconomic problems of financial management of banking firms. It focuses on decision making and offers a unique approach to understanding commercial bank management. Topics to be covered include banking trends and competition, performance analysis, liquidity planning, interest rate risk management, credit risk analysis, cost of funds, and capital management. Both domestic and international banking activities will be examined. The objective of this course is to provide the student with the conceptual framework necessary to analyze and comprehend the current problems confronting managers of commercial.

Pre-requisite: None

#### FINC7035 FINANCIAL RISK MANAGEMENT

This course focuses on risk management techniques in multinational corporations and credit risk management. A strand of risk management topics would be covered such as foreign exchange, money market instruments, derivative products, risk exposure of corporations, measurement of exposure, and risk management in financial institutions. The credit risk will discuss various economic and financial factors that affect credit quality of corporations, evaluating corporation's debt servicing ability and their likelihood of default. Topics covered will include business and financial risk analysis, debt covenants, security structures, credit scoring and credit rating models.

Pre-requisite: None

#### FINC7041 ADVANCED TOPICS IN FINANCE

This course covers advanced topics in finance that may arise due to the advances in the areas of corporate finance, investment and banking. The topics will be timely and may arise through emerging theory, new model or empirical research in the finance world. Pre-requisite: None

#### FINC7054 INTRODUCTION TO MODERN FINANCIAL TECHNOLOGY

Financial Technology, FinTech, refers to the use of technological innovation, particularly digital technology, in financial systems, business models, and existing and new financial products. This course offers students an introduction to how an ecosystem for the financial sector is created using disruptive technology. Topics covered include fintech financing, fintech innovations (such as smart contracts, robo-advisors, cryptocurrencies and block chain, insurtech, proptech), and cybersecurity. Through this course, students should have a foundation on how fintech innovations affect the finance industry, such as traditional banking, financial services, investment decisions, innovation on financial products, financial data analytics, and financial regulations. Pre-requisite: None

#### FINC7055 WEALTH MANAGEMENT

The objective of this course is to introduce the financial planning process and apply some of the tools to formulate investment plans for managing, preserving and growing wealth across the client segments the high net-worth individuals. Pre-requisite: None

1

## FINC7056 MACAO'S ECONOMY

It covers topics on the economic development and transition of Macau; the China-Portuguese speaking countries economic cooperation; integrated resorts, gaming, and hospitality industries in Macau; and banking and finance sectors of Macau. Special topics such as green development projects employed by the integrated resort operators, and Macau's economic collaboration within

the Greater Bay Area are discussed. The objective is to provide a foundation of current economic and financial developments in Macau to evaluate gaps and find opportunities for future economic and financial developments.

Pre-requisite: None

## FINC7057 FINANCIAL MARKETS AND INSTITUTIONS

This course covers the structure, functions, operations and regulations of financial markets and institutions. It covers the latest developments in the financial industry, such as financial leasing, RMB clearing centres. We examine markets such as bond markets, stock markets, foreign exchange markets including Renminbi market, derivative markets, and will also examine the role of financial institutions such as commercial banks and mutual funds. This course will be helpful to identify potential financial markets developments that are suitable for Macao under the public desires in developing its featured finance.

Pre-requisite: None

### FINC7058 INTERNATIONAL FINANCE AND DERIVATIVES

This course learns about derivative securities. Student will learn how to decide what factors should be incorporated in an appropriate pricing model for a derivative, how to price derivatives and define hedging strategies, and able to integrate the selected factors and formulate a consistent model. Another objective of the course is to provide the conceptual frameworks with which to analyze the principal financial decisions of the multinational company. Topics in this course include currency exchange rate changes, international parity relationships, the foreign exchange market, currency features and options market, swap and interest rate derivative, foreign exchange exposure and management.

Pre-requisite: None

#### FINC7998 PROJECT REPORT

Students are required to identify a real financial issue faced by companies and provide a data driven solution in the Project Report. The issue can come from any finance area, and can be local or international in scope.

Pre-requisite: None

### FINC8011 RESEARCH METHODS IN FINANCE AND BUSINESS ECONOMICS

The seminar course provides an overview of various theoretical perspectives that define the landscape of strategy research. Upon the completion of this course, students will be able to develop a pluralistic understanding about the conceptual development of strategy field and identify new directions and further areas of research. Major strands of theories to be discussed include industry-based view, institution theory, resource-based view, knowledge-based view and strategy process perspective.

Pre-requisite: None

# FINC8012 ADVANCED TOPICS IN FINANCE AND BUSINESS ECONOMICS

The course is designed to introduce important topics in finance and economics with both theoretical and empirical focus.Students will be provided with solid financial theoretical frameworks in four areas: corporate finance, asset pricing, derivatives, and behavioral finance. Recent developments in empirical studies in the four finance areas will be discussed intensively through lectures and journal paper discussions. Students will receive necessary training in microeconomics, macroeconomics, and econometrics at advanced levels. The topics to be presented include export taxation, secured loans, financial crises, global imbalances, financial opening, income inequality, housing bubbles, exchange rates, capital controls, tourism development etc.

Pre-requisite: None

# FINC8350 CONTEMPORARY ISSUES IN INTERNATIONAL FINANCIAL MANAGEMENT

This subject exposes students to contemporary issues in financial reporting and corporate disclosures, with particular emphasis on cross-country comparisons of regulatory frameworks,

the role of information intermediation, external monitoring by investors, and disclosure regulations. The primary objectives of the subject are to provide students with an indepth understanding of voluntary and mandatory financial reporting and corporate disclosures; and the link between disclosures and the capital markets, as well as with the institutional and legal environments of the economy.

Pre-requisite: None

#### FINC8351 PROJECT MANAGEMENT

This course guides students through fundamental project management concepts and behavioral skills needed to success-fully launch, lead, and realize benefits from projects in profit and nonprofit organizations. Successful project managers skillfully manage their resources, schedules, risks, and scope to produce a desired outcome. In this course, students explore project management with a practical, hands-on approach through case studies and class exercises.

Pre-requisite: None

#### IRTM1000 INTRODUCTION TO INTEGRATED RESORT MANAGEMENT

The objective of this course is to acquaint students with the basic structure and organization of hospitality as a single service, as well as a conglomerate of multiple services. Topics to be covered include the world history and the recent progress of the hospitality industry, principles of restaurant operations and food services, hotel and lodging operations, transportation, etc. In addition, principles of planning, organizing, staffing, controlling, leadership and hospitality management will be discussed. After completing this course, students will possess a solid foundation to further their studies in particular subjects of hospitality management. Pre-requisite: None

#### IRTM2000 INTRODUCTION TO GAMING MANAGEMENT

This course is aiming to provide students with an overview of the composition and attributes of the gaming industry. Both demand-side and supply-side issues are to be tackled. In addition, public policy and managerial issues associated with the practice of the gaming industry are discussed with reference to the general and unique features of various societies. To enhance students understanding of the characteristics of gambling products, common forms of games offered by the casino and non-casino sectors are introduced respectively. Lastly, the evolving and accelerating role of technology in the gaming industry, hence related managerial issues are reviewed. After completing this course, students are expected to possess the basic knowledge to pursue their junior and senior studies in other gaming-related subjects. Pre-requisite: None

#### IRTM2001 PSYCHOLOGY OF GAMBLING

This course focuses on the application of psychological knowledge to gambling behaviors. Topics include motivations, decision-making strategies, cognitive heuristics and biases, group and social influences, and pathological addictive gambling behaviors. Pre-requisite: None

#### IRTM3000 SOCIAL AND ECONOMIC IMPACTS OF GAMBLING

This course deals with the variety of issues surrounding gambling and commercial gaming in the area of public policy, social and economic impacts. Emphasis will be placed on the costs and benefits analysis of gambling in different domains: individual, household, community as well as macro economy. Special attention will be given to the relationship between gambling, political corruption, neighborhood crime and organized crime.

Pre-requisite: IRTM2000 Introduction to Gaming Management

### IRTM3001 QUALITY SERVICE MANAGEMENT

Quality service has been seen as a key marketing tool, playing an increasing role in contributing to customer experiences, determining their current satisfaction level and the possibility of repeated visits. This course focuses on the service management within the gaming and

entertaining businesses. It aims to raise students' awareness of the importance of quality services to the industry success and addresses issues concerning managing, designing and delivering quality service systems. The role of the customer in service delivery and how this impacts on the operation of a successful service in the industry are also explored. Pre-requisite: IRTM1000 Introduction to Integrated Resort Management

#### IRTM3002 CONVENTION AND EXHIBITION MANAGEMENT

This course provides the student an opportunity to explore the function of conventions and exhibitions from the point of view of the convention and exhibition center manager. Consideration is given to various methods used to sell a location to a planner and the servicing of large groups. It will also provide students with an overview of the MICE industry. It examines the physical requirements, marketing, management and operation of convention and exhibition facilities. Emphasis is also placed on the planning and organization of conventions, meetings and exhibition.

Pre-requisite: IRTM1000 Introduction to Integrated Resort Management

#### IRTM3003 CASINO MANAGEMENT

This course gives students an advanced introduction to the casino environment. At the end of this course, students are expected to demonstrate a strong working knowledge of casino operations and the interrelationship of the casino with other major departments (lodging, food, beverage, entertainment, etc.). Casino Management is also designed to introduce students to the development of gaming, the internal and external casino environment, marketing strategies, and the social, cultural and economic issues of gaming. A central focus will be on current trends as well as the primary management and financial elements unique to operating a casino. In addition, the course will also cover such topics as game protection/cheating and scams which would include advanced blackjack, basic strategy/card counting, internal theft, cheating at blackjack, craps, and other table and non-table games.

Pre-requisite: IRTM2000 Introduction to Gaming Management

#### IRTM3004 THE MACAO GAMING AND HOSPITALITY INDUSTRIES

This course familiarizes students with the particular situation, structure and performance of Macao's gaming and hospitality industries. Social and economic significance of casino gaming in the Macao economy will be emphasized. To accomplish this objective, the historical and cultural settings, institutions and institutional changes of the casino industry will be examined extensively. In addition, contemporary issues associated with the liberalization and future development of the casino industry will be explored. Moreover, progress and composition of Macao's hospitality industry, as well as its interrelationship with development of the casino industry will be discussed. Upon completion of this course, students are expected to possess the basic knowledge from the case of Macao to pursue related studies in the area of gaming and hospitality management.

Pre-requisite: None

#### IRTM3005 FESTIVAL AND EVENT MANAGEMENT

Festivals and events are seen as unique attractions and image-markers for many tourism destinations, and are playing an increasing role in attracting and retaining customers in the gaming and entertaining businesses. This course aims to enhance students' understanding of the roles and impacts of festivals and events on destinations, with particular reference to the gaming and entertaining industry; and equip them with the knowledge and skills in planning, managing, and marketing events, conventions and meetings, festivals and special events. Pre-requisite: IRTM1000 Introduction to Integrated Resort Management

#### IRTM3006 HUMAN RECOURSE MANAGEMENT IN INTEGRATED RESORTS

Human resource management is an important field of study in recognition of its growing significance to the IR industry. This course provides an opportunity for students to explore contemporary and emerging human resource management issues faced by various sectors of the industry. Special focus will be diverted to the related issues as presented in the gaming

and hospitality sectors. In-class performance is extremely important as it is similar to daily work environment in the hospitality industry.

Pre-requisite: IRTM1000 Introduction to Integrated Resort Management

# IRTM3007 TECHNOLOGY AND INNOVATION IN THE RESORT AND GAMING INDUSTRIES

This course is designed to introduce students to the information technologies used in the hospitality, casino, integrated resorts, and tourism industries and to deliver the fundamental understanding of technological advancement and/or innovation through technology in real life examples. Through in-class discussion, students will learn how hospitality and IR companies can utilize various technologies to achieve/maintain their comparative advantages in the market. Pre-requisite: None

#### IRTM3008 TRAVEL AND TOURISM MANAGEMENT

This course offers student an introduction to the travel and tourism industries and aims to prepare students to plan and implement various tourism activities and manage different tourism products. Issues in master planning and managing tourism in various geographical and environmental settings will be addressed with an emphases on the cultural and political aspects. Core topics include tourism destination planning, development of tourism products, regulatory frameworks and marketing strategy. It will also highlight the importance of sustainability and environmental awareness in tourism management.

Pre-requisite: None

#### IRTM3009 FOOD AND BEVERAGE MANAGEMENT

Food and beverage are the basic components to any hospitality industry including the gaming and MICE sectors. This course covers the key principles and skills required in the effective management of food and beverage operations. It seeks to develop students' understanding and application of the main strategic, managerial and operational factors which characterize successful food and beverage operations within modern casinos and resort. Topics covered include menu planning, food purchasing, receiving, preparation, serving and marketing as well as the management of the core activities of the Rooms Division, i.e. Front Office and Housekeeping room management. Students will also learn the legal requirements and ethical obligations in the industry.

Pre-requisite: IRTM1000 Introduction to Integrated Resort Management

#### IRTM3010 SELECTED TOPICS IN HUMAN RESOURCE MANAGEMENT

This course provides an opportunity for students to explore contemporary and emerging human resource management issues faced by various industries. Special focus will be diverted to the related issues as presented in the gaming and hospitality sectors. Possible topics include, but not limited to, conflict management and team management, cross-cultural human resource management, incentive systems, management education and training. The content of this course will be kept flexible between semesters as to best answer interests of the instructors and the students. In principle, prior approval from the program coordinator is needed for offering this course.

Pre-requisite: MGMT3005 Human Resources Management

#### IRTM3012 GAMING LAW

The purpose of this course is to familiarize students with various sets of legal rules that apply to the gaming industry in the Macau SAR, focusing especially on casino games of chance. The field is somewhat complex given that the legal regulation of gaming in Macao arises from various legal disciplines. Consequently, the course has an interdisciplinary nature and covers issues of constitutional law, administrative law, tax law, company law, contract law and criminal law. Pre-requisite: None

#### IRTM3014 HOSPITALITY AND TOURISM LAW

This course aims to cover the main aspects of the administrative law regulation and the commercial law issues related to the hospitality and tourism industries, including: lodging; food, beverage and entertainment; and the travel industry. A common theme underlying the various specialized areas shall be the role of the regulators (MGTO and IACM) and the general purposes of achieving quality and a high degree of consumer protection. Pre-requisite: None

#### IRTM3015 REVENUE MANAGEMENT

This unit of study introduces students to "Revenue Management" which is a demand based pricing system employed in the hospitality and tourism industry. The use of Revenue Management is seen as a critical change in the setting of price in the hospitality and tourism industry and, coupled with information technology, especially the internet, is having long term strategic impacts on the industry. This unit also explores the role and function of the "revenue manger" the key executive responsible for managing the pricing and supply policies in hotels and airlines within the hospitality and tourism industry.

Pre-requisite: IRTM1000 Introduction to Integrated Resort Management

#### IRTM3016 CASINO MARKETING

The course aims at giving students sufficient conceptual and theoretical as well as practical knowledge underpinning casino marketing in the context of the fast evolving sub-field of Services Marketing. Services in most developed economies like Macao, is the largest sector contributing to their respective GDP. Tourism and leisure activities (which include gaming and in particular casino) contributes a significant proportion of the value added in the services sub-sector. With projects and case analysis, the students are expected to become familiar with the marketing practices of firms in the industry both here and in the gaming entertainment centers in US, Europe, Australia and other places. The course will be delivered through lectures, case analysis and projects. Together the students are expected to gain an integrated knowledge of both theory and practice and impart in the students some capabilities for undertaking casino marketing planning, execution and evaluation.

Pre-requisite: IRTM2000 Introduction to Gaming Management

#### IRTM3017 ACCOMODATION, FACILITIES AND SECRUITY MANAGEMENT

Having good facilities and a sound management system are the prerequisite for any business success as they provide essential supports to business operations. This is no exception to the gaming, entertaining and hospitality businesses. This course provides an overview of the operation of Accommodation, facilities found in those sectors and explores the technical and managerial issues related to the operation and maintenance of the physical plant and equipment. Topics covered include the operating costs for various types of facilities, types and characteristics of major building systems, the responsibilities of the engineering-maintenance department as well as the managerial aspects of facilities renovations.

Pre-requisite: IRTM1000 Introduction to Integrated Resort Management

#### IRTM3018 CASINO MATHEMATICS

This course is designed for students who are interested in application of probabilities, statistics and other quantitative methods in issues that arise in legal commercial industries, especially, in casino industry. Students are expected to be able use the appropriate math tools learnt in the course to analyse the performance of casino games, casino promotions/comps, VIP programs, as well as to monitor and identify suspicious casino tables, etc. They are also expected to be able design a new casino game that is feasible and profitable in the casino floor.

Pre-requisite: IRTM2000 Introduction to Gaming Management and ISOM2002 Statistics and Data Analysis OR IRTM2000 Introduction to Gaming Management and ISOM2003 Probability and Statistics

## IRTM4000 STRATEGIC MANAGEMENT FOR THE RESORT AND GAMING INDUSTRIES

This course discusses how corporations should formulate and implement strategy in the gaming

and hospitality business. Students will learn contemporary tools of strategic management, include analyzing industry attractiveness, determination of competitive advantages and positions, etc. This course provides economic and marketing underpinnings of some of these tools so that students can conduct critical and independent analyses in the gaming and hospitality context. The design of this course is a mixture of strategic tools and case applications.

Pre-requisite: IRTM1000 Introduction to Integrated Resort Management & IRTM2000 Introduction to Gaming Management

#### IRTM4001 RESORT MARKETING AND PROMOTION

The course is designed to provide students with an understanding of the fundamental role of marketing in the hospitality sector. While revisiting basic marketing concepts learned in previous marketing courses, the course will illustrate the application of marketing knowledge onto the hospitality sector. Upon completion of the course, students should be able to analyze the hospitality environment, devise, execute and evaluate marketing plans with reference to the hospitality sector.

Pre-requisite: IRTM1000 Introduction to Integrated Resort Management

#### IRTM4002 GLOBAL ISSUES IN RESORT AND GAMING MANAGEMENT

This course provides an overview of development and proliferation of gaming and hospitality business in the U.S. and throughout the world over the past decade, as well as the management issues associated with the integration between these two sectors. Focus will be placed on the international aspects of gaming and hospitality development, interrelationship between these two industries, regional cooperation and competition in the tourist market, and public polices issues.

Pre-requisite: None

#### IRTM4003 PROFESSIONAL DEVELOPMENT IN CONVENTION AND HOSPITALITY INDUSTRY

Students who choose to join the convention and hospitality industry need to have strong interpersonal skills, professional skills and social skills in interacting with guests and customers. Students will need to participate / organize different professional activities such as professional meetings, seminars, or conferences in order to strengthen their skills. The goal of this course is to provide a broad exposure to the realities of professional life in the convention and hospitality industry. The instructor will guide and assist students through their professionally-oriented learning experience. At the end of this course, students will be able to develop strong confidence in this professional.

Pre-requisite: IRTM1000 Introduction to Integrated Resort Management

#### IRTM4004 GAMING MANAGEMENT INTERNSHIP

This course is designed to provide a broad exposure to the operations of gaming industry and knowledge of the structure, goals and work procedures of the agency by participating in guided observations and activities. This work-study program is limited to Year 3 or Year 4 students who are enrolled in the Gaming Management Stream. Students in the Internship are supervised directly by professionals in the Agency, who communicate directly with the University Instructor. While each learning experience will differ depending on the type of agency, situation, and duration. Instructor will guide and assist the students through their professionally-oriented learning experience. At the end of their internship, students are able to enter their chosen profession with confidence.

Pre-requisite: IRTM2000 Introduction to Gaming Management

#### IRTM4005 GRADUATION PROJECT ON AMING MANAGEMENT

This course is designed to serve as an alternative to students who are interested in conducting academic/business researches in relation to the contemporary management issues of the gaming industry, instead of undertaking the Gaming Management Internship option. In principle, this is a research-orientated course, and is limited to Year 4 students who are enrolled in the Gaming Management Stream. Students are expected to conduct extensive studies on

selected topics and provide suggestions as to get around the issues. Findings must be supported by appropriated quantitative and/or qualitative methods.

Pre-requisite: IRTM2000 Introduction to Gaming Management

#### **IRTM4006** CONVENTION AND HOSPITALITY MANAGEMENT INTERNSHIP

This course is designed to provide a broad exposure to the operations of hospitality industry (including the hotel and the MICE industries) and knowledge of the structure, goals and work procedures of the agency by participating in guided observations and activities. This work-study program is limited to Year 3 or Year 4 students who are enrolled in the Convention and Hospitality Management Stream. Students in the Internship are supervised directly by professionals in the Agency, who communicate directly with the University Instructor. While each learning experience will differ depending on the type of agency, situation, and duration. Instructor will guide and assist the students through their professionally-oriented learning experience. At the end of their internship, students are able to enter their chosen profession with confidence. Pre-requisite: IRTM1000 Introduction to Integrated Resort Management

#### **IRTM4007 GRADUATION PROJECT ON HOSPITALITY MANAGEMENT**

This course is designed to serve as an alternative to students who are interested in conducting academic/business researches in relation to the contemporary management issues of the hospitality business, instead of undertaking the Hospitality Management Internship option. In principle, this is a research-orientated course, and is limited to Year 4 students who are enrolled in the Convention and Hospitality Management Stream. Students are expected to conduct extensive studies on selected topics and provide suggestions as to get around the issues. Findings must be supported by appropriated quantitative and/or qualitative methods. Pre-requisite: IRTM1000 Introduction to Integrated Resort Management

#### **IRTM4008** QUESTIONNAIRE DESIGN AND SURVEY DATA ANALYSIS

This course examines the application of selected quantitative techniques to hospitality and tourism situations. Topics include: Data Envelopment Analysis for benchmarking applications, multi-criteria decision making using Analytic Hierarchy Process, applications of fuzzy techniques and neural network models in tourism and hospitality. Related computer software will be introduced to familiarize students with the application of these quantitative techniques in tourism and hospitality management research. Additional topics that are of current interest will also be discussed

Pre-requisite: ISOM2002 Statistics and Data Analysis

#### IRTM4009 SPECIAL TOPICS IN HOTEL AND RESORT MANAGEMENT

This course provides an opportunity for students to explore contemporary and emerging human resource management issues faced by various industries. Special focus will be diverted to the related issues as presented in the gaming and hospitality sectors. Possible topics include, but not limited to, conflict management and team management, cross-cultural human resource management, incentive systems, management education and training. The content of this course will be kept flexible between semesters as to best answer interests of the instructors and the students. In principle, prior approval from the program coordinator is needed for offering this course

Pre-requisite: None

#### INTERNATIONAL INTEGRATED RESORTS MANAGEMENT **IRTM7010**

This course introduces students with the newest concepts of Integrated Resort (IR) management. It discusses the inner workings of the hotel, gaming, entertainment and resort industry. Aside from the organizational structure and functions of each department, students will gain an understanding of the interaction and the logistics involved in ensuring the constant and uninterrupted output of services across all functions to ensure complete guest satisfaction within an integrated resort setting. This fundamental understanding of operations and basic managerial responsibilities will provide for a deeper and broader appreciation of the complexities and challenges of managing the daily operations of an IR. After completing this course, students will

be able to have a fundamental understanding of the integrated resorts from a local and global perspective. Learning outcomes of communication and logistic skills will also be emphasized in this course.

Pre-requisite: None

#### IRTM7011 INTERNATIONAL HOSPITALITY MARKETING MANAGEMENT

This course seeks to equip students with the key conceptual, analytical and problem solving skills to address marketing problems and decisions. Specifically, it introduces students to various marketing analyses (customer, competitor and company analysis) and marketing strategies. Tools and methods used in planning and implementing the four Ps (product, price, place and promotion) will be explored. Service marketing basics will be emphasized. This course integrates theory and practice within the context of organizations operating locally and globally. After completing this course, students will also be able to advance their research and analytical skills.

Pre-requisite: None

#### IRTM7012 MANAGING HUMAN RESOURCES AND PERSONNEL PSYCHOLOGY IN INTEGRATED RESORTS

This course aims to develop within students the capacity to understand the complexity of managing people. Participants of this course will carry out an in-depth investigation into such topics as recruitment, compensation, and training. This course will also examine the personnel psychology when managing human resources. It will introduce participants to current debates within human resource management. After completing this course, students will also be able to enhance their communication skills and should be able to formulate organizational strategies for integrated resorts.

Pre-requisite: None

#### IRTM7013 MANAGERIAL FINANCE IN INTEGRATED RESORTS

This course introduces the principles and practices of financial management. It describes financial decision making processes for firms where the desired outcome is the creation of wealth for shareholders. The first objective is to develop an appreciation for the relevance of financial theory and its empirical validation. The second objective is to provide a set of opportunities to productively link theory with practice. The third and last objective is to let the students understand the process of value creation and the principles of "value based" management. Topics in this course include the time value of money, financial analysis and planning, cost of capital, capital budgeting, capital structure, working capital management, long-term financing decisions, dividends policy, mergers and acquisitions and the international dimensions of finance especially in the integrated resorts and hospitality industry. Research and analytical skills will also be emphasized within the module.

Pre-requisite: None

#### IRTM7014 INTEGRATED RESORTS MANAGEMENT INTERNSHIP

The internship programme is designed for students who have no prior working experiences in the related hospitality fields. The aim of this programme is to allow these students to get familiar with the hospitality work settings so as to better prepare them to join the workforce after graduation. Students undergoing the internship will be based in a company whose focus is cognate with the gaming and hospitality industry. The nature of the internship will vary depending on the requirements of the company. Students are responsible for searching for their own placements. However, the overall structure and timing must be agreed with the programme director, the employer and the student. Students will be expected to work full time with the company in the gaming and hospitality industry for a period of at least 560 hours. Students can take the internship programme in the day time. A report has to be submitted after the internship. Students who are working full time with at least 2 years supervisory or managerial experience at the time of application will be able to exempt from this internship course. Students who are working full time withen internship course. All other exempt or waive cases will

be subjected to special approval on case by case bases. After completing this internship, students will be able to advance their communicational skills and have a better understanding of the industry in order to formulate organizational strategies for the integrated resorts. Pre-requisite: None

#### IRTM7030 MEETING, INCENTIVE, CONVENTION AND EXHIBITION MANAGEMENT

The objective of this course is to provide students an overview of the Meeting, Incentive, Convention, and Exhibition industry. It emphasizes on the advanced knowledge in planning, organizing, staging, marketing and management of conventions, meetings and exhibitions. Case studies and best practices will be emphasized in this course. Students will be able to advance their understanding of the importance of MICE in an integrated resort, formulating strategies in order to improve the MICE business after completing the module. In addition, analytical skills will also be emphasized in this course. Pre-requisite: None

# IRTM7031 EVENT AND ENTERTAINMENT MANAGEMENT

This course focuses on examining the unique characteristics of the event and entertainment industry. It gives advanced knowledge of how to research, organize, stage, manage and market different types of events and entertainment. This course examines the challenges that the industry faces and will cover topics such as basic event industry concepts, feasibility, venues and sites selection, legal compliance, risk management, marketing strategies, sponsorship and event bids. Students will be able to progress their communication, research and analytical skills. Pre-requisite: None

## IRTM7032 FOOD AND BEVERAGE MANAGEMENT

This course focuses on the overview of the management of the food and beverage operations. Topics for discussion include advanced knowledge in food and beverage trends, food and wine pairings, event caterings such as marketing, contract writing, food production, room arrangement, and personnel required for specific catered events and operation issues such as purchasing, service, and cost controls management. Emphasis will be placed on techniques and practices in the food and beverage operations. Case studies and best practices from the industry will be adopted. The importance of communication skills will be advanced in this course. Pre-requisite: None

## IRTM7034 HOTEL REVENUE MANAGEMENT

This course aims to provide students with concepts of revenue management in the hotel sector and discuss how managers can maximize hotel revenue by using forecast information in capacity management, discount allocation and duration control. Detail discussions will be on how revenue management decisions are affected by group room sales, transient room sales, food and beverage activities, local and are wide activities, special events and seasonality factors. Upon course completion, students will have further developed their research and analytical skills, with a greater understanding of the strategic perspective in formulating organizational strategies in integrated resorts.

Pre-requisite: None

## IRTM7035 GAMING AND CASINO OPERATION MANAGEMENT

This course aims to give students an advanced knowledge to the gaming industry development and management around the world. A central focus will be the rationale of gaming legalization and its economic impacts in different countries. In addition, this course also gives students an overview of the operations in casinos. An emphasis will be on current trends of the casino operations as well as the primary management and financial elements that are unique to operating a casino. Topics will also cover the game protection/cheating and scams, internal theft, and other table and non-table games that are important when managing a casino business. An outcome is that student will have a greater international perspective towards gaming and casino operations management. Communication skills will be advanced after completing this course. Pre-requisite: None

#### IRTM7036 CROSS CULTURAL GAMBLING PSYCHOLOGY

This course focuses on the application of psychological knowledge to gambling behaviors. Topics include motivations, decision-making strategies, cognitive heuristics and biases, group and social influences, and pathological addictive gambling behaviors. Students will be able to better formulate organizational strategies for integrated resorts and enhancing both their communication and analytical skills.

Pre-requisite: None

#### IRTM7037 TRAVEL AND TOURISM MANAGEMENT

This course provides student an overview of the unique characteristics of the travel and tourism industry. It emphasizes on examining advanced knowledge in travel and tourism industry system and will cover issues related to the impact of tourism planning and development. This course is designed to use a practical and pragmatic approach to understand travel and tourism management. Case studies and best practices will be emphasized in this course with global insights and perspectives. Research and analytical skills will be further developed as an outcome of this course.

Pre-requisite: None

#### IRTM7038 RETAIL MANAGEMENT IN INTEGRATED RESORTS

This course discusses different activities and decisions that retailers face everyday. Students will learn major issues related to marketing and management in retailing. After taking this course, students should be equipped with advanced knowledge of understanding and solving the challenges faced by retail stores especially in integrated resorts, managing and marketing retail operations, as well as communicating effectively with customers. As a result, communication skills will be advanced after completing this course.

Pre-requisite: None

#### IRTM7039 SERVICE QUALITY MANAGEMENT IN INTEGRATED RESORTS

This course provides students an overview of service quality management in integrated resorts. This course will equip students with the essential knowledge and service quality skills that are required in the industry. Quality analysis and enhancement issues are emphasized. Students will further progress their research and analytical skills as a result of taking this module. Pre-requisite: None

#### IRTM7040 SPECIAL TOPICS IN INTEGRATED RESORTS

This course aims to familiarize the students with the latest issues and topics in integrated resort. It allows students to develop skills related to a special aspect of integrated resort not presently covered in the other integrated resort related courses offered in the programme. Special topics may include one of the following: Global Issues in Integrated Resorts Management; Technological Advances in Integrated Resorts; Cross Cultural Communication in Integrated Resorts Management; Service Quality Management in International Hospitality; Customer Relationship Management in Integrated Resorts; Crisis Management in Integrated Resorts; Leadership in Integrated Resorts; Facility Management in Integrated Resorts; Environmental Management in Integrated Resorts; or other advance topics in Integrated Resorts Management. These courses are designed to improve and progress global perspectives in integrated resort management, with communication skills being further developed.

## IRTM7041 STRATEGIC MANAGEMENT IN HOSPITALITY INDUSTRY

This course provides students with the challenge of integrating different functional skills and applies them to actual business cases especially in the hospitality industry. Consequently, strategic management is a capstone course, where students will deepen their understanding of how competitive advantages, business strategy, corporate strategy, and international strategy impact the success or failure of companies. Research and analytical skills with ability to better formulate organizational strategies will be improved as outcomes for this module. Pre-requisite: None

# IRTM7042 DIRECT MARKETING AND CUSTOMER RELATIONSHIP MANAGEMENT IN INTEGRATED RESORTS

This course aims to equip students with key knowledge and skills in direct marketing and customer relationship management. It will cover the core elements of customer relationship management and topics such as customer retention, service delivery, and customer satisfaction will be included. Advances in direct marketing will also be emphasized. Students will be able to diagnose and establish customer relationship management strategies and direct marketing strategies that support integrated resort objectives. Case studies and best practices will be emphasized, with an enhanced ability in communication, research and analytical skills upon course completion.

Pre-requisite: None

#### IRTM7051 RESEARCH METHODS

This course aims to equip students with the knowledge and skills in conducting research for the hospitality industry. Students will be able to diagnose and identify research problems, collect relevant quantitative and qualitative data, propose alternatives and solutions, and report recommendation to business professionals in the hospitality industry. The ability for students to conduct research and analysis will be enhanced as an outcome from this module. Pre-requisite: None

#### IRTM7052 INFORMATION TECHNOLOGY IN TOURISM AND HOSPITALITY INDUSTRIES

This course aims to provide the basic understanding of information technology used in hospitality, casino, integrated resorts, and tourism industry. Students can learn the fundamentals of information technology in hospitality and integrated resort industry. Based on in-class discussion and case studies, the course will facilitate students to have their own perspectives on technology developments and the way of utilizing technologies effectively. Communication and problemsolving skills will be advanced after completing this course.

Pre-requisite: None

#### IRTM7998 PROJECT REPORT

Students are required to identify a real business issue faced by companies and provide a data driven solution in the project report. The issue, which can be local or international in scope, may come from any business functional areas in an integrated resorts context. Pre-requisite: None

# IRTM8011 ADVANCED RESEARCH METHODS IN HOSPITALITY AND GAMING MANAGEMENT

This course will provide an overview on various research paradigms and research methods used in various business areas. It is designed to familiarize PhD students with the logic discipline, principles of good research design, and various research processes, methodology and strategies that researchers use to address research questions. Topics include the identification of research problems, development of research hypotheses, research designs, data collection and processing, statistical and/or econometric analyses, and interpretation of results. Pre-requisite: IRTM7051 Research Methods or equivalent (master level)

#### IRTM8012 CONTEMPORARY RESEARCH IN HOSPITALITY AND GAMING MANAGEMENT

This core course provides PhD students with a topical foundation in hospitality and gaming management research. It introduces students to basic academic theories and concepts relating to hospitality and gaming management. Students will also learn more about current research in these areas. These knowledge will be critical for students to engage in future high-level hospitality and gaming research. They lay the foundation for the generation of more advanced knowledge in this field.

Pre-requisite: None

#### ISOM1000 INTRODUCTION TO COMPUTING AND PROGRAMMING

The objective of this course is to enable students to become competent users of computers and information systems. The course introduces students to fundamental knowledge and concepts about computing and programming, as well as the application of technology in the service industry. It covers topics on computer hardware, software, storage, networking, Internet, and programming. Basic programming is taught using a high-level language such as SAS. Pre-requisite: None

#### ISOM1001 CONTEMPORARY INFORMATION SYSTEMS FOR ORGANIZATIONS

This course provides a comprehensive introduction to the evolving field of information systems (IS) from an organizational perspective. A wide range of topics are covered beginning with the fundamentals of systems, information, organizations, the underlying information Technology (IT) as well as the ethical issues for IS/IT in today's enterprises. A contemporary perspective on IT is provided by emphasizing current topics (e.g. IT138 infrastructure and the Internet technology) before presenting the E-commerce and E-business developments which are radically transforming the traditional organizations and our lives. Throughout the course, we explore implications of this new IS/IT - digital firm - scenario for corporate management in today's global business environments.

Pre-requisite: None

#### **BUSINESS MATHEMATICS** ISOM1002

This course aims at providing students with a sound foundation in mathematics that is required for future courses in quantitative methods and economics, as well as for some business subjects. Basic knowledge and applications in mathematical functions, matrix algebra, and calculus will be introduced. By exposing the students to various business and economic applications through a wide range of mathematical procedures, the students not only will get familiar with numerous business procedures that require the use of mathematics, but will also be able to use mathematics to solve some basic business problems.

Pre-requisite: None

#### LOGIC AND REASONING ISOM1003

The aim of this course is to introduce the basic concepts of logic, apply the knowledge in the context of our daily applications and reasoning and to enhance students' generic analytical ability. Topics include concepts of logic and reasoning, logic puzzles, propositional logic, syllogistic logic and predicate logic.

Pre-requisite: None

#### ISOM1004 APPLIED CALCULUS

This subject is to provide students with basic skills of mathematical analysis, which is the core of many quantitative disciplines such as Optimization, Financial Mathematics, Statistics, and Econometrics. The syllabus emphasizes an approach to mathematics of a more abstract and conceptual kind. This emphasis is designed to help students cope with more advanced mathematics that they will meet in their senior years. Topics include: Exponential Function, Limits and continuity, Differentiation, Parametric Curves and Polar Coordinates, Parametric curves, polar coordinates, gradients, Riemann Integral, Numerical methods, Infinite sequences and series, Functions of Several Variables, and Introduction to Ordinary Differential Equations. Pre-requisite: ISOM1002 Business Mathematics or GEST1001 Quantitative Reasoning for Business or Equivalent course

#### ISOM1005 INTRODUCTION TO BUSINEESS INTELLIGENCE AND INFORMATION

This is an introductory course which aims to provide students with a general understanding a business intelligence (BI) and the different career options and associated responsibilities of BI professionals. This course will introduce the procedures for the execution of a BI project, various layers of a BI architecture, and what career track one can choose to work on based on your areas of interest in a BI project. Real world exams of BI projects will be presented. Industry leading tools and technologies for BI projects will also be presented.

Pre-requisite: Any course from GE science and technology area

#### ISOM2001 INFORMATION SYSTEMS AND ORGANIZATIONS

This is an introductory course for students to develop a broad-based understanding of Information Systems (IS) from a business and management perspective. Topics to be covered include: the technological foundations of IS; tools that help managers make better decisions such as Decision Support Systems, Executive Support Systems, and Knowledge Management Systems; approaches for building an IS; ethical and societal issues related to the use of IS.

Pre-requisite: ISOM1001 Contemporary Information Systems for Organizations or GEST1005 Internet, Business and Society

#### ISOM2002 STATISTICS AND DATA ANALYSIS

This course aims to provide an opportunity for business students to understand and appreciate the broad use of statistics and probability in business world. The objectives are to demonstrate how to summarize, present and analyze data using commonly available statistical computing tools and to introduce the principles and procedures of statistical theories, which are important for making business decisions. The emphasis here is on developing the ability to effectively communicate statistical data and the results of analysis.

Pre-requisite: ISOM1002 Business Mathematics or GEST1001 Quantitative Reasoning for Business or Equivalent course

#### ISOM2003 PROBABILITY AND STATISTICS

This course aims to provide an opportunity for students to understand and appreciate the broad use of statistics and probability in business world. The objectives are to demonstrate how to summarize, present and analyse data using commonly available statistical computing tools and to introduce the basic concepts of probability as well as the mathematics of probability theories. The emphasis here is on developing students' ability to effectively choose the correct statistical techniques and communicate statistical data and results of analysis. Topics include: Organization and Presentation of Data, Descriptive Statistics, Fundamentals of Probability, Probability Distributions and Probability Densities, Mathematical Expectations, Sampling Distributions.

Pre-requisite: ISOM1002 Business Mathematics or GEST1001 Quantitative Reasoning for Business or Equivalent course

#### ISOM2004 DATA ANALYSIS AND MODELING

This course marks the transition of descriptive statistics and probability concepts to inferential statistics, with high priority on regression analysis. It aims to provide students with a solid training in the principles and procedures of statistical theories, which are important for making business decisions. The objectives are therefore to give students statistical knowledge and techniques to analyze and solve real world business problems and to introduce to students computer software techniques for achieving the above objectives. Topics include: sampling theory, confidence interval estimation, hypothesis testing, inferences based on two samples, analysis of variance, Chi-Square test, linear regression and correlation, statistical process and quality control, software packages for statistical analysis.

Pre-requisite: ISOM2003 Probability and Statistics

#### ISOM2005 LINEAR ALGEBRA

This course is intended to provide conceptual understandings and computational techniques of linear algebra. Linear algebra has wide applications to diverse areas in natural science, engineering, business and social science. This course covers linear equations, matrices, determinants, vector spaces, linear transformations, inner product and orthogonality, eigenvalues and eigenvectors, least squares problems and quadratic forms. The course emphasizes matrix and vector calculations, and its applications to finance and statistics.

Pre-requisite: ISOM1002 Business Mathematics or GEST1001 Quantitative Reasoning for Business or Equivalent course

#### ISOM2006 E-COMMERCE AND M-COMMERCE STRATEGIES

This course examines the linkage between organizational strategy and electronic methods of delivering products and services in the Web as well as mobile environment, and information technology strategies and technological solutions for enabling effective business processes. It presents the theoretical foundations necessary for understanding e-commerce and mcommerce, ranging from consumer behavior to economic theory of competition. Topics such as e-commerce types, e-strategy, e-commerce economics, m-commerce types, m-strategy, social networking, mobile marketing, social marketing, local and location-based marketing, collaborative commerce, and Web-based supply chain systems are presented from the theoretical point of view as well as from the application side.

Pre-requisite: Any course from GE science and technology area

#### ISOM2007 PROGRAMMING FOR BUSINESS ANALYTICS

This course introduces the foundation of programming for data analysis with Python. This course is meant for students to get acquainted with key programming and design techniques as well as various libraries of Python, allowing them to understand, analyze, and solve data analytical problems through programming. It involves both theoretical and practical components. Upon the completion of this course, students are expected to have a solid foundation on the basic concepts of programming and technical skills required for scientific computing problems. Pre-requisite: Any course from GE science and technology area

## ISOM3000 DATABASE MANAGEMENT

Database management is the foundation of any accounting information systems. During this course students will have ample opportunity to master the theoretical basis of relational database design in the context of accounting systems. Database management systems must effectively store, access and manipulate data as well as provide data security, data sharing and data integrity. This course emphasizes on both theories and hands-on experiences and most of the concepts will be explained through practical examples. The course work includes a term project in which students are required to design and implement a relational database for a part of the accounting system for a small business. The Microsoft ACCESS will be used as the main software package for students to gain hands-on experience. In-depth tutorials on commercial-grade Database Management Systems including Oracle and SQL Server will be given as well.

Pre-requisite: Any course from GE information technology and knowledge society or any course from GE science and technology area

#### ISOM3001 E-AUDITING

This course explores the theories and practices of audit and control of computer-based information systems. Audit and control of information systems is examined from the viewpoint of management, systems professionals, and auditors. The rationale for controls, control theories, and audit practices are emphasized. Students will be exposed to risk assessment and professional standards in the field of information systems auditing. Pre-requisite: None

#### ISOM3002 ANALYSIS AND DESIGN OF INFORMATION SYSTEMS

The objective of this course is to provide students a theoretic foundation and technique of system analysis and design. To understand the importance of system analysis, information system concepts and techniques for data collection will be introduced prior to covering analysis and modelling tools. Discussion of process specifications and structured decisions, cost/benefits analysis and preparation of system proposal will be covered. Lastly, a variety of development tools will be introduced. Upon completion, students should be able to analyse and design different real systems.

Pre-requisite: Any course from GE information technology and knowledge society or any course from GE science and technology area

### ISOM3004 E-ACCOUNTING AND FINANCIAL MODELING

This course has two objectives. First, it provides a broad introduction to accounting information systems. The focus is to introduce enterprise systems, database management, documentation methods, internal controls, and the core business processes found in organizations to students. Second, it presents corporate modelling theory and uses financial modelling as an example. It covers areas such as using models as decision support tools, the types and uses of models, the benefits and limitations of models, and the development of models using standard industry software.

Pre-requisite: ACCT1000 Principles of Financial Accounting

# ISOM3005 ACCOUNTING INFORMATION SYSTEMS SECURITY AND ASSURANCE

This course examines the control and security issues of accounting information systems as an organizational function to ensure the assurance of data integrity, system governance, system effectiveness, and system efficiency within the context of business processes. Topics include overview of accounting information systems and business processes, control and auditing of accounting information systems, risks evaluation and management, accounting information systems applications and system development strategies.

Pre-requisite: ISOM3000 Database Management AND ISOM3016 Computer Networking for Business

#### ISOM3006 BIG DATA WITH BUSINESS APPLICATIONS

This course aims to introduce the critical role of big data approach in gaining business insight for operating enterprises better, and help students develop skills in carrying out real-world Business Intelligence (BI) tasks in common business contexts – accounting, sales, marketing, customer relationship management, etc. Through this course, students will understand the basic concepts and terminologies of big data approach, and be familiar with mainstream techniques and their potential pitfalls when delivering BI solutions. Students will work extensively with popular BI software in analysing real business data. The course will use lectures, case discussions, lab tutorials, and exercises.

Pre-requisite: ISOM3000 Database Management

#### ISOM3011 MOBILE APPLICATION DEVELOPMENT

Nowadays, smartphones are very popular. One of the major reasons of its popularity is the availability of mobile apps that can be used for personal or business purposes. Mobile apps offer a convenient way to mobile users as they can use the apps anywhere in their smartphones. Currently, Android powers the majority of smartphones. The course is designed to teach students how to make a new Android app from scratch. The students are required to use the tools and technologies, including Java, XML and Android SDK, to create Android apps. At the end of this course, the students can learn all the basics of the platform and all the skills that an Android app developer needs to be successful.

Pre-requisites: ISOM3000 Database Management System and ISOM3013 Advanced Business Programming OR CISC3000 Introduction to Database Systems and CISC3008 Programming Language

## ISOM3012 WEB SITE DESIGN AND INTERNET BUSINESS APPLICATIONS

This course provides students with the knowledge and skills needed to build and design web applications. Students will be exposed to best practices for analyzing, designing, developing, testing, and deploying web applications. Students will also be taught the skills required for developing seamless and integrated service for businesses in the internet. Pre-requisite: ISOM3028 Advanced Computer Programming

#### ISOM3013 ADVANCED BUSINESS PROGRAMMING

The course covers in greater detail about business programming. Topics covered include data structures, information representation, storage, search and sorting algorithms. Upon completion of the course, students should know how to design, code and debug simple and efficient business applications. Pre-requisite: ISOM2000 Business Programming

### ISOM3014 ADVANCED COMPUTER NETWORKING FOR BUSINESS

This course is an advanced networking course for business students. As computer networking is a one of the major components to support big data and business intelligence for business operation. In-depth knowledges for modern networking technologies is definite advantages for career development. Topics to be covered include basic enterprise network architectures, enterprise network construction; IP addressing; Internet Protocols; IP frame forwarding, filtering and routing; and different computer networking services.

Pre-requisite: ISOM3016 Computer Networking For Business

#### ISOM3015 BIG DATA MANAGEMENT

Traditional relational databases systems and data warehouse platforms are no more enough to manage big data. This course discusses concepts, management, analytics and impact of big data on nowadays environment. It introduces the core technologies for big data management, and architectures and ecosystems, and helps students gain knowledge in designing, managing and evaluating big data solutions. By working on lab exercises and group project, students will develop skills in solving big data management problems in real-world business contexts. Pre-requisite: ISOM3000 DATABASE MANAGEMENT

#### ISOM3016 COMPUTER NETWORKING FOR BUSINESS

This course covers topics on network applications, network administration, telecommunications and issues related to computer networking for business. Students will also have the opportunity to have a hands-on approach to build a computer network. As computer networks are essential in modern business transactions, this course is required for all business students. Pre-requisite: None

#### ISOM3018 BUSINESS DATA MINING AND VISUALIZATION

This course provides a comprehensive discussion to data mining (DM) problems, and introduces DM tools to enhance business decision making in common business contexts – accounting, sales, marketing, customer relationship management, etc. Through this course, students will understand the process and concepts of data mining approach, be familiar with mainstream techniques and their potential pitfalls when delivering business intelligence solutions, and be able to adopt appropriate data visualization tools to create and study the visual presentation of data. Students will work extensively with commonly used business data mining software in analyzing realistic business datasets. Upon the completion of this course, student will gain data analytical skills for effective digital storytelling, business communication, and presentation. Pre-requisite: none

#### ISOM3020 SECURITY, CONTROL AND AUDIT FOR E-BUSINESS

The aim of this subject is to provide students with the knowledge and skills necessary to identify security problems that may arise in an electronic business environment. The course includes exploring how technologies may be used to prevent or resolve security problems. Pre-requisite: None

#### ISOM3021 BUSINESS PROCESS WORKFLOW AND ANALYSIS

This course provides students with knowledge of design, implementation, and management of workflow applications in e-commerce. Topics include workflow technologies, workflow systems, business processes that transform intra- and inter-company relationship in E-commerce. Pre-requisite: None

# ISOM3022 INFORMATION TECHNOLOGY FOR LOGISTICS AND SUPPLY CHAIN MANAGEMENT

This course relates IT to logistics and supply chain management (SCM). Topics include material and resource requirement planning, scheduling and managing the entire flow of information, materials, and services from raw-materials suppliers through factories and warehouses to the end customers.

Pre-requisite: None

#### ISOM3025 BUSINESS MODELING AND SIMULATION

The purpose of the course is to provide an understanding of the principles of simulation methods and their application to a variety of common management decision problems. On successful completion of the subject student will understand the principles of simulation techniques, appreciate the advantages and disadvantages of simulation methods, and be able to recognize business problem types that can or must be approached using simulation

Pre-requisite: FINC2002 Statistics for Finance or ISOM2002 Statistics and Data Analysis or ISOM2004 Data Analysis and Modelling

### ISOM3026 E-BUSINESS AND GLOBAL BUSINESS ENVIRONMENT

This course provides an introduction to E-Business and the global business environment. It covers areas related to the transformation of a traditional firm to a digital firm and includes aspects about strategy, global business models, technology, public policy, capital and media. Students will also learn what a company needs adapt in the global business environment and the key global environmental factors and issues impacting on the development of international business.

Pre-requisite: Any course from GE science and technology area and MGMT1000 Principles of Business Management

#### ISOM3028 ADVANCED COMPUTER PROGRAMMING

This is an advanced course in software development using the programming language C++ or Java. Students are to study algorithms design of programmes with a background of data and file structures and some advanced features of the objective-oriented programming language. At completion of this course, students should be able to use the tools and techniques introduced to develop well-structured and fully documented programmes to solve business problems of various types.

Pre-requisite: ISOM2007 Programming Business Analytics or ISOM3029 Computer Programming using C++

## ISOM3029 COMPUTER PROGRAMMING USING C++

This course provides an introduction on business programming. It covers basic concepts of structured programming and programming languages, techniques of programme structure and algorithm design, the data/object types, the control structures, the functions and libraries, arrays and input/output and friendly user interface. One core issue of the course is to emphasize on the problem-solving skills and the structured programming techniques through some business examples, especially some finance examples. Upon completion of this course, students are expected to have sufficient knowledge and skills to define cost effective algorithms for both business and system applications.

Pre-requisite: None

## ISOM3030 QUANTITATIVE DECISION ANALYSIS

This course provides a survey of the quantitative techniques that are used by modern managers. Topic coverage will focus on model building, linear programming methods, network models, and regression models. Emphasis is placed on the use and limits of these quantitative methods. Model analysis will be done using EXCEL and related Add-ins.

Pre-requisite: FINC2002 Statistics for Finance or ISOM2002 Statistics and Data Analysis or ISOM2003 Probability and Statistics

## ISOM3031 FORECASTING MODELS IN BUSINESS

This course provides students with an understanding of the theory and practice of business forecasting, as applied to real data and practical problems in forecasting. In particular, students will be taught the formal procedures of identifying and understanding characteristics of time series data in business and economics, and the basic skills for developing and analyzing models for forecasting time series data. At the end of the course, students should be able to use a standard computer package to carry out these analyses.

Pre-requisite: ISOM2002 Statistics and Data Analysis or ISOM2004 Data Analysis and Modeling

## ISOM3032 APPLIED MATHEMATICS FOR ECONOMICS

This course introduces to students the mathematical tools generally used in economic theory and other economic courses. It aims to deliver students a rigorous knowledge on mathematical techniques and their economic applications. After this course, students would be able to apply mathematical analyses in business and economics.

This course will cover topics such as matrices, elementary linear algebra, numerical approximation, partial differentiation, unconstrained optimization, optimization with equality constraints, first linear difference equations and comparative statics.

Pre-requisite: ISOM1002 Business Mathematics or GEST1001 Quantitative Reasoning for Business or Equivalent course

#### ISOM3033 ADVANCED CALCULUS

The course introduces concepts and skills of calculus of functions of several variables and the basic theory of differential equations, as well as Fourier analysis and calculus of variations that are useful to understand other mathematical techniques applied to modelling in the financial markets. The emphasis will be on the basic understanding of the concepts, techniques and applications.

Pre-requisite: ISOM1004 Applied Calculus

#### ISOM3034 STATISTICAL QUALITY CONTROL

This course introduces various techniques used in quality control and quality management, and exemplifies how quality control can improve an enterprise's profitability by decreasing product defects, increasing customer satisfaction and product competitiveness. Probabilistic and statistical techniques are applied to modeling and analysis of variability associated with product production and service processes. Topics include analysis of product design tolerances, statistical analysis of process capability, statistical process control using control charts, and acceptance sampling.

Pre-requisite: FINC2002 Statistics for Finance or ISOM2002 Statistics and Data Analysis or ISOM2004 Data Analysis and Modeling

#### ISOM3035 OPERATIONS MANAGEMENT

This course is intended to be a survey of operating practices and models in both manufacturing and service oriented firms. It is intended to equip students with sufficient knowledge concerning the operations function and to better prepare them to make informed "total business decisions". It also introduces students to standard terms and concepts for communications with operations personnel. In such a course, it should be recognized that breadth of subject matter, not depth of topic, will be the goal. We will often use cases for classroom discussion. Operational issues to be discussed include designing, acquiring, operating, and maintaining the facilities and processes; purchasing raw materials; controlling and maintaining inventories; and providing the proper labor needed to produce a good or service so that customers' expectations are met.

Pre-requisite: FINC2002 Statistics for Finance or ISOM2002 Statistics and Data Analysis or ISOM2004 Data Analysis and Modeling

**ISOM3036 CYBER SECURITY AND BLOCKCHAIN**This course aims to provide students with the knowledge and skills necessary to identify security threats and vulnerabilities that may arise in an Internet-based business environment as well as to evaluate and implement protective measures. Topics to be covered include cyber security threats; types of malware, attack vectors, and prevention; risk analysis and management; authentication with access control, passwords, two-factor authentication; symmetric and asymmetric cryptography; network security such as firewalls, virtual private networks, intrusion detection / prevention; and Blockchain concepts, benefits, issues, and real world application examples to support students in understanding how blockchain may improve data security in the cyber space.

Pre-requisite: Any course from GE science and technology area

## ISOM3037 INTERNET OF THINGS AND CLOUD COMPUTING

The explosive proliferation of the Internet of Things (IoT) is digitalizing the world, increasing the volume of big data, and fueling the rapid development of business intelligence and data analytics. At the same time cloud computing enables the achievement of coherence and economies of scale through sharing of resources. This course is designed with two parts which offers students with a comprehensive understanding from the technical view, while emphasizing the socio and economic impacts, of IoT and cloud computing. Part One overviews the current components of typical IoT devices, IoT design considerations, design trade-offs of hardware and software, and technological constraints and limitations; Part Two introduces the fundamental understanding of cloud computing, cloud segments, and cloud deployment models. Cloud services, cloud security, and economic impacts of cloud computing adoption will be provided. This course also discusses a variety of business application scenarios of IoT and cloud computing via case studies. Pre-requisite: Any course from GE science and technology area

#### ISOM3038 FINANCIAL TECHNOLOGY

Financial technology (FinTech) is exerting tremendous impact on financial industries. This course offers students with empowering and practical knowledge on FinTech, helping them understand the disruptions happening now and will happen in the future in the financial services. Students will gain a broad understanding of cryptocurrencies, blockchain, smart contract, decentralized applications, P2P lending, crowdfunding, machine learning and its applications in high-frequency trading.

Pre-requisite: CISC1000 (Information Technology Fundamentals and Practices)

#### ISOM4000 SPREADSHEETS AND DECISION MODELING

The purpose of this course is to enhance students' skills in using spreadsheets to aid decision making. Spreadsheets are among the most widely used decision support tools in business today. They contain many useful analytical tools. Students will be taught in greater detail the usage of these tools. They will design macros to automate spreadsheet applications and learn about the common errors committed by spreadsheet users. Besides usage of the software, students will also be taught how to analyse managerial problems. The analyses will focus on the modelling aspects and will make use of spreadsheets to develop solutions to the problems.

Pre-requisite: Any course from GE information technology and knowledge society or any course from GE science and technology area

#### ISOM4001 INFORMATION SYSTEMS PROJECT MANAGEMENT

Information systems projects are usually long-term, large-scale programming projects. This course introduces topics in the management of information systems projects. Beginning with an introduction on the theoretical foundation of software engineering (including software development process, what constitutes well-engineered software, and why it is so difficult to produce well-engineered software), the topics covered incorporates the 9 areas outlined in the Project Management Institute's Project Management Body of Knowledge (PMBOK®): project integration management, project scope management, project cost management, project quality management, project human resource management, project cost communications management, project risk management, and project procurement management. Pre-requisite: Any course from GE information technology and knowledge society or any course from GE science and technology area

ISOM4002 WEB-BASED DEVELOPMENT OF INFORMATION SYSTEMS

This course is designed to provide students with the practical skills of developing information systems. The students are required to design and implement accounting applications such as accounts receivable or payable system, inventory costing system and financial statements reporting system, etc. During the course, the students will learn how to use web-based languages and database systems to design and develop information systems.

Pre-requisite: ISOM2000 Business Programming, ISOM3000 Database Management AND ISOM3002 Analysis and Design of Information Systems

#### ISOM4003 IMPLEMENTATION OF ACCOUNTING INFORMATION SYSTEMS

This course is a continuation of Database Applications in Accounting Information Systems. Students are required to write a research report of systems they analyzed and designed in the previous course, and write reports and present their systems (including demonstration) at the end of the course.

Pre-requisite: ISOM4002 Web-based Development of Information Systems

#### ISOM4005 BUSINESS PROJECT MANAGEMENT

This course covers the principles, processes, and strategies of project management for businesses. Students learn the roles and responsibilities in a typical project management team throughout the project life cycle. Topics include 10 areas outlined in the Project Management Body ofKnowledge (PMBOK®) — project integration management, project scope management, project time management, project cost management, project quality management, project nanagement, project ranagement, project risk management, and project procurement management. Quality standards and market trends affecting project management are introduced, such as ISO, Six Sigma, globalization, outsourcing, virtual teams, agile project management, and so on.

Pre-requisite: Any course from GE information technology and knowledge society or any course from GE science and technology area

#### ISOM4006 PROJECT AND QUALITY MANAGEMENT

This course aims to familiarize students with the fundamental concepts of the environment and process of project management, so they will be able to productively take part in a cross-functional project team and potentially lead a real-world business project. Students will learn to understand the common practices and issues in project planning and control, and to effectively make use of project management techniques and tools to ensure that the project meets its deliverables and is completed on schedule and within budget. Topics to be covered include: the project life cycle; project planning and control, leading project teams. Basic quality management concepts will also be introduced and applied to project planning and execution.

Pre-requisite: FINC2002 Statistics for Finance or ISOM2002 Statistics and Data Analysis or ISOM2004 Data Analysis and Modeling

#### ISOM4007 GRADUATION PROJECT

This course is the capstone of the BIDA programme. Students will group in teams to undertake a full end-to-end development of a solution to address a real-world data analytics problem. The project involves initial problem definition, conceptualization, data collection, data analytics, and solution delivery.

Pre-requisite: ISOM3018 Business Data Mining and Visualization and ISOM4008 Machine Learning for Business Intelligence

#### ISOM4008 MACHINE LEARNING FOR BUSINESS INTELLIGENCE

This course helps students make sense of business datasets using programming languages for machine learning and visualization. The course provides students with an understanding of a scientific procedure for systematic data analytics. It introduces the popular algorithmic solutions to big data exploration, supervised learning, unsupervised learning, and visualization. Upon the completion of this course, student will gain data analytical skills for common machine learning and visualization problems in business domain.

Pre-requisite: ISOM2007 Programming for Business Analytics

#### ISOM7010 BUSINESS TECHNOLOGY MANAGEMENT

This course introduces the application of business process and technology management in the workplace and equips students with the required knowledge and skills. Topics include concepts of the information systems (IS) and its strategy in the net-mediated and global economy, the elements of a business process, business process changes with IT, the establishment of process standards and tools, implementation issues, strategic technology management and emerging

industries, benchmarking, knowledge management, as well as new business paradigms and models.

Pre-requisite: ISOM7001 Statistics

#### ISOM7012 STATISTICAL ANALYSIS AND APPLICATIONS

This course aims to introduce postgraduate students to basic statistical techniques for analyzing data in business world. The objective is to provide an opportunity for students to learn how to effectively choose the correct statistical techniques and communicate sample data and results of analysis. The emphasis is placed on how to run data analysis with the use of statistical softwares in order to achieve the above objective.

Pre-requisite: None

#### ISOM7013 INFORMATION MANAGEMENT AND DIGITAL INNOVATION

In a net-centric and global economy, information technologies (IT) are now key drivers of business. This course emphasizes the strategic and management issues associated with the effective use of IT. Topics in this course include the concepts of the information systems, strategies in the network-mediated and global economy, network effects, disruptive technologies, big data, business intelligence (BI), machine learning (ML), and the like. This course will provide students with an understanding of how IT can affect an organization's processes and operations, and impact its strategic and competitive advantages.

Pre-requisite: None

#### ISOM7030 SERVICE OPERATIONS

This course provides an overview of supply chains and operations management. It also contains an analysis of policies, decisions and systems that produce goods and services and an examination of the role of comprehensive planning, materials management, resource scheduling, distribution systems, and system location in service operations. Quality analysis and enhancement issues and processes are also introduced.

Pre-requisite: None

## ISOM8011 QUANTITATIVE RESEARCH METHODS IN DECISION SCIENCES AND INFORMATION SYSTEMS

This course will provide an overview on various quantitative research paradigms and methods in decision science (DS) and information systems (IS). It is designed to familiarize PhD students with data analysis skills and the logic of DS&IS discipline, principles of good research design, and various research processes, methodologies and strategies that researchers use to address questions in DS and IS.

Pre-requisite: None

## ISOM8012 ADVANCED TOPICS IN DECISION SCIENCES AND INFORMATION SYSTEMS

The course covers some advance topics in decision sciences and information systems including statistics analysis, game theory, stochastic models, supply chain management, data analysis and database management. The first half of the course will be in lecture format, with the second half devoted to letting students develop and present some topics relating decision science and write individual research reports.

Pre-requisite: None

#### ISOM8300 TECHNOLOGY ADVANCEMENT AND APPLICATION FOR BUSINESS MANAGEMENT

Technology in business is a growing necessity. As the years go by, the business world is leaning more and more toward it, making it almost impossible to separate the two from each other. Innovation breeds business, and since technology paves the way for it, it can be gathered here that business needs technology to be sustained. This course offers multiple independent sessions discussing how advanced technology is now applying in doing research, innovation and entrepreneurship, and influencing business administration and management in the modern

world. Many state-of-art technology will be discussed. Pre-requisite: None

#### ISOM8350 STATISTICAL ANALYSIS FOR BUSINESS AND MANAGEMENT RESEARCH

Macao is currently positioned itself as the World Centre of Tourism and Leisure as it develops into a quality international tourist destination. Macao takes leading position about tourism and leisure activities in Greater China area. International Integrated Resort Management (IIRM) is one of signature programmes in UM. The objective of this course is to acquaint students with advanced service strategy in IIRM. Topics to be covered include the world history and the recent progress of the hospitality industry, principles of restaurant operations and food services, hotel and lodging operations, transportation, etc.

Pre-requisite: None

#### IRTM8350 CONTEMPORARY ISSUES IN INTERNATIONAL INTEGRATED RESORT MANAGEMENT

Macao is currently positioned itself as the World Centre of Tourism and Leisure as it develops into a quality international tourist destination. Macao takes leading position about tourism and leisure activities in Greater China area. International Integrated Resort Management (IIRM) is one of signature programmes in UM. The objective of this course is to acquaint students with advanced service strategy in IIRM. Topics to be covered include the world history and the recent progress of the hospitality industry, principles of restaurant operations and food services, hotel and lodging operations, transportation, etc.

Pre-requisite: None

#### MGMT1000 PRINCIPLES OF BUSINESS MANAGEMENT

This is an introductory course regarding the nature and environment of business and its role in the society. It also provides an overview of the concepts related to basic functions of management

Pre-requisite: None

#### MGMT2000 BUSINESS COMMUNICATIONS

This is an introductory course regarding practical and professional understanding of business communication skills and core competencies needed to deal effectively with internal and external audiences. Applications of communication theories will also be covered. Students will also learn to effectively produce and present various data and information convincingly and professionally. Pre-requisite: MGMT1000 Principles of Business Management

#### MGMT2001 ORGANIZATIONAL BEHAVIOR

Organizational Behavior (OB) is the study of human behavior within organizations. It looks into the many factors that have an impact on how people and groups act, think, feel and respond to work and organizations, and how organizations respond to their environments. The course focuses on the key concepts and theories from behavioral and social sciences that form the bases for understanding human interaction in the workplace. It covers a wide range of topics that include values, perception, personality, motivation, decision making, group processes, communication, leadership, and power and politics. After completing this course, students should be able to: understand the basic concepts and theories related to managers and employee behavior; apply the concepts and theories introduced to solve problems in an organizational context; and develop a better appreciation of their own values, ability and personality.

Pre-requisite: MGMT1000 Principles of Business Management

#### MGMT3000 GLOBAL BUSINESS ENVIRONMENT

This course introduces students to the dimensions and complexity of global business environment. Students will learn what modern business corporations need to adapt in the global business environment and develop individual sensitivity and competence in the global work context.

Pre-requisite: MGMT1000 Principles of Business Management AND MKTG2000 Principles of Marketing

#### MGMT3001 INTERNATIONAL MANAGEMENT

This course is a study of international management issues with an aim to improve managerial effectiveness and organizational performance in a global environment. Several organizational and behavioral issues will be examined in an international context, which include ethics, management of international operations and control, motivation, leadership, communications and negotiation, and corporate culture. Theories of cross-cultural differences will also be discussed in depth.

Pre-requisite: MGMT3000 Global Business Environment or ISOM3026 E-Business and Global Business Environment or BECO3010 Global Economic Issues and Business Implications

#### MGMT3002 COMPETITIVE ADVANTAGE

This course intends to provide a fundamental analysis on how firms can gain competitive advantage in single and multiple businesses. It draws on recent contribution to the analysis of competitive advantage by focusing on the need to identify, develop and exploit firm resources and capabilities, and exploring the industry dynamics to offer insight into the sources of success and guidance in the formulation of competitive strategies.

Pre-requisite: MGMT3003 Strategic Management

#### MGMT3003 STRATEGIC MANAGEMENT

This course introduces students to the process of strategy formation, formulation, and implementation. Students learn to integrate functional knowledge in business and to apply strategic management tools in case studies.

Pre-requisite: MGMT1000 Principles of Business Management AND FINC2000 Financial Management or FINC2003 Corporate Finance AND ACCT1000 Principles of Financial Accounting

#### MGMT3004 RESEARCH METHODS

This course prepares students to understand the role and importance of research in business. It also enables students to plan methodologically sound research studies, to execute them, and to analyze research results. Knowledge and skills acquisition include: problem identification; literature review; theoretical framework development; hypotheses formulation; research design selection, data collection, data analyses, report writing, and differentiation between sound and unsound research. Students are required to conduct a research project as group.

Pre-requisite: MGMT1000 Principles of Business Management AND MKTG2000 Principles of Marketing AND ISOM2002 Statistics and Data Analysis

#### MGMT3005 HUMAN RESOURCES MANAGEMENT

The course provides students an overview of contemporary theory, analysis, and practice in the field of human resources management (HRM). It introduces students to the fundamental and strategic role of HRM in today's organizations. It aims to develop in the students a stronger capacity to grasp the complexity of managing people and the ability to form intelligent opinion about various challenges facing HR practitioners. Broad areas of concern include the main HR functions such as recruitment, selection and retention of human resources, training and development of people, employee assessment and compensation.

Pre-requisite: MGMT1000 Principles of Business Management

#### MGMT3006 HUMAN RESOURCES PLANNING AND STAFFING

The course focuses on the crucial role of planning and staffing in the overall human resource strategy of the company. It aims to familiarize students with the knowledge and tools to assess the future supply and demand for human resources in organizations, and the methods to attract, select and retain qualified employees. Students will find many opportunities in both classroom discussions and field research to test the congruence of theory and practice. In the process, they

should be able to enhance their analytical and problem-solving skills. Pre-requisite: MGMT2001 Organizational Behavior

#### MGMT3007 ORGANIZATIONAL CHANGE AND DEVELOPMENT

Organizational Behavior (OB) is the study of human behavior within organizations. It looks into the many factors that have an impact on how people and groups act, think, feel and respond to work and organizations, and how organizations respond to their environments. The course focuses on the key concepts and theories from behavioral and social sciences that form the bases for understanding human interaction in the workplace. It covers a wide range of topics that include values, perception, personality, motivation, decision making, group processes, communication, leadership, and power and politics. After completing this course, students should be able to: understand the basic concepts and theories related to managers and employee behavior; apply the concepts and theories introduced to solve problems in an organizational context; and develop a better appreciation of their own values, ability and personality.

Pre-requisite: MGMT1000 Principles of Business Management

#### MGMT3008 QUALITY MANAGEMENT

This course introduces students to the core concepts and techniques of total quality management (TQM) and its implementation in organizations. Major topics include the evolution of the Quality Management concepts, quality control circles, quality enhancement tools, and the implementation of TQM. At the end of the course, students are expected to understand the underlying philosophy of TQM, evaluate the strengths and limitations of some quality systems such as ISO9000, and appreciate the challenges of sustaining an organization which is capable of delivering a quality product.

Pre-requisite: MGMT1000 Principles of Business Management

#### MGMT3009 BUSINESS ETHICS AND CORPORATE SOCIAL RESPONSIBILITY

The aim of this course is to provide students with the knowledge, critical thinking skills and understanding to make ethically sound business judgments and decisions when faced with complex and difficult problems. In this course, students will have an opportunity to build a strong foundation for their own ethical development as a citizen, employee, manager or corporate leader.

Pre-requisite: MGMT1000 Principles of Business Management

#### MGMT4000 GLOBAL STRATEGIC MANAGEMENT

The course takes a global perspective in the strategic management process and discusses how multinational corporations should formulate and implement strategy in various regions of the world. It covers contemporary tools of strategic management and their applications to multinational corporations.

Pre-requisite: MGMT3003 Strategic Management

#### MGMT4001 GLOBAL HUMAN RESOURCES MANAGEMENT

This course examines key problems and issues regarding management of global human resources. These include how recruitment, compensation, performance evaluation should be done for multinational corporations. Other topics include expatriate management and managing culturally diverse work teams.

Pre-requisite: MGMT2001 Organizational Behavior

#### MGMT4002 ASIAN BUSINESS

The course provides a comprehensive illustration of the nature and characteristics of management styles in major Asian countries, illustrating both the similarities and differences between them. Students will also analyze unique organizational arrangements in Asia, including chaebol in Korea, keiretsu in Japan, and family business in China. A clear conceptual framework which highlights the unique institutional and cultural settings of Asia will also be discussed. Pre-requisite: MGMT3000 Global Business Environment OR ISOM3026 E-Business and Global

Business Environment OR BECO3010 Global Economic Issues and Business Implications

#### MGMT4003 CROSS-CULTURAL COMMUNICATION IN BUSINESS

This course provides a framework for identifying and analyzing diverse cultural approaches to interpersonal and business communication. It aims to enhance students' awareness of their own cultural biases, and to provide students with the skills to successfully and sensitively interact in different cultural settings. Students will be introduced to various negotiation strategies and will learn how to adapt such strategies to prevailing cultural contexts.

Pre-requisite: MGMT3000 Global Business Environment OR ISOM3026 E-Business and Global Business Environment OR BECO3010 Global Economic Issues and Business Implications

#### MGMT4004 MANAGEMENT OF INTERNATIONAL TRADE

This course introduces students to theories and practice of international trade, and the managerial decisions to export and import. Students also study the process of trading activities, analyse the roles of economic agents involved in international trade, and examine related human resource and legal frameworks.

Pre-requisite: MGMT3000 Global Business Environment or ISOM3026 E-Business and Global Business Environment or BECO3010 Global Economic Issues and Business Implications

#### MGMT4005 MANAGEMENT OF FOREIGN AFFILIATES

This course studies how multinational corporations manage the ownership and control of activities across international markets through various organizational forms or modes of foreign entry. These organizational forms of international cooperation include wholly owned subsidiaries, branches, and representative offices; and the new forms such as international joint ventures, alliances, management contracts, franchising, licensing and mergers.

Pre-requisite: MGMT3000 Global Business Environment or ISOM3026 E-Business and Global Business Environment or BECO3010 Global Economic Issues and Business Implications

#### MGMT4006 ENTREPRENEURSHIP MANAGEMENT

This course is about creation and management of new ventures. Key topics include the concept of entrepreneurship, identification and evaluation of entrepreneurial opportunities, financing of new ventures, government policies promoting innovation and new venture creation, and small business management. Students will also learn how to formulate business plans. Pre-requisite: MGMT1000 Principles of Business Management

#### MGMT4007 CONTEMPORARY ISSUES IN GLOBAL BUSINESS MANAGEMENT

The course offers an in-depth discussion of some current and important topics in global business. The focus is on the various strategic and management challenges associated with the development of global strategies. Specific topics include global industry dynamics, development of strategic capabilities, management of strategic alliances, coordination and control processes in multinational corporations.

Pre-requisite: MGMT1000 Principles of Business Management

#### MGMT4008 LEGAL ISSUES IN HUMAN RESOURCES MANAGEMENT

This course aims to develop student's sensitivity on the legal ramification of human resource decisions. Basic legal knowledge regarding recruitment, compensation, training, and working conditions will be covered in this course.

Pre-requisite: MGMT2001 Organizational Behavior

#### MGMT4009 TRAINING AND DEVELOPMENT

Training and Development (T & D) builds on teaching and learning theories in providing students an overview of contemporary theory and practice in the field. They are exposed to the whole T

& D process and are expected to demonstrate what they have learned through in-class training presentations. Moreover, students are also expected to research on current T & D practices in the region. Course topics include training and development theories, learning motivation, T & D needs assessment, design and delivery, transfer of training, T & D strategies, and the management and evaluation of T & D programmes.

Pre-requisite: MGMT2001 Organizational Behavior

#### MGMT4010 PERFORMANCE AND COMPENSATION MANAGEMENT

The course provides knowledge of compensation and performance appraisal systems, and their relationships to corporate and human resource strategies. It exposes students to benefit packages, the benefits determination process, the legal requirements in administering compensation, various compensation systems, and performance appraisal methods. The course also addresses the impact compensation and performance appraisal systems have on employee performance. Students will also study the influence unions have on wage and salary administration.

Pre-requisite: MGMT2001 Organizational Behavior

#### MGMT4011 EMPLOYEE RELATIONS, SAFETY & HEALTH

This course is concerned with both quality of work life issues and employee relations. Topics can include occupational health and safety, emotional health, interpersonal relationships, work/family conflict, degree and nature of employee participation in decision-making, the role of labor unions and other forms of employee representation, and the pattern of cooperation and conflict resolution that occur among employees and employers.

Pre-requisite: MGMT2001 Organizational Behavior

#### MGMT4012 STRATEGIC HUMAN RESOURCES MANAGEMENT

The course provides students with a strategic approach to human resource management, clearly establishing the link between HRM and corporate strategies. It deals with the importance of "human capital" as a cornerstone of firms' competitive advantages. The course also enables the students to understand and apply processes, techniques, and activities of HRM in order to form and implement organizational strategies amid critical environmental influences. Pre-requisite: MGMT2001 Organizational Behavior

#### MGMT4013 INDUSTRIAL PSYCHOLOGY

This course is an introductory course of industrial psychology which includes application of psychological theory and research to recruitment, personnel selection, training and development, job design, work group design, work motivation, leadership, performance assessment, and job satisfaction measurement.

Pre-requisite: MGMT2001 Organizational Behavior

#### MGMT4014 CONTEMPORARY ISSUES IN HUMAN RESOURCES MANAGEMENT

The course gives students an opportunity to examine in some depth a variety of important current issues and trends in HRM. It explores current theory, analysis, and practice in selected areas of the field. The course introduces students to the theoretical and analytical issues shaping contemporary HRM thinking and practice. It also serves as a forum for students to exchange views on both the theoretical and practical aspects HRM as they might apply to the Macao context.

Pre-requisite: MGMT2001 Organizational Behavior

#### MGMT4015 LEADERSHIP

This course is designed to provide students with a broad perspective on the practice of managerial leadership and organizational life in the global arena. It enable students to develop the leadership skill, to inspire people to go from vision to action to results, to ensure organization to stay competitive in today's' global competition, global market, organizational turbulence, and a changing workforce marked by higher education and resultant higher expectations, as well as diversity. Pre-requisite: MGMT1000 Principles of Business Management

#### MGMT4016 INNOVATION MANAGEMENT

The course focuses on the processes and challenges involved in discovering, creating, and managing innovations for organizations. The course also explores how innovation strategies and entrepreneurial skills can create value in products, services, and business models. The module includes application of innovation-related frameworks to specific context and phases of innovation.

Pre-requisite: MGMT1000 Principles of Business Management

#### MGMT7010 ORGANIZATIONAL BEHAVIOR

The course presents frameworks for explaining human behavior in the workplace. Through these frameworks, students will be intellectually equipped with tools to manage employees, work teams, and organizations effectively. Topics include basic attributes of individuals, theories of motivation, job design and work arrangements, group development and processes, organizational structure and design, organizational culture and organizational change. Pre-requisite: None

#### MGMT7011 STRATEGIC MANAGEMENT

This course provides students with the challenge of integrating different functional skills and applies them to actual business cases. Consequently, strategic management is a capstone course where students will deepen their understanding of how competitive advantages, business strategy, corporate strategy, and international strategy impact the success or failure of companies

Pre-requisite: MKTG7010 Marketing Management AND MGMT7010 Organizational Behavior

#### MGMT7012 ETHICS AND LEADERSHIP IN ORGANIZATIONS

This course is designed to provide students a roadmap for effective organization leadership. Through reviewing contemporary theories of leadership and classical theories of ethics, it encourages students to form their own perspectives on leadership and ethics. The course discusses crucial aspects of leadership, such as integrity, networking, relationship building, and coaching. It also develops students' leadership awareness to address the expectations of diverse organizational stakeholders. Special consideration will be given to the role of ethical leadership in ensuring that firms balance their diverse social responsibilities and maintain robust ethical safeguards, while resolving ethical problems and drawing appropriate lessons from them. Pre-requisite: None

#### MGMT7013 ENTREPRENEURSHIP

This course helps students to understand the role and importance of entrepreneurship. It also enables students to recognize their entrepreneurial potential, have an appreciation for opportunity and creativity, ethical issues related to entrepreneurial activities, and develop business planning skills. Instruction will include lectures, class discussion, and workshops. Students will be assessed by tests, assignments, presentation, and formal written reports. Through the activities of this course, students are expected to develop their business plan and identify strategies for managing enterprise growth/exit.

Pre-requisite: None

#### MGMT7014 BUSINESS CONSULTANCY METHODS

Today's business environment is fast changing and challenging to managers. Business consultants play an important role in helping companies and organizations to understand the complexity of business situations and solve the problems they face. This course aims to introduce to students the business consultancy industry, approaches of diagnosing and analysing business situations, and ways to develop effective solutions to business problems. Pre-requisite: None

#### MGMT7032 HUMAN RESOURCES MANAGEMENT

This course aims to develop within students the capacity to understand the complexity of managing people. Participants of this course will carry out an in-depth investigation into such

topics as recruitment, compensation, and training. The course will also introduce participants to current debates within human resource management. Pre-requisite: None

#### MGMT7036 ADVANCES IN MANAGEMENT STUDIES

This course provides students with the opportunity to focus on a particular contemporary issue in managing people and organizations, utilizing the most recent advances in theory and practice in the field.

Pre-requisite: MGMT7010 Organizational Behavior

#### MGMT7037 GLOBAL BUSINESS

This course enables students to conduct analyses of the cultural, legal, political, financial, and economic factors affecting the global business environment. Substantial attention will be paid to integrated, multidisciplinary applications of knowledge. A case-based approach is used. Pre-requisite: None

#### MGMT8011 ADVANCED RESEARCH METHODS IN MANAGEMENT AND MARKETING

This is a seminar course on behavioral research in business. This course provides basic concepts on social theories and scientific laws with respect to the philosophy of science. It covers various stages of behavioral research including research design, measurement scale and development, samples, data collection and statistical analyses such as significance tests, experimental design, multiple regression, mediation and moderating effects, multi-level analysis, confirmatory factor analysis, and structural equation modeling.

Pre-requisite: BAGC7011 Research Methods or equivalent (master level)

#### MGMT8013 DOCTORAL SEMINAR IN STRATEGIC MANAGEMENT

The seminar course provides an overview of various theoretical perspectives that define the landscape of strategy research. Upon the completion of this course, students will be able to develop a pluralistic understanding about the conceptual development of strategy field and identify new directions and further areas of research. Major strands of theories to be discussed include industry-based view, institution theory, resource-based view, knowledge-based view and strategy process perspective.

Pre-requisite: MGMT7011 Strategic Management or equivalent (master level)

#### MGMT8014 DOCTORAL SEMINAR IN ORGANIZATIONAL BEHAVIOR/HUMAN RESOURCE MANAGEMENT

This is a seminar course introducing the major theoretical perspectives pertaining to organizational behavior (OB) and human resource management (HRM) research. It covers the major topics in OB and HRM research and focuses on discussing the various theoretical perspectives employed by current OB and HRM studies. Through intensive in-class discussion, the students can have an understanding on the latest development of OB and HRM theories and generate their perspective on future research directions.

Pre-requiste: MGMT7010 Organizational Behavior or equivalent (master level)

#### MGMT8300 LEADERSHIP AND ORGANIZATIONAL CHANGE

This course is designed to provide students with a broad perspective on the practice of managerial leadership and organizational life in the global arena. It enables students to further enhance the leadership skill in their business operation, Chinese family business models and conventional wisdom of Chinese culture and business. Besides, the course presents frameworks for explaining human behavior in the workplace. Through these frameworks, students will be intellectually equipped with tools to manage employees, work teams, and organizations effectively. Topics include basic attributes of individuals, theories of motivation, job design and work arrangements, group development and processes, organizational structure and design, organizational culture and organizational change. Pre-requisite: None

#### MGMT8350 CROSS-CULTURAL BUSINESS STRATEGY

The purpose of this course is to provide a solid theoretical foundation that can enable CEOs and senior managers charged with the design and implementation of strategic initiatives to develop their critical thinking and analytical skills. It contains a detailed treatment of fundamental theoretical perspectives of strategy, including industrial organization economics, resource-based view, dynamic capability and knowledge management. Pre-requisite: None

#### MKTG2000 PRINCIPLES OF MARKETING

This is an introductory course providing students with key concepts and skills underlying the modern practice of marketing. The role of marketing in the organization and in society is also examined. Tools and methods used in planning and implementing the four Ps (product, price, place and promotion) will be explored.

Pre-requisite: MGMT1000 Principles of Business Management

#### MKTG3000 CONSUMER BEHAVIOR

This course is designed to provide students with a framework for analyzing consumer behavior by learning about relevant psychological and sociological theories. It focuses on the consumer decision process with emphasis on consumer decision making, satisfaction/dissatisfaction factors, perception, learning, group influences as well as marketing strategies implications. Pre-requisite: MKTG2000 Principles of Marketing

#### MKTG3001 BUSINESS-TO-BUSINESS MARKETING

This course focuses on the key issues and factors to consider when formulating and implementing marketing strategies target at other business and nonprofit organizations. emphasizing relationship building, alliance and partnership, data interchange, power shifts in the channel and the impact of changing technology.

Pre-requisite: MKTG2000 Principles of Marketing

#### MKTG3002 MARKETING RESEARCH

Marketing managers are required to make enormous number of decisions that have direct impact on consumer experiences and ultimately purchase. This course is designed to equip students with the skills of collecting data, transforming these data into information and developing insights for making effective marketing decisions. Students will be introduced to various techniques and methodologies to plan and execute sound research studies, as well as updated analytical tools to analyse and interpret research results. They will also acquire practical experiences by working on a group research project.

Pre-requisite: MKTG2000 Principles of Marketing

#### MKTG4000 INTERNATIONAL MARKETING

This course enables students to develop an understanding of the dynamics of foreign markets and learn how to apply the marketing concepts in these environments. Students will be able to gain the necessary skills needed to evaluate and select foreign market opportunities, segment international markets, enter and effectively serve the foreign markets as well as develop and implement marketing strategies at the country, regional, and global level.

Pre-requisite: MKTG2000 Principles of Marketing

#### MKTG4001 INTEGRATED MARKETING COMMUNICATIONS

Students will be able to exhibit: a critical appreciation of key models and framework within the marketing communications area; critically appraise and develop integrated marketing communications campaigns; show a sound understanding of the advertising process ranging from creative strategy to media strategy; demonstrate an appreciation of the roles and relative contributions of public relations, sponsorship, sales promotion, direct marketing and the internet as communications tools; and understand the differing roles of advertising agency, specialist Pre-requisite: MKTG2000 Principles of Marketing agency and creative consultancy.

#### MKTG4002 MARKETING STRATEGY

This is a capstone course in marketing to train students in consolidating all learnt principles and putting them into making marketing decisions relevant to the long-run performance of organizations. It will introduce students to strategic thinking and also other updated and pertinent issues in marketing strategy. Upon completion of the course, students should be able to recognize the key influencers of success of various marketing decisions and thereby improve their ability in making marketing decisions.

Pre-requisite: MKTG2000 Principles of Marketing

#### MKTG4003 SERVICES MARKETING

This course seeks to prepare students to function as effective marketers in a services economy, to raise awareness of the nature and characteristics of services as well as to provide more knowledge about service quality, the foundation of services marketing.

Pre-requisite: MKTG2000 Principles of Marketing

#### MKTG4004 SALES MANAGEMENT

This course aims at familiarizing students with the development, trends and relevant theories of sales management. After taking this course, students should understand the principles of organizing, motivating, leading and compensating salesforce. They will also acquire the knowledge and techniques of effective personal selling.

Pre-requisite: MKTG2000 Principles of Marketing

#### MKTG4005 RETAIL STRATEGY

This course discusses the various activities and decisions that retailers face everyday. It introduces and integrates business, consumer and social concepts to provide an effective framework for the study of retailing. After taking this course, students should be equipped with the knowledge of selecting a store location, managing the retail operation, developing a merchandise plan as well as communicating with customers.

Pre-requisite: MKTG2000 Principles of Marketing

#### MKTG4006 INTERNATIONAL RETAILING

Upon completion of this course, students should get a basic understanding of the retailing practices in various developed and developing countries, and be able to appreciate how differences in market structure, culture and consumer behavior bring about differences in retailing strategies across these countries.

Pre-requisite: MKTG2000 Principles of Marketing

#### MKTG4007 MARKETING FOR HOSPITALITY INDUSTRY

This course examines how hospitality and tourism enterprises apply marketing theories for the purpose of successful business. It provides students with basic knowledge and practical experience to develop strategic and operating marketing plans for hospitality properties, emphasizes the marketing orientation as a management philosophy that guides the design and delivery of guest services and examines the dynamic relationship between hospitality marketing and daily operations.

Pre-requisite: MKTG2000 Principles of Marketing

#### MKTG4008 EVENTS MARKETING

Events marketing covers the field of conferences and meeting management and marketing. The different types of meetings and conferences and the types of organizations that stage such events are examined. Topics include: the role of the planner; setting objectives; site selection negotiations; programme design; budgeting; contracts; speaker selection; registration; on-site logistics; transportation; and security and legal issues. The use of convention centres and multi-hotels in relationship to housing and participant registration systems, vendor contracts, and union staff is also explored.

Pre-requisite: MKTG2000 Principles of Marketing

#### MKTG4009 MARKETING CHANNEL MANAGEMENT

The management of the flow of products from producer to consumers/customers is one of the critical components of marketing strategy. This course seeks to examine the role of the marketing channels in the field of marketing activities and to develop student's problem solving abilities in distribution activities.

Pre-requisite: MKTG2000 Principles of Marketing

#### MKTG4010 PRODUCT MANAGEMENT

This course enables students to gain an understanding of the basic concepts in product management, to develop decision-making skills by applying these concepts to real-life problems as well as an awareness of the latest tools, techniques, and research in product management. Pre-requisite: MKTG2000 Principles of Marketing

#### MKTG4011 PRICING STRATEGY

This course will draw on the concepts of economics and marketing to develop approaches useful for pricing decision making. Students are expected to develop a deep appreciation of the complexities of making pricing decisions from a managerial perspective and to be able to conduct detailed analysis of the pricing environments. The elements of a comprehensive conceptual model of the pricing decision will be demonstrated. Pre-requisite: MKTG2000 Principles of Marketing

MKTG4012 CUSTOMER RELATIONSHIP MANAGEMENT

This course seeks to provide students with the necessary conceptual background of what customer relationship management is and is not, introduce them to various techniques through which relationships can be acquired and retained, as well as critically evaluate and assess the effectiveness of various CRM efforts.

Pre-requisite: MKTG2000 Principles of Marketing

#### MKTG4013 DIGITAL MARKETING

The course focuses on what a manager must know to take advantage of the Net. Students will understand the key issues and factors to consider when formulating and implementing Internet marketing strategies, know how to apply the concepts, principles and theories associated with marketing management to an online environment and use the Internet more effectively on personal and professional levels.

Pre-requisite: MKTG2000 Principles of Marketing

#### MKTG4014 BRAND MANAGEMENT

This course will address the strategic importance of branding, provide theories and strategies for building, leveraging, and defending strong brands, and discuss current opportunities and challenges facing brand managers.

Pre-requisite: MKTG2000 Principles of Marketing

#### MKTG4015 QUANTITATIVE MARKETING RESEARCH

The objective of this course is to teach the students the concept of quantitative research and to train them on how to use large and representative sample to collect data that can be analyzed statistically to output conclusive results.

Pre-requisite: MGMT3004 Research Methods

#### MKTG4016 QUALITATIVE MARKETING RESEARCH

Qualitative research has much relevance in marketing as a tool in searching for relevant information about markets and their uses in formulating marketing strategies and programmes. This course aims to develop the concept of scientific research and provide an understanding of the nature of qualitative research. Students should be able to command basic qualitative data collection approaches and basic qualitative marketing research project.

Pre-requisite: MGMT3004 Research Methods

#### MKTG4017 SPECIAL TOPICS IN MARKETING

This course aims to familiarize the students with the latest issues and topics in marketing. It allows students to develop skills related to a special aspect of marketing not presently covered in the other marketing courses offered in the programme (e.g. Marketing for Non-profit Organizations, Marketing in the Asia-Pacific Region).

Pre-requisite: MKTG2000 Principles of Marketing

#### MKTG4018 LEISURE AND LIFESTYLE MARKETING

This course provides a basic understanding and familiarity with the latest strategies, techniques, and communication media employed to market the expanding range of entertainment, sports, resorts/spas in the world. On completion, students should be equipped with the knowledge and skills to apply marketing principles as they pertain to the fast growing leisure industry. Pre-requisite: MKTG2000 Principles of Marketing

#### MKTG4019 ANALYTICS FOR MARKETING DECISIIONS

Marketers increasingly found that big data is becoming mainstream and the ability to collect, analyse and generating insights from these data becomes essential to the success of modern enterprises. This course seeks to introduce students to various sources of marketing data as well as a variety of statistical tools available to convert them into useful insights enabling profitable customer acquisitions, retention and growth. Using real world cases and statistics software, this course will bring students through the process of acquiring useful data, choosing relevant analytical methods as well as converting results into meaning insights which can input into major marketing decisions. Data privacy issues will also be explored in this course. Pre-requisite: MKTG2000 Principles of Marketing and MKTG3002 Marketing Research

#### MKTG7010 MARKETING MANAGEMENT

This course seeks to equip students with the key conceptual, analytical and problem solving skills to address marketing problems and decisions. Specifically, it introduces students to various marketing analyses (customer, competitor and company analysis) and marketing strategies. Tools and methods used in planning and implementing the four Ps (product, price, place and promotion) will be explored. This course integrates theory and practice within the context of organizations operating locally and globally.

Pre-requisite: None

#### MKTG7030 CONSUMER BEHAVIOR

This course offers an analysis of consumer and organizational purchase behavior. Emphasis is placed on how and why purchase decisions are made and on the psychological, sociocultural and economic underpinnings of different purchase behaviors. Based on these principles, students should be able to predict how buyers (consumers and organizations) will react to various marketing actions.

Pre-requisite: MKTG7010 Marketing Management

#### MKTG7032 ADVANCES IN MARKETING STUDIES

This course provides students with the opportunity to focus on a particular contemporary issue in marketing. Possible topics come from the fields of internet marketing, brand management, marketing in China and customer relationship management.

Pre-requisite: MKTG7010 Marketing Management

#### MKTG7033 MARKETING ANALYTICS

This course is designed to help students understand the development of marketing data in the big data era and the value of such data in marketing decision making. Students will be introduced the broad range of marketing data available to businesses, ways to gain insights from the data and convert insights into profitable customer acquisition, retention and growth efforts. Important marketing data usages (e.g., customer behavior prediction, customer value evaluation, social listening, etc.) are discussed using examples from different industries. Issues of data privacy and implementation challenges in big data marketing will also be explored.

Pre-requisite: MKTG7010 Marketing Management

#### MKTG8012 DOCTORAL SEMINAR IN MARKETING THEORIES

This course introduces Ph.D. students to recent topics and literature in the field of marketing. It aims to generate a discussion highlighting recent developments in marketing theories in the following areas:

- Marketing strategy
- Consumer behavior

Students are required to read and prepare written reviews on journal articles at home. They also need to share and discuss these reviews in the class. This approach enables students to appreciate marketing theories and concepts and their managerial implications. It also enables students to assess the strengths and weaknesses of various marketing investigations. Pre-requisite: MKTG7010 Marketing Management or equivalent (master level)

#### MKTG8350 INTERNATIONAL MARKETING

This is an executive course in marketing to train students in consolidating all learnt principles and putting them into making marketing decisions relevant to the long-run performance of organizations. It will introduce students to strategic thinking and also other updated and pertinent issues in marketing strategy. Lots of cases under various scenarios will be discussed. Upon completion of the course, students should be able to recognize the key influencers of success of various marketing decisions and thereby improve their ability in making complicated marketing decisions.

Pre-requisite: None

## PROGRAMMES OF STUDY Faculty of Education

## **Doctoral Degree Programme**

### AREA OF STUDY

Education

# FACULTY OF EDUCATION Doctoral Degree Programme

## **Doctor of Philosophy**

• Education

		Credits
For students	s admitted with a relevant Master's degree	
Compulsory	Courses	
EDUC8001	Qualitative Research Methods	3
EDUC8002	Applications of Advanced Quantitative Methods	3
EDUC8003	Research Ethics	
EDUC8004	Research Writing	3
EDUC8005	Introduction to Educational Research	1
EDUC8006	Introducing Qualitative Research	1
EDUC8007	Introducing Quantitative Research	1
EDUC8999	Doctoral Thesis	18
Total Credits	S:	30
	s admitted without a relevant Master's degree the above, students are required to take the following courses:	
Compulsory	Course	
EDUC7001	Research Methods in Education	3
Required El	ective Courses	
3 Master-leve research are	el courses in FED that are related to student's specialized a	9
Total Credits	S:	42

## FACULTY OF EDUCATION **Doctoral Degree Programme**

## **Doctor of Education**

Compulsory	Courses	Credits
EDUC8100	Educational Leadership and Policy Analysis	3
EDUC8101	Organization and Leadership: From Theories to Practices	3
EDUC8102	Research Methods in Education	3
EDUC8103	Organizing for Learning	3
EDUC8104	Data and Decision	3
EDUC8105	Comparative and International Education	3
EDUC8106	Research Writing and Ethics	3
EDUC8107	Special Topics Seminar	4
EDUC8108	Practice in Action	2
EDUC8109	Independent Study	2
EDUC8199	Doctoral Thesis	18
Total Credits	6:	47

## **Master of Philosophy**

## • Educational Administration

Year I		Credits
Compulsory	Courses:	
EDUC7201	Theories of Educational Administration	3
EDUC7202	Educational Law and Policy Analysis	3
EDUC7203	Education and Development	3 3 3
EDUC7001	Research Methods in Education	3
Required El	ective Courses (1 out of 7):	3
EDUC7251	Organizational Change and Development in Schools	
EDUC7252	Seminar of Social Change and Educational Reforms	
EDUC7253	School Administration and Management	
EDUC7254	Sociological Analysis of Educational Policy	
EDUC7255	Group Dynamics	
EDUC7256	Comparative Education	
EDUC7257	Special Topics in Educational Administration	
Required El	ective Course (1 out of 3):	3
EDUC7051	Qualitative Research in Education	
EDUC7052	Quantitative Research in Education	
EDUC7053	Action Research	

Year II		Credits
EDUC7290	Thesis	12

## **Master of Philosophy**

## • Educational Psychology

Year I		Credits
Compulsory	Courses:	
	Educational and Psychological Assessment	3
	Psychology of Learning	3
	Advanced Developmental Psychology	3
EDUC7001	Research Methods in Education	3
EDÚC7451	ective Courses (1 out of 7): Motivation and Learning Psychology of Instruction	3
EDUC7453	Learning Difficulties and Guidance	
	Educational Diagnosis and Interventions	
	Behavioral and Social Problems and Guidance	
EDUC7456 EDUC7457	Teaching Students with Attention Deficit and Hyperactivity Disorder Special Topics in Educational Psychology	
Required Ele	ective Course (1 out of 3):	3
	Qualitative Research in Education	
	Quantitative Research in Education	
EDUC7053	Action Research	

Year II		Credits
EDUC7490	Thesis	12

## Master of Philosophy

## • Curriculum and Instruction

Year I		Credits
EDUC7103	Courses: Principles of Curriculum & Instruction Evaluation of Curriculum, Instruction and Student Performance Research Methods in Education	3 3 3
EDUC7051 EDUC7052	ective Course (1 out of 3): Qualitative Research in Education Quantitative Research in Education Action Research	3
	nts without selected area of concentration:	
Compulsory EDUC7102	Course: Curriculum Design & Implementation	3
Required Ele EDUC7151 EDUC7152 EDUC7153 EDUC7154 EDUC7155 EDUC7156 EDUC7157 EDUC7157 EDUC7158 EDUC7159 EDUC7160 EDUC7161	Multimedia Technology in Instructional Design Intelligence and Creativity Mathematics Learning & Teaching Chinese Language Learning & Teaching Second Language Learning & Teaching Science Learning and Teaching Social Studies Learning and Teaching Moral Development and Teaching	3
(I) For the c Compulsory		2
EDUC/162	Theories of Science Teaching and Learning	3
EDUC7163	ective Courses (1 out of 3): Studies on Science Curriculum The Evaluation of Science Teaching and Learning Professional Development of Science Teachers	3

(II) For the concentration of Information and Communication Technology in Education Compulsory Course:			
EDUC7169	ntegrating Technology for Teaching and Learning	3	
EDUC7166 I EDUC7167 M	tive Courses (1 out of 3): ssues in Distance Education Multimedia Design and Practice Frends & Issues in Instructional Technology	3	
	ncentration of Chinese Language Education		
Compulsory C EDUC7170	Secondary School Chinese Language Curriculum Design and Teaching	3	
EDUC7171 1 EDUC7172 A	tive Courses (1 out of 3): Topic Studies in Chinese Writing Appreciation and Teaching of Chinese Literature _anguage Arts Topic Studies and Teaching	3	
	ncentration of Mathematics Education		
Compulsory C EDUC7175 T	ourse: Theories of Mathematics Teaching and Learning	3	
EDUC7174 S EDUC7176 T	tive Courses (1 out of 3): Studies on Mathematics Curriculum Fhe Evaluation of Mathematics Teaching and Learning Preparation and Professional Development of Mathematics Teachers	3	
V) For the cor Compulsory C	ncentration of English Language Education		
	Curriculum Design and Materials Development for English Teachers	3	
EDUC7180 F EDUC7181 T	tive Courses (1 out of 3): Pedagogical Grammar for English Language Teachers Feaching Second Language Writing Second Language Vocabulary Acquisition and Language Teaching	3	

Year II	Credits
EDUC7190 Thesis	12

Total Credits:

30

## **Master of Philosophy**

## School Counseling

Year I		Credits
Compulsory	Courses:	
EDUC7601	Theories in Counseling Profession	3
EDUC7602	Educational & Psychological Assessment	3
EDUC7603	Advanced Counseling Skills	3 3 3
EDUC7001	Research Methods in Education	3
Required Ele	ective Courses (1 out of 5):	3
EDUC7651	Career Counseling	
EDUC7652	Group Counseling	
EDUC7653	Family Counseling	
EDUC7654	Abnormal Psychology in Adolescence	
EDUC7655	Special Topics in School Counseling	
Required Ele	ective Course (1 out of 3):	3
EDUC7051	Qualitative Research in Education	
EDUC7052	Quantitative Research in Education	
EDUC7053	Action Research	
Year II		Credits

<u>tear li</u>		Credits
EDUC7690	Thesis	12

### Total Credits:

30

## **Master of Philosophy**

## • Physical Education and Sport Studies

Year I	<u>Credits</u>
Compulsory Courses:	
EDUC7501 Advanced Exercise Psychology	3
EDUC7502 Curriculum and Teaching of Physical Education	3
EDUC7503 Advanced Exercise Physiology	3
EDUC7001 Research Methods in Education	3
Required Elective Courses (1 out of 7):	3
EDUC7551 Comparative Physical Education and Sport	
EDUC7552 Sports, Recreation and Leisure Studies	
EDUC7553 Effective Teaching and Learning in Physical Education	
EDUC7554 Exercise and Nutrition	
EDUC7555 Sports Sociology	
EDUC7556 Physical Activity and Health	
EDUC7557 Special Topics in Physical Education and Sport Studies	
Required Elective Course (1 out of 3):	3
EDUC7051 Qualitative Research in Education	
EDUC7052 Quantitative Research in Education	
EDUC7053 Action Research	

Crec	its
is	2
\$	cred Sis

### Total Credits:

30

## **Master of Philosophy**

## • Early Childhood Education and Child Development

Year I	Credits
Compulsory Courses: EDUC7301 Theories and Studies of Child Development EDUC7302 Cognition and Learning in the Early Years EDUC7303 Child Play Studies EDUC7001 Research Methods in Education EDUC7304 Early Childhood Programme Quality Evaluation	3 3 3 3 3
Required Elective Course (1 out of 3): EDUC7051 Qualitative Research in Education EDUC7052 Quantitative Research in Education EDUC7053 Action Research	3
Year II EDUC7390 Thesis	<u>Credits</u> 12

30

## FACULTY OF EDUCATION **Postgraduate Certificate Programmes** (Daytime/Evening)

### Postgraduate Certificate in Education

## • Secondary Education

Year I		Credits
Compulsory	Courses:	
EDUC6001	Introduction to Education	3
EDUC6002	Educational Psychology	3
EDUC6003	Teacher Ethics	1
EDUC6004	Teaching Practice	2
EDUC6011	Classroom Assessment	1.5
EDUC6012	Information Technology in Education	1.5
EDUC6101	Counseling and Guidance	3
EDUC6102	Curriculum and Pedagogy (Subject-based)	3
Required Ele	ective Courses (Choose 6 credits from the following required electives co	urses):
EDUC6501	Educational Administration	3
EDUC6502	Introduction to Special Education	3
EDUC6503	Educational Research	3
EDUC6504	Sociology of Education	3
Total Credit	S:	24

## Postgraduate Certificate in Education

## • Primary Education

Year I		Credits
Compulsory	Courses:	
EDUC6001	Introduction to Education	3
EDUC6002	Educational Psychology	3
EDUC6003	Teacher Ethics	1
EDUC6004	Teaching Practice	2
EDUC6011	Classroom Assessment	1.5
EDUC6012	Information Technology in Education	1.5
EDUC6201	Curriculum and Pedagogy	3
EDUC6202	School Counseling and Guidance	3
Required Ele	ective Courses (Choose 6 credits from the following required electives co	urses):
EDUC6501	Educational Administration	3
EDUC6502	Introduction to Special Education	3
EDUC6503	Educational Research	3
EDUC6504	Sociology of Education	3
Total Credit	s:	24

## Postgraduate Certificate in Education

• Pre-Primary Education

Year I		<b>Credits</b>
Compulsory	Courses:	
EDUC6001	Introduction to Education	3
EDUC6002	Educational Psychology	3
EDUC6003	Teacher Ethics	1
EDUC6004	Teaching Practice	2
EDUC6301	Health and Care in Early Childhood	3
EDUC6302	Early Childhood Development	3
EDUC6303	Integrated Learning	3
Required Ele	ctive Courses (Choose 6 credits from the following required electives	courses):
EDÚC6501	Educational Administration	3
EDUC6502	Introduction to Special Education	3
EDUC6503	Educational Research	3
EDUC6504	Sociology of Education	3
EDUC6505	Educational Technology in Early Childhood Settings	3
EDUC6506	Assessing Young Children	3
EDUC6507	Parental Education and Involvement	3
EDUC6508	Guidance and Counseling in Early Childhood	1.5
EDUC6509	Inclusive Education	1.5
Total Credit	5:	24

## **Bachelor of Education**

### • Chinese

Year I		Credits
EDUC1000	Introduction to Education	3
EDUC1002	History of Chinese Literature and Its Teaching I	3
EDUC1003	History of Chinese Literature and Its Teaching II	3
EDUC1004	Modern Chinese Language and Its Teaching	3
EDUC1005	Teaching and Learning of the Ancient and Modern Chinese Characters	3
EDUC1047	Theories of Curriculum & Instruction	3
Community ar	d Peer Education Courses	2
Languages and Skills Courses		12
2 General Education Courses		6
Total Credits:		38

### Total Credits:

Year II		<b>Credits</b>
EDUC2001	Sociology of Education	3
EDUC2003	Educational Psychology	3
EDUC2005	Classical Chinese Prose and Its Teaching I	3
EDUC2006	Classical Chinese Prose and Its Teaching II	3
EDUC2007	Teaching and Learning of the Grammar and Rhetoric of Literary Chinese	3
Community and	Peer Education Course	1
Languages and	Skills Course	3
4 General Educ	ation Courses	12
Total Credits:		31

Year III		<b>Credits</b>
EDUC3000	Integrating IT into Teaching and Learning	3
EDUC3003	Introduction to Special Education	3
EDUC3006	Teacher Ethics and Teacher Professional Development	3
EDUC3007	Subject-based Teaching Methods I (Chinese)	3
EDUC3008	Subject-based Teaching Methods II (Chinese)	3
EDUC3009	The Teaching of Chinese Poetry, Lyric and Vernacular Songs	3
EDUC3010	History of Chinese Thoughts and Education	3
2 General Ed	ucation Courses	6
1 Free Elective Course		3
Total Credits	X.	30

Year IV		Credits
EDUC4000	School Counselling and Guidance	3
EDUC4001	Supervised Teaching and School Experience	6
EDUC4007	Analects of Confucius and the Works of Mencius	3
3 Free Elective Courses		9
Total Credits:		21

#### Free Elective Courses \*

FIGE Elective	Courses
EDUC1001	Philosophy of Education
EDUC1007	Life Education
EDUC1008	Education and Society in Macao
EDUC1009	Multimedia Courseware Design and Development
EDUC1010	Photography in Education
EDUC1011	Western Classical Music History
EDUC1012	Industry of Sport, Leisure and Recreation - an Introduction
EDUC2000	Moral Education
EDUC2002	Educational Assessment
EDUC2004	Modern Chinese Writing and Its Teaching
EDUC2008	Gender and Education
EDUC2009	Media Literacy and Citizenship Education
EDUC2010	Nurturing Talented and Creative Learners: Know-What, Know-Why and Know-How
EDUC2011	Enlightened Early Childhood Education in China
EDUC2012	History of Education in the East and the West
EDUC2013	Health Care and Massage in PE and Sports
EDUC2014	Psychology of Adolescents
EDUC2015	Youth Culture
EDUC2016	Introduction to Classical Works and Its Teaching
EDUC2017	Teaching Writing and Chinese Culture
EDUC2051	Chinese History Curriculum and Teaching I
EDUC2052	Chinese History Curriculum and Teaching II
EDUC3001	Educational Administration
EDUC3002	Educational Research
EDUC3005	Classroom Management (Secondary)
EDUC3011	Educational Policy and Practice in Macao
EDUC3012	Civil Examination and Traditional Education in China
EDUC3014	I Music: Music, Me & the Society
EDUC3015	Ancient History Teaching in China
EDUC3016	Literature, History and Reading
EDUC3017	Modern and Contemporary Chinese Literature and Its Teaching
EDUC3052	Methods of Teaching in Secondary School History
EDUC3053	World History Curriculum and Teaching
EDUC4006	Teaching of Organization of Writing in Secondary School
EDUC4008	Topics in History of Chinese Education
EDUC4009	Chinese Literary Criticism and Its Teaching
EDUC4010	Ming-Qing Fictions and Its Teaching
EDUC4020	Teaching of Modern Chinese History
EDUC4021	Teaching of Macao History

\* Students can also choose any courses offered by all bachelor's degree programmes of UM.

## **Bachelor of Education**

• English

Year I		Credits
EDUC1000	Introduction to Education	3
EDUC1023	Introduction to Applied English Studies	3
EDUC1024	Introduction to English Language Teaching	3
EDUC1047	Theories of Curriculum & Instruction	3
Community and Peer Education Courses		2
Languages and Skills Courses		12
4 General Education Courses		12
Total Credits		38

Year II		Credits
EDUC1006	Language Learning Theories and English Language Teaching	3
EDUC2001	Sociology of Education	3
EDUC2003	Educational Psychology	3
EDUC2018	Subject-based Teaching Methods I (English)	3
EDUC2019	Subject-based Teaching Methods II (English)	3
Community and Peer Education Course		1
Languages and Skills Courses		3
4 General Education Courses		12
1 Free Elective Course		3
Total Credits:		34

Year III		Credits
EDUC2022	Teaching Reading and Writing	3
EDUC2023	Teaching Listening and Speaking	3
EDUC3000	Integrating IT into Teaching & Learning	3
EDUC3003	Introduction to Special Education	3
EDUC3006	Teacher Ethics and Teacher Professional Development	3
EDUC3018	Socio-Cultural Aspects of English Language Teaching	3
EDUC3019	Creative Ideas in the English Language Classroom	3
3 Free Elective Courses		9
Total Credits:		30

Year IV		Credits
EDUC4000	School Counselling and Guidance	3
EDUC4002	Supervised Teaching and School Experience	6
EDUC4011	Practical Classroom English	3
2 Free Electi	ve Courses	6
Total Credit	s:	18

#### Free Elective Courses \*

- EDUC1001 Philosophy of Education
- EDUC1007 Life Education
- EDUC1008 Education and Society in Macao
- EDUC1009 Multimedia Courseware Design and Development
- EDUC2000 Moral Education
- EDUC2002 Educational Assessment
- EDUC2009 Media Literacy and Citizenship Education
- EDUC2010 Nurturing Talented and Creative Learners: Know-What, Know-Why and Know-How
- EDUC2011 Enlightened Early Childhood Education in China
- EDUC2012 History of Education in the East and the West
- EDUC2014 Psychology of Adolescents
- EDUC2015 Youth Culture
- EDUC2020 Focused English Skills for ELT Teachers: Speaking
- EDUC2021 English Linguistics and Literature as Resources for Teachers
- EDUC2024 Teaching Grammar and Vocabulary
- EDUC3001 Educational Administration
- EDUC3002 Educational Research
- EDUC3005 Classroom Management (Secondary)
- EDUC3011 Educational Policy and Practice in Macao
- EDUC3012 Civil Examination and Traditional Education in China
- EDUC3060 Extensive Reading and Language Teaching
- EDUC3061 Technology Enhanced Language Learning and Teaching
- EDUC4012 Language Testing

\* Students can also choose any courses offered by all bachelor's degree programmes of UM.

## **Bachelor of Education**

### • Mathematics

Year I		<b>Credits</b>
EDUC1000	Introduction to Education	3
EDUC1022	Theories of Curriculum and Instruction (Secondary Mathematics)	3
MATH1001	Linear Algebra I	3
MATH1002	Linear Algebra II	3
MATH1003	Intermediate Calculus	3
MATH1004	Geometry	3
Community & Peer Education Courses		2 12
1 General Education Course GEST1004 Quantitative Reasoning for Science and Technology		3
1 Free Elective Course		3
Total Credits:		38

Year II		Credits
ECEN1008	Physics I	3
EDUC2001	Sociology of Education	3
EDUC2003	Educational Psychology	3
EDUC2049	Subject Based Teaching Methods (Secondary Mathematics) I	3
EDUC2050	Elementary Mathematics Teaching & Research	3
MATH2002	Multivariable Calculus	3
MATH2003	Mathematical Analysis I	3
MATH2004	Mathematical Analysis II	3
MATH2005	Probability	3
MATH2006	Applied Statistics	3
Community & Peer Education Course		1
Languages & Skills Courses		3
2 General Education Courses		6
Total Credits:		40

Year III		Credits
EDUC3003	Introduction to Special Education	3
EDUC3006	Teacher Ethics and Teacher Professional Development	3
EDUC3050	Subject Based Teaching Methods (Secondary Mathematics) II	3
EDUC3051	Learning Technology for Secondary Mathematics Teaching	3
MATH3000	Ordinary Differential Equations	3
MATH3001	Complex Analysis	3
MATH3003	Abstract Algebra	3
5 General Education Courses		15
1 Free Elective Course		3
Total Credits:		39

Year IV		Credits
EDUC4000	School Counselling and Guidance	3
EDUC4023	Supervised Teaching and School Experience	6
MATH4000	Elementary Number Theory	3
1 Free Elective Course		3
Total Credit	S:	15

#### Free Elective Courses \*

EDUC1001	Philosophy of Education
EDUC2002	Educational Assessment
EDUC3001	Educational Administration
EDUC3002	Educational Research
EDUC3005	Classroom Management (Secondary)
MATH3004	Partial Differential Equations
MATH3007	History of Mathematics
MATH3013	Mathematical Modeling

\* Students can also choose any courses offered by all bachelor's degree programmes of UM.

### **Bachelor of Education**

## • Integrated Science with Specialization in Biology

Year I		Credits
APAC1000	Advanced Mathematics I	3
APAC1001	College Physics	3
APAC1002	Electromagnetism and Physical Optics	3
APAC1003	Introduction to College Chemistry	3 3
EDUC1000	Introduction to Education	3
HSCI1002	Introduction to Biological Sciences	3
Community & Peer Education Courses		2
Languages & Skills Courses		12
1 General Education Course		3
1 Required Elective Course:		
HSCI1003	General and Clinical Biochemistry	3
Total Credits:		38

Year II		Credits
APAC2000	Advanced Mathematics II	3
APAC2001	Analytical and Environmental Chemistry	3
APAC2003	Inorganic Chemistry	3 3
APAC2005	Earth and Universe	3
EDUC2001	Sociology of Education	3 3
EDUC2003	Educational Psychology	3
EDUC3056	Science Education in Secondary Schools	3
EDUC3057	Scientific Inquiry and Practical Work in Secondary Schools	3
HSCI2002	General and Clinical Microbiology	3
HSCI2004	Genetics and Epigenetics	3
Community & Peer Education Course		1
Languages & Skills Courses		3
1 General Education Course		3
2 Required Elective Courses:		
HSCI2000 Cell and Molecular Biology		3
1 Required Elective Course		3
Total Credits:		43

Year III		Credits
EDUC3003	Introduction to Special Education	3
EDUC3006	Teacher Ethics and Teacher Professional Development	3
EDUC3013	Assessment in Science Education	3
EDUC3059	Emerging Pedagogies of STEM Teaching	3
6 General Education Courses		18
3 Free Elective Courses		9
Total Credits:		39

Year IV		Credits
EDUC4000	School Counselling and Guidance	3
EDUC4022	Supervised Teaching and School Experience	6
Total Credit	5:	9

#### **Required Elective Courses**

HSCI1003	General and Clinical Biochemistry
HSCI2000	Cell and Molecular Biology
HSCI2005	Development and Aging
HSCI2006	Physiology and Pathophysiology

#### Free Elective Courses \*

- EDUC1001 Philosophy of Education
- EDUC2002 Educational Assessment
- EDUC3001 Educational Administration
- EDUC3002 Educational Research
- EDUC3005 Classroom Management (Secondary)

\* Students can also choose any courses offered by all bachelor's degree programmes of UM.

## **Bachelor of Education**

## • Integrated Science with Specialization in Chemistry

Year I		Credits
APAC1000	Advanced Mathematics I	3
APAC1001	College Physics	3
APAC1002	Electromagnetism and Physical Optics	3
APAC1003	Introduction to College Chemistry	3
EDUC1000	Introduction to Education	3
HSCI1002	Introduction to Biological Sciences	3
Community &	2	
Languages & S	12	
1 General Education Course		
1 Free Elective Course		3
Total Credits:		38

Year II		Credits
APAC2000	Advanced Mathematics II	3
APAC2001	Analytical and Environmental Chemistry	3
APAC2003	Inorganic Chemistry	3
APAC2005	Earth and Universe	3
EDUC2001	Sociology of Education	3
EDUC2003	Educational Psychology	3
EDUC3056	Science Education in Secondary Schools	3
EDUC3057	Scientific Inquiry and Practical Work in Secondary Schools	3
HSCI2002	General and Clinical Microbiology	3
HSCI2004	Genetics and Epigenetics	3
Community & Peer Education Course		1
Languages & Skills Courses		3
1 General Education Course		3
1 Free Elective Course		3
Total Credits:		40

Year III		Credits
EDUC3003	Introduction to Special Education	3
EDUC3006	Teacher Ethics and Teacher Professional Development	3
EDUC3013	Assessment in Science Education	3
EDUC3059	Emerging Pedagogies of STEM Teaching	3
6 General Education Courses		18
3 Required Elective Courses		9
1 Free Elective Course		3
Total Credits	:	42

Year IV		Credits
EDUC4000	School Counselling and Guidance	3
EDUC4022	Supervised Teaching and School Experience	6
Total Credit	s:	9

#### **Required Elective Courses**

- APAC3000 Materials Physics and Chemistry
- APAC3005 Physical Chemistry
- APAC3008 Nanochemistry
- APAC3009 Organic and Polymer Chemistry

#### Free Elective Courses \*

- EDUC1001 Philosophy of Education
- EDUC2002 Educational Assessment
- EDUC3001 Educational Administration
- EDUC3002 Educational Research
- EDUC3005 Classroom Management (Secondary)

\* Students can also choose any courses offered by all bachelor's degree programmes of UM.

# FACULTY OF EDUCATION Bachelor's Degree Programmes

### **Bachelor of Education**

### • Integrated Science with Specialization in Physics

Year I		Credits
APAC1000	Advanced Mathematics I	3
APAC1001	College Physics	3
APAC1002	Electromagnetism and Physical Optics	3
APAC1003	Introduction to College Chemistry	3
EDUC1000	Introduction to Education	3
HSCI1002	Introduction to Biological Sciences	3
Community & Peer Education Courses		2
Languages & Skills Courses		12
1 General Education Course		3
1 Free Elective Course		3
Total Credits:		38

Year II		Credits
APAC2000	Advanced Mathematics II	3
APAC2001	Analytical and Environmental Chemistry	3
APAC2003	Inorganic Chemistry	3
APAC2005	Earth and Universe	3
EDUC2001	Sociology of Education	3
EDUC2003	Educational Psychology	3
EDUC3056	Science Education in Secondary Schools	3
EDUC3057	Scientific Inquiry and Practical Work in Secondary Schools	3
HSCI2002	General and Clinical Microbiology	3
HSCI2004	Genetics and Epigenetics	3
Community & Peer Education Course		1
Languages & Skills Courses		3
1 General Education Course		3
1 Required Elective Course		3
1 Free Elective Course		3
Total Credits:		43

Year III		Credits
EDUC3003	Introduction to Special Education	3
EDUC3006	Teacher Ethics and Teacher Professional Development	3
EDUC3013	Assessment in Science Education	3
EDUC3059	Emerging Pedagogies of STEM Teaching	3
6 General Education Courses		18
2 Required Elective Courses		6
1 Free Elective Course		3
Total Credits:		39

Year IV		Credits
EDUC4000	School Counselling and Guidance	3
EDUC4022	Supervised Teaching and School Experience	6
Total Credit	6:	9

#### **Required Elective Courses**

APAC2004	Quantum Physics
APAC3001	Solid State Physics
APAC3002	Thermodynamic and Statistical Physics
APAC3007	Low-Dimensional Physics

#### Free Elective Courses \*

- EDUC1001 Philosophy of Education
- EDUC2002 Educational Assessment
- EDUC3001 Educational Administration
- EDUC3002 Educational Research
- EDUC3005 Classroom Management (Secondary)

\* Students can also choose any courses offered by all bachelor's degree programmes of UM.

# FACULTY OF EDUCATION Bachelor's Degree Programmes

### **Bachelor of Education**

### • Pre-Primary Education

Year I		Credits
EDUC1000	Introduction to Education	3
EDUC1013	Early Childhood Development	3
EDUC1054	Musicianship I	3
EDUC1060	Visual Art I: Exploration and Discovery	3
Community & Peer Education Courses		2
Languages & Skills Courses		12
4 General Education Courses		12
Total Credits	8:	38

Year II		Credits
EDUC2001	Sociology of Education	3
EDUC2003	Educational Psychology	3
EDUC2025	Teaching Fundamental Movement Skills for Young Children	2
EDUC2026	Teaching of Chinese in Kindergarten	3
EDUC2027	Young Children's Mathematical Activities	3
EDUC2032	Movement Programme for Young Children	2
EDUC2064	Teaching of Music I	1.5
EDUC2067	Teaching of Visual Art	1.5
Community & Peer Education Course		1
Languages & Skills Courses		3
4 General Education Courses		12
Total Credits:		35

Year III		Credits
Compulsory (	Courses (Major):	
EDUC3004	Introduction to Special Education	3
EDUC3006	Teacher Ethics and Teacher Professional Development	3
EDUC3020	Social and Cultural Activities	3
EDUC3021	Health and Care for Young Children	3
EDUC3023	Educational Technology in Early Childhood Education	3
EDUC3024	Curriculum and Instruction in Early Childhood Education	3
EDUC3025	English Language Learning in Early Childhood	1.5
EDUC3026	Guidance in Early Childhood	3

EDUC3027 EDUC3028 EDUC3029	Assessing Young Children Integrated General Studies and Scientific Activities Children's Language and Literature	3 3 1.5
2 Free Elective Courses		6
Total Credits	:	36

Year IV		Credits
EDUC4003	Supervised Teaching and School Experience	6
2 Free Electiv	/e Courses	6
		0
Total Credits	:	12

Free Electives	;*
EDUC1001	Philosophy of Education
EDUC2028	Integrated Creative Activities
EDUC2029	Playing and Learning
EDUC2030	Parental Education and Involvement
EDUC2031	Creative Physical Activities and Equipment for Young Children
EDUC2065	Teaching of Music II
EDUC2066	Visual Art II: Theory and Practice
EDUC3002	Educational Research
EDUC3031	Educational Evaluation
EDUC3032	Drama Teaching in Early Childhood
EDUC3033	Education Planning and Creation of Learning Environment
EDUC3035	Digital Resources Application In Kindergarten
EDUC3036	Assessment and Improvement of Effective Teacher-child Interactions in Early Years Education 0-8
EDUC4015	Teaching in Inclusive Settings

\* Students can also choose any courses offered by all bachelor's degree programmes of UM.

# FACULTY OF EDUCATION Bachelor's Degree Programmes

### **Bachelor of Education**

### • Primary Education

Year I		Credits
EDUC1000	Introduction to Education	3
EDUC1047	Theories of Curriculum & Instruction	3
Community & P	eer Education Courses	2
Languages & Sl	kills Courses	12
4 General Education Courses		12
Required Electiv EDUC1015	ve Course (1 out of 3): Physical Education I – Games Learning and Foundamental Movement Exercises for Children	3
EDUC1054	Musicianship I	
EDUC1060	Visual Art I: Exploration and Discovery	
1 Free Elective Course		3
Total Credits:		38

Year II		Credits
EDUC2001	Sociology of Education	3
EDUC2003	Educational Psychology	3
EDUC2033	Primary Mathematics Teaching Skills and Principles	3
EDUC2034	The Development of Mathematics Interest, Concepts, and Key Ideas for Primary Mathematics	3
EDUC2035	Child Development	3
Community & Peer Education Course		1
Languages & Skills Courses		3
2 General Education Courses		6
Required Elective Course (1 out of 3):		3
EDUC2036	Physical Education II – Sport Education and Exercises Habit Development for Young Adolescent	-
EDUC2063	Musicianship II	
EDUC2066	Visual Art II: Theory and Practice	
Required Elective Course (1 out of 2):		3
EDUC2041	5	
EDUC2044	Guided Chinese Reading and Writing	

Required Elec EDUC2042 EDUC2047	tive Course (1 out of 2): English Phonology Guided Reading and Teaching of Chinese Prose and Poet	3
2 Free Elective Courses		6
Total Credits:		40

Year III		<b>Credits</b>
EDUC3000	Integrating IT into Teaching and Learning	3
EDUC3004	Introduction to Special Education	3
EDUC3037	Curriculum and Instruction of Primary Mathematics	3
EDUC3039	Teaching of Social Studies in Primary Schools	3
EDUC3044	Classroom Management	3 3
EDUC3049	Teaching of Science and Technology	3
EDUC3062	Educational Probation (Internship)	1
2 General Education Courses		6
Required Elec EDUC3040 EDUC3047	ctive Course (1 out of 2): Chinese Curriculm and Course Materials in Primary Education Teaching of English in Primary Schools I	3
Required Elective Course (1 out of 2):		3
EDUC3038 EDUC3048	Teaching of Chinese in Primary Schools Teaching of English in Primary Schools II	
3 Free Elective Courses		9
Total Credits:		40

Year IV		Credits
EDUC3006	Teacher Ethics and Teacher Professional Development	3
EDUC4000	School Counselling and Guidance	3
EDUC4004	Supervised Teaching and School Experience	6
Total Credits:		12

#### Free Elective Courses \*

EDUC1001	Philosophy of Education
EDUC1016	Appreciation and Teaching of Children's Literature
EDUC1017	Thinking and Learning with IT
EDUC1018	Teaching of Traditional Chinese Culture
EDUC1019	Teaching and Learning National Education
EDUC1020	Ways of Seeing: Drawing as Inquiry
EDUC1021	Quality Physical Education
EDUC1055	Understanding Visual Culture
EDUC2000	Moral Education
EDUC2037	Integrated Activity Teaching and Design For Primary Education

- EDUC2038 Elementary Mathematics Teaching & Research
- EDUC2040 Design and Analysis of Learning Materials for Elementary Social Studies
- EDUC2043 The Research of the Teaching Chinese in Mandarin Chinese
- EDUC2045 Teaching of Physical Education
- EDUC2046 Teaching of Music: Elementary General Music Methods
- EDUC3001 Educational Administration
- EDUC3002 Educational Research
- EDUC3043 Teaching of Visual Art
- EDUC3045 Research in Mathematics Education
- EDUC3046 Advanced Piano Accompaniment for General Music Classroom
- EDUC3058 Orff and Kodaly Music Teaching Methods
- EDUC4017 Physical Education III

\* Students can also choose any courses offered by all bachelor's degree programmes of UM.

### **Course Description**

#### APAC1000 ADVANCED MATHEMATICS I

The course aims at providing mathematical concepts and methods to students in the study of classical mechanics, electromagnetism, quantum mechanics as well as statistical mechanics. The topics will cover linear algebra, vector calculus, special functions, complex numbers and hyperbolic functions.

Pre-requisite: None

#### APAC1001 COLLEGE PHYSICS

In this part, mechanics included rotation, gravitation, elasticity, oscillation, waves, sound waves, fluid, gas theory and laws of thermodynamics will be introduced. Pre-requisite: None

#### APAC1002 ELECTROMAGNETISM AND PHYSICAL OPTICS

In this part, Electromagnetism will be introduced in terms of forces, fields, potential, laws, current, circuits, induction, circuit components, electromagnetic waves, light, geometric optics, interference and diffraction.

Pre-requisite: None

#### APAC1003 INTRODUCTION TO COLLEGE CHEMISTRY

This course addresses the basic concepts of chemistry through lectures and laboratory experiments. Topics include: atoms and molecules, periodic table, electronic structure, chemical bonding, chemical reactions, electrochemistry, and organic chemistry. Pre-requisite: None

#### APAC2000 ADVANCED MATHEMATICS II

The course is the extension of Advanced Mathematics I. The course aims at providing mathematical concepts and methods to students in the study of classical mechanics, electromagnetism, quantum mechanics as well as statistical mechanics. The topics will cover infinite series, Fourier series and transformation, ordinary differential equations, probability. Pre-requisite: APAC1000

#### APAC2001 ANALYTICAL AND ENVIRONMENTAL CHEMISTRY

Introduction of analytical chemistry, including the concept of analytical chemistry, sample preparation, analysis methods, quality control, as well as analytic techniques for environmental science. Related experiments will also be arranged in this course. Pre-requisite: None

#### APAC2003 INORGANIC CHEMISTRY

Introduction of inorganic chemistry, including general principles of chemistry, periodic properties of elements, acid-base theory, structure of compounds, s, p, d-block elements, etc. Some related experiments will be included.

Pre-requisite: None

#### APAC2004 QUANTUM PHYSICS

Introduction to quantum mechanics. It may cover the following topics: Wavefunction and Schrodinger equation, observables, eigenfunctions, One-dimensional steady state problem, Mechanical quantities expressed by operators and representation transformation, The evolution of mechanical quantities over time and symmetry, The Schrodinger equation in spherical coordinates, Spin and orbital angular momentum, Quantum transitions, The hydrogen atom and the addition of angular momenta. Pre-requisite: APAC2000

400

#### APAC2005 EARTH AND UNIVERSE

In this course, we aim to explain the fundamental concepts including gravity, Einstein's relativity, cosmology, etc. Topics including the solar system, the climate of the earth, the life cycle of stars, gravitational lensing, cosmic microwave background radiation will also be discussed. No prior knowledge of astronomy is necessary.

Pre-requisite: None

#### APAC3000 MATERIALS PHYSICS AND CHEMISTRY

The course will introduce the general synthesis methodologies in material science based on Physics and Chemistry principles. Exploration and applications of novel and functional materials, especially in modern technology, will also be covered in the course. Pre-requisite: None

#### APAC3001 SOLID STATE PHYSICS

In this course, the behavior of atoms and shared electrons in solids will be described by classical physics and quantum mechanics. The discussion of solid with crystalline structure will be one of the emphases. Some properties of crystal such as defects, disorder and thermal vibration will be studied. Then, band theory and motion of electron will be investigated. Pre-requisite: None

#### APAC3002 THERMODYNAMIC AND STATISTICAL PHYSICS

This course introduces the foundations of statistical mechanics to students with a strong mathematics and physics background, who are contemplating a major in Physics or interested in a rigorous treatment of physics. The main contents include the zeroth, first, second and third laws, thermodynamical potentials and Legendre transformation, phase coexistence and phase transition, thermodynamical stability, statistical distribution of almost independent systems, and others.

Pre-requisite: None

#### APAC3005 PHYSICAL CHEMISTRY

This course provides a theoretical and mathematical description of the physical behavior of chemical systems. Introduce and interpret observations on the physical and chemical properties of matter. Physical chemistry is also essential for developing and interpreting the modern techniques used to determine the structure and properties of matter, such as new synthetic materials. Related experiments will also be arranged in this course. Pre-requisite: APAC1003

APAC3007 LOW-DIMENSIONAL PHYSICS

The course aims at an introduction to basic principles of nanophysics allowing working in research and development in nanotechnology. Students will learn basic principle of physics of nanometer-size systems with a focus on basic physical phenomena. Pre-requisite: None

#### APAC3008 NANOCHEMISTRY

Introduction of nanomaterials and nanochemistry, including the concept of nanoscale, the band structure and the corresponding characters of nanomaterials, the fabrication, modification and application of nanosystem.

Pre-requisite: None

#### APAC3009 ORGANIC AND POLYMER CHEMISTRY

Introduction of various classes of organic and polymer compounds, emphasizing organic and polymer chemical reactions and mechanisms of major functionalities and their importance in the area of chemistry. Topics covered include: structure and bonding; regio-, geometric, and stereoisomerism; substitution and elimination reactions; synthesis and reactions of alcohols and epoxides; structure and properties of polymer; free radical polymerization; condensation polymerization; crystallization and crosslinking of polymer chains; characterization and

application of organic and polymer compounds. Related experiments will also be arranged in this course.

Pre-requisite: None

#### CPED1001/CPED1002 PHYSICAL EDUCATION I/ PHYSICAL EDUCATION II

Physical Education consists of theory of fitness (Part I) and basic sport concepts, knowledge and skill practice in team sport and individual sport (Part II). Part I covers sport relevant concepts including the function of sports in life, sports injury prevention & treatment and sport knowledge. Students will learn theory, principle and regulation in fitness. And know how to do exercise and workout regularly. Part II focuses on skill-based physical fitness which includes one team sport and one individual sport. Students will be guided to apply the concept of fitness, sport theory and game strategy with skill when they learn sports for participating in sport and sport practice continuously.

Pre-requisite: None

#### ECEN1008 PHYSICS I

This is a general physics course for engineering students. Firstly, kinematics will be introduced including straight line and plane motion. Then, the causes of motion will be elucidated and summarize into laws of force. Concepts of energy and work will be discussed with conservation law. Draw an analogy between translational and rotational motion. Laws of thermodynamics will also be studied.

Pre-requisite: None

#### EDUC1000 INTRODUCTION TO EDUCATION

This course aims to help students understand the general law of the human education system. From historical, theoretical and practical perspectives, the course explores (1) the fundamentals of education, (2) the relationship between education and social, political, economic and cultural developments, and (3) the relationship between education and human physical and mental developments (4) education purposes (teleology), and (5) the relationship between teachers and learners. It also discusses issues about education systems/structure, curriculum and instruction, moral education, educational management, etc.

Pre-requisite: None

#### EDUC1001 PHILOSOPHY OF EDUCATION

This course is designed to show the important influence of educational philosophy on different philosophical theories. All educators and educational investigators should be equipped with a knowledge base of Western and Chinese educational philosophies in order to seek a correct educational orientation. The course will cover topics such as the definition of philosophy and education, their relationships and their basic problems, with a systematic analysis, comparison and evaluation of various schools of educational philosophies, studying their advantages and disadvantages and their influences on teaching. Other topics include analysis of educational concepts, critique of educational philosophies, examination of classical educational doctrines, evaluation of modern educational problems and reflection on one's educational beliefs and aspirations.

Pre-requisite: None

#### EDUC1002 中國文學發展與教育 | HISTORY OF CHINESE LITERATURE AND ITS TEACHING I

本科主要介紹先秦兩漢至隋唐這段歷史時期重要的文體(詩、散文、賦、樂府、駢文等)特點、 文學流派、文論發展、名家作品等,說明文學與思想、政治、社會等關係,並教授學生如何蒐集 相關的文、論材料,編寫教材,選用適當的教學法,以便將來能在中學教學實踐中靈活正確運用。 先修科目:沒有

#### EDUC1003 中國文學發展與教育 II HISTORY OF CHINESE LITERATURE AND ITS TEACHING II

本科主要介紹宋元明清這段歷史時期重要的文體(詞、曲、戲劇、小說、新民體)特點、文學流 派、文論發展、各家作品等,並說明文學與思想、政治、社會等關係,並教授學生如何蒐集相關 的文、論材料,編寫教材,選用適當的教學法,以便將來能在中學教學實踐中靈活正確運用。 先修科目: 沒有

#### EDUC1004 現代語文與教育 MODERN CHINESE LANGUAGE AND ITS TEACHING

本科旨在切合澳門現行中學語文教學的內容和要求。教學內容以中學課程教學需要為導向,即字、 詞、句的講解,以及語法和修辭的分析。內容除通論現代漢語的基本知識外,並簡述邏輯與語文的 關係,培養學生的語文思維能力,藉以提高學生在語文教學方面的能力。 先修科目:沒有

#### EDUC1005 古今漢字的教與學 TEACHING AND LEARNING OF THE ANCIENT AND MODERN CHINESE CHARACTERS

漢字是漢語的基本單位, 是形音義結合的符號體系, 故本科將從歷史發展的角度, 考察漢字字形、 字音、字義的變遷, 講授漢字的性質、特點和結構, 以及漢字簡化等問題, 以增進學生對漢字的理 解。又文言以一字一詞為主,故本科亦將講授文言詞彙的基本知識,以配合中學古詩文教學的需 要。

先修科目:沒有

#### EDUC1006 LANGUAGE LEARNING THEORIES AND ENGLISH LANGUAGE TEACHING

This course provides an overview of the concepts, theories, and research in language acquisition with an emphasis on second language acquisition. Special attention is paid to the linking of theories with current practices in English language teaching. Pre-requisite: EDUC1023 and EDUC1024

#### EDUC1007 LIFE EDUCATION

Life education is to explore the fundamental life issues based on the content of life wisdom. Why do people live? How should people live? How can they live out the values of life? These three fundamental questions about life are the core issues of life education. This course quides students to explore important life values and moral topics through critical thinking and reflection in order to figure out the meaning of life. In addition to the sentiments of humanistic arts, gratitude and service, life education also includes areas like life philosophy, life and death, religious beliefs, moral thoughts, spiritual developments, etc. With systematic exploration and experiences for these important life issues under the framework of East and West cultural thoughts, this course aims to help students construct a world vision, a complete life philosophy and correct values. Pre-requisite: None

#### EDUC1008 EDUCATION AND SOCIETY IN MACAO

This course is designed to help students to reflect on the social and education systems of Macao since the foundation of New China in 1949. By applying sociological and political concepts and theories, the course will analyse the discourses and development experiences of Macao. The course materials will be based on the accumulated research findings and publications related to the said period. It is intended to assist students in having a broader and more penetrating understanding of Macao society and its educational system.

Pre-requisite: None

#### EDUC1009 MULTIMEDIA COURSEWARE DESIGN AND DEVELOPMENT

This course deals with the basic principles and practice of design and development of multimedia courseware based on the latest development in Information Technology. Specifically, participants will identify, analyse instructional problems, design and develop learning environments and courseware aids. Participants are also encouraged to design, develop, implement and evaluate their courseware. Pre-requisite: None

#### EDUC1010 PHOTOGRAPHY IN EDUCATION

In contemporary culture, the practice and use of photographs has been vital in everyday life and in education. This course will help students understand some photographic work from the early 19<sup>th</sup> century to the present day, each of which was taken with a unique approach and perspective. Students will undergo a series of workshops, taking snapshots of everyday life and exploring the role of photography in relation to education and aesthetics in the modern world. Pre-requisite: None

#### EDUC1011 WESTERN CLASSICAL MUSIC HISTORY

This course aims at providing an advanced discussion of the styles, characteristics and historical development of the different eras from the 8<sup>th</sup> century to the 19<sup>th</sup> century in western classical music history. The focus of the course is on the aesthetic analysis of music literature, famous composers' masterworks and different compositional styles. Understanding the development of notation will provide students with a better idea of how musical concepts have influenced the development of characteristics identified in each era in history. By the close of the semester, students will have a solid understanding of the development of western classical music. Pre-requisite: None

#### EDUC1012 INDUSTRY OF SPORT, LEISURE AND RECREATION - AN INTRODUCTION

Sports and its related development in leisure and recreation attract attention dueto its intrinsic connection to personal growth, health improvement and social development. Bidding of mega sport events, building of sport tourism, planting of jogging and bicycle tracks in city, promotion of health related sport projects in community and planning of sport and recreational centres are examples of the contemporary development of sports. This course aims at bringing students basic understandings of sport, leisure and recreation as an industry, with an emphasis on the following strands: structure and organisation; activity types and international development; economic prospects, demand and supply, management, sport market and services; social change and customer behaviour; national, city and community planning; and careers and job nature in the industry of sport, leisure are the basic content of the study. Teaching will be conducted from an interactive perspective, with field trips, project works and visits as the major learning activities.

Pre-requisite: None

#### EDUC1013 EARLY CHILDHOOD DEVELOPMENT

This course will instill into teachers, who work with 0 to 8-year-old children, a thorough understanding of the developmental changes at this stage of life, the roles that genetics play in human development, as well as some common childhood disorders. Different theories of child development will be introduced to provide students with an all-rounded knowledge of children's united growth, which should lay the foundation for effective teaching and learning in early childhood education.

Pre-requisite: None

# EDUC1015 PHYSICAL EDUCATION I - GAMES LEARNING AND FOUNDAMENTAL MOVEMENT EXERCISES FOR CHILDREN

The teaching of physical education contains the study of track and field, gymnastics, ball games, dancing and swimming. Nevertheless, students at the age of 6 to 9 are too youn  $\cdot$  g to understand the sport rules, use of equipment and its competitive nature. For this purpose, the teaching of fundamental movement exercises and use of games approach become prevailed practice in helping young children to develop necessary movement skills. The main feature of this course is to help pre-service teachers or children workers to understand the principles of fundamental movement exercises and games teaching in children at junior primary age. Pre-requisite: None

#### EDUC1016 APPRECIATION AND TEACHING OF CHIDREN'S LITERATURE

The purpose of this course is to discuss various forms of children literature such as fairy tales,

stories and fables, and the connections between children literature and literature education. Students will learn how to write different forms of children literature and improve their writing skills. At the same time, student teachers will learn how to evaluate the qualities of literatures and become prepared to teach children literary appreciation or engage in creating children literature.

Pre-requisite: None

#### EDUC1017 THINKING AND LEARNING WITH IT

This course aims to help teacher trainees to create a classroom community in which learning dialogues take place through computers or other associated resources. To achieve this goal, teacher trainees are first expected to review critically the role of computers in enhancing thinking skills and facilitating students' learning. Evidence from a decade of research is drawn to show how children are engaged in talking and thinking together with computers. Pre-requisite: None

#### EDUC1018 傳統文化與教學 TEACHING OF TRADITIONAL CHINESE CULTURE

中國是一個幅員遼闊、歷史悠久、文化發達的國家。傳統文化內容豐富,並充分融合於思想、風俗、生活習慣、思維模式各個領域之中。本課程旨在協助學員透徹了解中華傳統文化的特質與內容,目的在提升在語文課堂中涉及與傳統文化相關的眾多方面的知識時,學員能達致高水平的教學效果。

先修科目: 沒有

#### EDUC1019 國情教育的教與學 TEACHING AND LEARNING NATIONAL EDUCATION

本課程分兩部分,理論與實踐並重。一方面重點介紹現代中國歷史及社會概況,包括新中國成立 經過,現今政治、社會、經濟情形,澳門特區基本法等;另方面通過一些課程設計的例子,說明 如何把有關材料運用在社會科教育上。 先修科目:沒有

#### EDUC1020 WAYS OF SEEING: DRAWING AS INQUIRY

Through diverse drawing workshops both in-doors and out-doors, this course introduces students to the various modes and approaches of drawing, from the traditional techniques to some experimental practices. While getting acquainted with different material approaches in drawing, the students will also explore drawing as ways of seeing, building conceptual thinking and visual mapping.

Pre-requisite: None

#### EDUC1021 QUALITY PHYSICAL EDUCATION

Quality Physical Education (QPE) refers to the effective use of various components to achieve the educational prospects, health conditions and active lifestyle of pupils. The course aims at helping students to understand the nature of QPE, importance of current issues and strategies to enhance the introduction of QPE in school. Student will also have chances to study the theoretical background and develop analytical understanding on related issues such as gender and choice of physical activities, opportunities of learning and behavioral pattern in sport activities. Demonstrations and experimental works in teaching are used as main methods in learning and assisted by cases studies to prepare students with abilities for quality teaching in physical education.

Pre-requisite: None

## EDUC1022 THEORIES OF CURRICULUM AND INSTRUCTION (SECONDARY MATHEMATICS)

This course seeks to elucidate evolution of mathematics education in the 20th century and for the 21st century. Past influential mathematics education reforms affecting mathematics curriculum and instruction are highlighted. Course participants are expected to be conversant with basic theories and principles of mathematics education, and in particular understand the salient characteristics of Chinese learners. They are familiarized with the course rationale, course objectives, content standards, as well as teaching and evaluation recommendations in accordance with contemporary mathematics curriculum standards. Commonly used mathematics textbooks and resources used in Macao's secondary classrooms are also exemplified.

Pre-requisite: EDUC1000 and MATH1001

#### EDUC1023 INTRODUCTION TO APPLIED ENGLISH STUDIES

This course provides an overview of the basic concepts, scope, and methodology of the science of language in its historical and descriptive aspects. The course covers description of language and language use, essential areas of enquiry in applied linguistics, and language skills and assessment, with examples drawn mostly from English. Students will be helped to see how they can synthesize and apply the knowledge about language to the teaching of English. Pre-requisite: None

#### EDUC1024 INTRODUCTION TO ENGLISH LANGUAGE TEACHING

This introductory course for English education majors aims to cover a wide range of concepts, issues, and debates relevant to language teaching and learning. It examines language learning conditions and processes and helps students see how language teaching is influenced by the ultimate goals of language learning, learner variables, and other contextual factors. Pedagogical implications link these topics to the teaching of English in Macao school contexts. Pre-requisite: None

#### EDUC1036 WELLNESS AND SPORT PRACTICE

Physical Education (PE), which is composed of theory and sport practice with individual and team sports, provided a general overview divided into two parts. Part I covers sport relevant theories including the function of sports in life, sports injury prevention & treatment, and physical fitness & exercise prescription while Part II is skill-based practice in both team and individual sports. After completing the PE study, students will not only meet individual need and develop the concept of total well-being, but also can apply and transfer what they have learned to their lifestyle and lifelong activities. Students are expected to achieve general standards in their chosen sports.

Pre-requisite: None

#### EDUC1047 THEORIES OF CURRICULUM & INSTRUCTION

Theories of Curriculum and Instruction provide students with basic principles of modern curriculum and instruction. It aims to improve their professionalism and teaching efficiency in all their working processes, put basic principles into creative practices, set clear objectives, select and organize contents, implement and evaluate curriculums under the guidance of ideal educational values and goals. It also helps to effect leadership in the teaching process, create an exciting learning situation and deeply involve the students in teacher-student interactions with the support of new instruction models, strategies and methods. Pre-requisite: EDUC1000

#### EDUC1054 MUSICIANSHIP I

This course aims to develop fundamental knowledge in understanding basic music theory and in note reading, sight singing, and ear training accurately. Rhythmic and melodic dictation and training are also included in the course. Furthermore, piano training will be included, and students will be able to play easy songs with the primary level by the end of the semester. Pre-requisite: None

#### EDUC1055 UNDERSTANDING VISUAL CULTURE

The course provides an introduction to visual culture. It is designed to equip students with the basic knowledge for understanding visual culture in the context of Chinese and Western art. Its content includes topics on concepts of perception, visual aesthetics, visual languages and theories, etc. Having acquired basic understanding of how art connects to the world, students are led to appropriate the knowledge to the appreciation and contextualization of the vibrant and

diverse visual culture of today. Pre-requisite: EDUC1060 and EDUC2066

#### EDUC1060 VISUAL ART I: EXPLORATION AND DISCOVERY

Visual art as a major component of visual culture has the characteristics of inter-/cross disciplinary study which is one of the dominant trends in academic research. The course is designed to equip students with basic art skills as well as teach them ways of seeing and help develop their faculties of imagination and creativity so as to make them capable of discovering art's existence in life, aiming to provide students with a foundation for art learning. The course will not only lead students to understand different kinds of painting techniques, but also teach and let them use different materials, media and tools to experience art creation in their exploration of its "expressivity".

Pre-requisite: None

#### EDUC2000 MORAL EDUCATION

This course aims at introducing theories, principles, and examples of moral education. Topics include: the theoretical framework of moral education, moral education in classic works, character and moral education, citizenship and moral education, religion and moral education, moral education implemented in different educational settings, curriculum guideline of moral education, learning materials of moral education, moral education in various learning areas, and examples of moral education practice.

Pre-requisite: None

#### EDUC2001 SOCIOLOGY OF EDUCATION

This is an introductory course on the Sociology of Education. It provides a brief introduction to the basic sociological concepts and perspectives. By applying these concepts and perspectives, the course intends to let participants have a broad and profound understanding of Macao society and its educational system.

Pre-requisite: None

#### EDUC2002 EDUCATIONAL ASSESSMENT

This course is designed to give a fundamental understanding of the major aspects of assessment in the classroom, in education and in society. It sets the stage for educators to develop and conduct assessment in practice. Topics include purposes and principles of assessment, planning the assessment process, choosing and developing appropriate tools. This course covers, but is not limited to, the following basic concepts: formative versus summative assessment, norm versus criteria reference, high versus low stake tests, objective versus subjective items, standard setting, item analysis, difficulty and discrimination index, reliability and validity, etc. After completion of the course, participants are expected to take reasonable steps to ensure that their tests are of sufficient quality to give useful results and for making correct interpretations. Pre-requisite: None

#### EDUC2003 EDUCATIONAL PSYCHOLOGY

This course aims to give a systematic introduction to the main concerns in educational psychology, including human development, students' learning, learning motivation, instruction and evaluation, and individual differences. Also, this course will emphasise the application of the related knowledge in educational settings.

Pre-requisite: None

#### EDUC2004 現代中文寫作與教學 MODERN CHINESE WRITING AND ITS TEACHING

本科旨在通過有目的的寫作訓練,有效地提高學生書面語言的表達能力;也在於培養學生審美情 趣、發展健康個性、形成健全人格。本科教學內容包括:培養學生觀察與感受生活能力、閱讀能 力、聯想能力和語言能力。此外,並指導學生就現代中文寫作,編寫教材,採用合適的教學法, 以便日後在教學實踐中靈活正確運用。 先修科目:沒有

#### EDUC2005 中國古典散文與教育 I CLASSICAL CHINESE PROSE AND ITS TEACHING I

本科旨在講述中國歷代散文(古文)的意義、特色與演變概況;揭示學習古文的目的與教育作用; 從《昭明文選》、《古文觀止》等古文總集中,擷取自先秦至東漢各朝代的著名古文篇章,尤其是 富有教育意義的為教材,引導學生在課堂講解、研讀與小組討論,以培養學生對古文的認知,養 成閱讀古文的興趣,充實教授古文的能力。 先修科目:沒有

#### EDUC2006 中國古典散文與教育 II CLASSICAL CHINESE PROSE AND ITS TEACHING II

本科旨在闡述中國歷代散文(古文)的朗讀技巧與研習方法;辨析古代散文與現代散文的區別; 從《昭明文撰》、《古文觀止》等古文總集中,擷取自魏晉六朝至明清各朝代的著名古文篇章,尤 其是富有教育意義的為教材,引導學生在課堂施以範文講解、研讀與小組討論,以增進學生對古 文的認知,提升研讀古文的興趣,增強教授古文的能力。 先修科目: 沒有

#### EDUC2007 文言語法修辭教與學 TEACHING AND LEARNING OF THE GRAMMAR AND RHETORIC OF LITERARY CHINESE

本科旨在切合澳門現行中學文言教學的內容和要求。教學內容以中學課程教學需要為導向, 講授 文言語法和修辭的基本知識,並注重培養學生講授文言語法和修辭知識的能力。文言修辭與文字、 音韻、詞彙、語法、訓詁相關聯,故本科有助學生提高學生閱讀和欣賞古詩文的能力。 先修科目: 沒有

#### EDUC2008 GENDER AND EDUCATION

This course aims to provide students with an overview of topics, controversies, and positions on the role of gender in education and to examine with students issues, research, theory and policy on gender and education from a historical, political and contemporary perspective. With reference to their personal experiences and observations, students will examine intersections of gender with class and ethnicity in different social mechanisms through which the patterns of educational inequality are changed or reproduced. Students will also discuss implications for gender research in school achievement, peer interaction and socialisation, teacher-student interactions, hidden curriculum, knowledge production and distribution in higher education, divisions in schooling across cultures and teaching as work. More generally, gender effects in socialisation and schooling are analysed for their implications for individuals. society and culture. Pre-requisite: None

#### EDUC2009 MEDIA LITERACY AND CITIZENSHIP EDUCATION

This course aims to develop the critical abilities that create literate media consumers. The increasing pervasiveness of Western popular culture via all forms of media around the world has had an immense impact on the ways in which we produce ourselves socially in relation to our own lived experiences and desires, together with how these identities may be perceived by others in relation to their own practices of consumption. In this context, this course will consider the wider pedagogical implications of popular culture in terms of the production and distribution of media texts and how we consume and respond to them. Pre-requisite: None

#### EDUC2010 NURTURING TALENTED AND CREATIVE LEARNERS: KNOW-WHAT, KNOW-WHY AND KNOW-HOW

The course introduces structures, functions, power and plasticity of the human brain, emphasising the interplay between nature and nurture for the lifetime development of the human mind. Based on recent advances in biology, cognitive psychology, neuropsychology and anthropology, contemporary intelligence and creativity theories (e.g. theorists like Sternberg, Gardner, Csiksentmihalyi, amongst others) are then expounded. A century of assessment research on intelligence and creativity will be elucidated, highlighting the major paradigm shifts therein. Participants are empowered to design environments and activities undertaken within cultural contexts for nurturing talented and creative learners in the 21<sup>st</sup> century.

#### Pre-requisite: None

#### EDUC2011 中國啟蒙教育 ENLIGHTENED EARLY CHILDHOOD EDUCATION IN CHINA

本科旨在講解中國歷代啟蒙教育(兒童教育)的意義與時代作用;揭示歷代啟蒙教育的發展概況, 介紹歷代著名啟蒙教材,如《三字經》、《百家姓》、《千字文》、《千家詩》、《弟子規》、《聲律啟蒙》 等,引導學生研讀與討論,從而探討啟蒙教育的教學目標、教學理論、教學方法,藉以古為今用, 推陳出新;並養成學生對啟蒙教育的認知與興趣,充實教授啟蒙教育的能力。 先修科目:沒有

#### EDUC2012 HISTORY OF EDUCATION IN THE EAST AND THE WEST

This course aims to discuss the important events, educational thoughts and systems in the history of education in China and the West. The related political, social, economic and cultural contexts will be analysed for an interpretation of the background and development of each era and stage in history. This course will allow students to understand how educational activities evolved in history and to learn from the experiences and thoughts advocated by educators in the past.

Pre-requisite: None

#### EDUC2013 HEALTH CARE AND MASSAGE IN PE AND SPORTS

This course, which combines medical health care with exercise science, offers the basic knowledge as well as the skills essential for the prevention, evaluation and treatment of common injuries in the care of physically active individuals. Topics such as physical measures, medical supervision in sports, hygiene in youth and females, prevention and treatment of sports injuries, sports massage and medical sports will be introduced. This class also emphasises hands-on experiences and the need for students to develop their practical skills. Upon completion of this course, students should be able to become familiar with the concepts and basic medical knowledge relevant to sports, to know how to prevent and treat common sports injuries and to apply what they have learnt in physical fitness and ways of recovery from exercise fatigue. Pre-requisite: None

#### EDUC2014 PSYCHOLOGY OF ADOLESCENTS

This course aims to help educators understand the characteristics of adolescents from psychological points of view. It covers the following topics: the emergence of adolescence, classic and contemporary theories, physiological and sexual development, intellectual and cognitive development, self-concept and identity formation, emotional adjustment, moral development, peer and friendship group, socialised anxiety, views on work, life, marriage and family, and adolescent problems related to parenting, schooling and social change. Lectures, group discussions, reading assignments and research projects are employed to equip pre- and in-service teachers with professional insights into the psychological well-being of teenagers (aged 10 to 18, senior primary to high school years).

### EDUC2015 YOUTH CULTURE

This course aims to provide students with a variety of perspectives on youth culture so that students could have a better understanding of not only activities of the youth but also how the youth and their activities are represented and thus perceived by the general public. Students will be engaged in debates over how youth culture is interpreted. How far could it be seen as part of national culture, although it seems peculiar to a particular age group of a nation? How far could youth culture be seen as a subculture? And, if so, in what ways should youth culture be regarded as deviance, mass culture, resistance (or counter-culture), or a social movement? And how do capitalism and globalisation impact on youth culture? Relevant concepts and theories will provide students with insights into examining youth culture in Macao and evaluating existing Macao youth policies.

Pre-requisite: None

#### EDUC2016 古籍導讀與教學 INTRODUCTION TO CLASSICAL WORKS AND ITS TEACHING

本科對四部 (經、史、子、集)作綜合性的講述和介紹,選擇若干重要的古籍作進一步評析,增強 學生閱讀古籍的基本知識,並教授學生如何把所學知識靈活運用在教學中,以便對將來教學實踐 有幫助。 先修科目:沒有

#### EDUC2017 寫作教學與中華文化 TEACHING WRITING AND CHINESE CULTURE

本科旨在協助學生了解進行寫作教學的基本原則和方法,認識與寫作教學有關的中華文化內涵, 通過教導寫作與中華文化之關係,使學生明瞭如何提升寫作技巧和內容,為日後在中學教授中文 課程作出準備。 生格利日,20万

先修科目:沒有

#### EDUC2018 SUBJECT-BASED TEACHING METHODS I (ENGLISH)

It is so designed as to equip student teachers with the essentials of English language teaching and to develop their abilities to teach effectively at the secondary school level through reflecting upon theory and practice. It aims at familiarizing them with major ELT approaches, the techniques and strategies of integrated teaching and communicative skills, materials development and the use of multimedia aids and various resources to enrich, enliven and innovate teaching and learning.

Pre-requisite: EDUC1023 and EDUC1024

#### EDUC2019 SUBJECT-BASED TEACHING METHODS II (ENGLISH)

It is so designed as to equip student teachers with the essentials of English language teaching and to develop their abilities to teach effectively at the secondary school level through reflecting upon theory and practice. It aims at familiarizing them with major ELT approaches, the techniques and strategies of integrated teaching and communicative skills, materials development and the use of multimedia aids and various resources to enrich, enliven and innovate teaching and learning.

Pre-requisite: EDUC2018

#### EDUC2020 FOCUSED ENGLISH SKILLS FOR ELT TEACHERS: SPEAKING

This course is designed for FED students in the English stream and will cater to the needs of prospective English teachers in their professional lives, i.e. to read aloud teaching materials accurately and fluently, maintaining the interest of a second language learner audience and communicating meaning adequately in the process; to give lectures and produce spoken language with structures that are grammatical and generally adequate despite occasional errors; and to interact with peers in a group discussion, keeping the discussion focused and using conversational strategies effectively. There will be three focus areas in this course: (1) reading aloud English teaching materials including poems and prose passages; (2) giving short speeches or mini lectures such as recounting an experience or presenting arguments; and (3) engaging in professional interaction about content knowledge/subject matter knowledge. Students coming to this course will raise their awareness to the common English pronunciation and ample practice opportunities to improve their English pronunciation, interaction strategies and oral communication skills.

Pre-requisite: EDUC2018 and EDUC2019

# EDUC2021 ENGLISH LINGUISTICS AND LITERATURE AS RESOURCES FOR TEACHERS

This course is not a course on linguistics analysis; nor is it a course on criticism of literary studies. In other words, this course is not intended to teach students how to study literature – either from the stylistics or the literary critical viewpoint. Rather, this is a course for prospective teachers and aims to introduce to them the possibilities of using literary texts as a resource for stimulating language activities. The course will examine the justification for using literary texts in language classrooms and will provide samples of classroom materials which are designed for engaging students interactively with the given literary texts, with fellow students and/or with the teacher, in the performance of tasks involving these texts. While this course aims at enriching student teachers' knowledge in the use of literary materials in language classrooms, it will also provide them with hands-on experience in the design of tasks for language teaching and learning. Pre-requisite: EDUC2018 and EDUC2019

#### EDUC2022 TEACHING READING AND WRITING

This course will examine the theoretical bases for reading and writing in the light of current perceptions of the processes and strategies involved in these skills and will explore recent developments and models of second language reading and writing as well as the pedagogical impact of these developments. The course will also integrate theory and practice and discuss how to teach English reading and writing lessons in Macao classrooms. Pre-requisite: EDUC2018 and EDUC2019

#### EDUC2023 TEACHING LISTENING AND SPEAKING

This course will review the theories and approaches related to speaking and listening and analyses the different processes and strategies that speakers and hearers use as they speak or listen. The course will also examine the pedagogical approaches to teaching speaking and listening and the design and planning of speaking and listening lessons in Macao classrooms. Pre-requisite: EDUC2018 and EDUC2019

#### EDUC2024 TEACHING GRAMMAR AND VOCABULARY

This course will examine relationships between grammar, meaning and context and the role of vocabulary knowledge in language learning. It will also identify issues and problems in teaching and learning English grammar and vocabulary and discuss how to plan and teach grammar and vocabulary effectively in Macao classrooms. In addition, strategies for helping learners gain control over systems of English grammar as well as learner strategies in acquiring English vocabulary will be explored.

Pre-requisite: EDUC2018 and EDUC2019

#### EDUC2025 TEACHING FUNDAMENTAL MOVEMENT SKILLS FOR YOUNG CHILDREN

The course introduces the theories about the development of physical and motor movement in early childhood, to know the foundations for teaching of movement for student teacher to develop child's movement skills and gross motor learning and to plan movement activities and lessons for fun. The primary purpose of the course is enable students to apply principles of child motor development and learning to plan Physical activities. It will prepare students to teach, organize and manage different activities, make groups, demonstrate skills (locomotors, gymnastics and rhythmic movement) and give feedback to young children to enhance their motor skill and movement experience.

Pre-requisite: CPED1001 and CPED1002

#### EDUC2026 幼稚園中文教學 TEACHING OF CHINESE IN KINDERGARTEN

本課程旨在讓學員認識語文學習對幼兒發展的重要性,掌握中文語文活動的教學原理、方法及發展趨勢,並學會根據幼兒不同發展階段的需要,提供不同的語言教育。期望學員能透過本課程學會如何引起幼兒對學習語文的興趣,以及全面提高幼兒聽、說、讀、寫的能力。此外,學員亦能學會評鑑幼兒語文教學之模式,及檢視如何利用不同的資源及方法鷹架幼兒語文能力的發展。 先修科目:EDUC1000

#### EDUC2027 YOUNG CHILDREN'S MATHEMATICAL ACTIVITIES

Mathematics has always been taken seriously by educational institutions as an important discipline. In fact, mathematical concepts exist in our everyday life. The aim of this course is to introduce teaching principles and strategies that facilitate 0 to 8-year-old children's mastery of some basic mathematical concepts. It also attempts to illustrate ways to make children understand the relationship amongst simple mathematical concepts and the connection of these

concepts to their everyday experiences as well as ways to foster children's interest in mathematical thinking through integrating mathematics into an overall design in curriculum and instruction.

Pre-requisite: None

#### EDUC2028 INTEGRATED CREATIVE ACTIVITIES

This course will examine the theories of creative thinking, provide students with a deeper and broader view of creative activities and enable them to put theory into practice in their everyday life and teaching. The content will also cover the development of children's creativity, the essential elements in creative thinking, and applications of the principles of teaching for creative thinking, expression and experiences.

Pre-requisite: EDUC1000

#### EDUC2029 PLAYING AND LEARNING

Human beings were born with the ability to play, an instinctive competence which facilitates our learning. Children's play is often mistaken as time-wasting and indulgence and its role in learning have often been neglected. The aim of this course is to re-shape students' understanding of play, especially free-play, and to highlight the value of play in children's growth and its functions in learning. It will also explore different types of play and analyse their roles in children's learning and development from various perspectives, re-state teachers' role in children's play, as well as demonstrate the relationship among play, personality and the realisation of children's potentials. Pre-requisite: None

#### EDUC2030 PARENTAL EDUCATION AND INVOLVEMENT

Family plays an important role in the child's upbringing. The course aims to explore how we, as teachers, can empower the parents to play a role in the positive development of the child. Emphasis is put on possibilities and strategies concerning the implementation of parent education and parental involvement in the local school context. Topics include: integrated approach to building staff-parent partnerships, family relationship and personal growth, disciplining methods and principles, parental ethics, development and implementation of parent education, and family-school collaboration.

Pre-requisite: None

#### EDUC2031 CREATIVE PHYSICAL ACTIVITIES AND EQUIPMENT FOR YOUNG CHILDREN

The course aims to introduce the tried-and-true guidelines for students to explore child body awareness and physical movement with four basic movement concepts (body, space, effort, relationship) and their elements. It will also help students to create and modify equipment for enriching the learning environment. Students will learn how to apply the methods of integrated learning in lesson planning and teaching/learning activities. Pre-requisite: None

#### EDUC2032 MOVEMENT PROGRAMME FOR YOUNG CHILDREN

This course helps students to understand the importance of movement for the different aspects (physical, affective and cognitive) of child development. The course gives equal stress on theories and practice. It enables student to put knowledge into practice through engaging in group discussion, planning movement station lessons, and designing movement programmes. Pre-requisite: EDUC2025

#### EDUC2033 PRIMARY MATHEMATICS TEACHING SKILLS AND PRINCIPLES

- This course aims to develop basic skill and theory for primary mathematics education.
- 1. Mathematically speaking skill and Mathematical language training
- 2. Introduction Design in mathematics teaching
- 3. Writing skill and Design
- 4. Assessment skill: Error Analysis
- 5. The reasoning principle and application
- 6. The student-centered design principle and application

- 7. The principle and applications from concrete to abstract principles
- 8. The principle and Application of the step-by-step principle Pre-requisite: None

# EDUC2034 THE DEVELOPMENT OF MATHEMATICS INTEREST, CONCEPTS, AND KEY IDEAS FOR PRIMARY MATHEMATICS

This course aims to develop basic mathematics knowledge and basic ability in mathematics for primary teachers.

- 1. Interest cultivation of primary mathematics
- 2. The development and training of proper mathematics problem solving habits
- 3. The development and training of Mathematical Beauty
- 4. The development and training of calculation ability
- 5. The development and training of Problem Solving
- 6. The development and training of geometric thinking and spatial concepts
- 7. The development and training of data collection, collation and description
- 8. The development and training of Algebraic Thinking

Pre-requisite: None

#### EDUC2035 CHILD DEVELOPMENT

In individual's interpersonal relationship, thinking and learning abilities, as well as conceptions of the world of children in middle childhood (primary school children) are in many ways different from those in their early childhood. This course aims at enhancing in- and pre-service primary school teachers' understanding of this age group, in particular, their psychological changes. The contents will cover objective analyses of the different aspects illustrated with the research directions of this life period.

Pre-requisite: None

# EDUC2036 PHYSICAL EDUCATION II - SPORT EDUCATION AND EXERCISES HABIT DEVELOPMENT FOR YOUNG ADOLESCENT

Students in upper level primary are more mature to handle different sport activities. This programme emphasizes the learning of how to teach athletic and ball games to upper primary school students. Modified sports activities and systematic learning are the major contents in teaching with purpose to assist the development of exercise habit in activities. In this course, the developmental sequences of athletic activities and ball skills are introduced. Relevant background knowledge, game complexity and transfer, games sense, curriculum arrangement, assessment format, rules and regulations and safety measures will be covered to assist the teaching and learning of different sport activities.

Pre-requisite: None

# EDUC2037 INTEGRATED ACTIVITY TEACHING AND DESIGN FOR PRIMARY EDUCATION

The course aims to introduce participants the rationale of Integrated Activity Teaching and Design for Primary Education. At the end of the course, participants are able to plan and design integrated curriculum and activity according to the ability, interest and necessity of primary students. As there are differences in adapting the integrated concept in Chinese and English teaching and if there is an available of suitable colleagues, students will be divided in groups of Chinese and English in programme learning.

Pre-requisite: None

#### EDUC2038 ELEMENTARY MATHEMATICS TEACHING & RESEARCH

All over the world, students encounter persistent difficulties (both cognitive and affective) in their learning of some elementary mathematic topics (e.g. fractions, negative numbers, solving word problems, mathematical proofs). Course participants will be studying empirical research reports of relevant teaching experiments that aim to help students overcome these learning difficulties. Under the instructor's guidance, course participants are expected to devise or revise lesson plans in light of research findings and to engage in reflective action research so as to relate

theory with practice. Pre-requisite: EDUC1000

# EDUC2040 DESIGN AND ANALYSIS OF LEARNING MATERIALS FOR ELEMENTARY SOCIAL STUDIES

The contents of elementary social studies involve broad knowledge areas, mainly including the simplified concepts and facts of different disciplines in social science. This course aims at introducing the scope and key ideas of elementary social studies, and helping learners to understand how to use some principles and techniques to design and analyze various kinds of learning materials for elementary social studies. Pre-requisite: None

#### EDUC2041 ENGLISH GRAMMAR

The course aims to help students to understand how English grammar works. It also introduces the techniques they need to analyse English grammar. The course will simultaneously prepare students for further linguistic study.

Pre-requisite: None

#### EDUC2042 ENGLISH PHONOLOGY

The course examines descriptively the phonetics and phonology of contemporary English. The major accents described are the British one known as "Received Pronunciation" (RP) and General American (GA) while other accents will be compared where necessary. Pre-requisite: None

#### EDUC2043 普通話教學研究

#### THE RESEARCH OF THE TEACHING CHINESE IN MANDARIN CHINESE

本課程旨在探討幼兒與小學教育階段"普通話課程/教材"或"用普通話教授中文課"可能遇到 的相關問題。教授學生掌握普通話語音、語法、詞彙和修辭等知識,培養學生運用普通話教學的 能力,介紹普通話在幼兒與小學教育階段課程與教學上的運用,並分析普通話教學中常見的問題 與解決之道。本課程適合想從事學前及小學教育工作的學生選修。 先修科:沒有

#### EDUC2044 GUIDED CHINESE READING AND WRITING

This course is designed to equip pre-service student teachers with the knowledge and skills of Chinese teaching. The contents include an overview of the development of reading and writing instruction theories, a variety of teaching strategies, and also the appreciation and creation of different texts. In addition, integrated reading and writing activities will also be arranged to facilitate teaching and learning. The main teaching strategies applied in this course are instruction, modeling, cooperative learning, investigative learning and problem based learning. Pre-requisite: None

#### EDUC2045 TEACHING OF PHYSICAL EDUCATION

The course aims at helping students to understand the importance of teaching physical education in school and process in attaining the expected goal in education. Mosston's Teaching Spectrum and approaches in Games Learning will be introduced. Students will have chances to learn about various principles and methods in teaching, motives in learning, curriculum planning, evaluation and assessment, safety issue and development of health-related fitness in children. The principle of Discrete Trial Training (DTT) will be adopted. The purpose is to assist students' professional build-up of knowledge in games teaching in children with simple but structured and connected trials.

Pre-requisite: EDUC1015 or EDUC2036

#### EDUC2046 TEACHING OF MUSIC: ELEMENTARY GENERAL MUSIC METHODS

The course is the continuation of Musicianship I and Musicianship II and aims at the development of students' knowledge in teaching music at primary school. It includes advanced music theory

and sight reading training. Students are expected to familiar with the knowledge and apply in their music teaching. Besides, advanced piano accompaniment will also be included in the course. The teacher will introduce the textbooks and curriculum standards from several nations so that students will have global prospective of music teaching. Furthermore, the most leading music method, Orff Music Method, will also be introduced in the course. Students will be expected to familiar with the concepts of this method and apply it in their music teaching. At last the music assessment will be used in the course so that students can understand their own progress from teacher, peers and themselves. The evaluations can also be used as an effective assessment methods for their future music teaching. Pre-requisite: EDUC2063

.

#### EDUC2047 詩文選讀與教學 GUIDED READING AND TEACHING OF CHINESE PROSE AND POETRY

本課程簡介詩詞、散文的特點、發展,選讀不同時代的一些重要詩文作品,以提高學生對中國文 學作品的欣賞、理解、分析能力,並加強對中國文化的認同感,並教授學生如何蒐集相關的詩文 材料,編寫教材,選用適當的教學法,以便將來能在教學實踐中靈活正確運用。 先修科目:沒有

#### EDUC2049 SUBJECT BASED TEACHING METHODS (SECONDARY MATHEMATICS) I

This course focuses on empowering course participants to write teachable lesson plans and programme of study pertaining to three key domains of secondary mathematics curriculum: elementary expressions and functions depicting changes and relationships; and coordinates, synthetic and dynamic geometry; special topics of mathematical investigations. Due attention is paid on professional treatment of a number of issues that have a bearing on successful meaningful student learning: educational objectives in accordance with key stages of secondary education; mathematical literacy, competencies, and thinking underpinning various pedagogic and instructional models; history of development of mathematics in different cultures; psychology of mathematics learning, particularly for Chinese learners and different gender; use of calculators and ICT tools for mathematics education; and good balance of assessment o : f learning and assessment for learning.

Pre-requisite: EDUC1022

#### EDUC2050 ELEMENTARY MATHEMATICS TEACHING AND RESEARCH

Around the world, students encounter persistent difficulties (both cognitive and affective) in their learning of some elementary mathematics topics (e.g. fractions, negative numbers, solving word problems, mathematical proofs). Course participants are empowered to study empirical research reports of relevant teaching experiments that aim to overcome these learning difficulties. Under guidance, they are expected to devise or revise lesson plans in the light of research findings and engage in reflective action research so as to relate theory and practice underpinning the teaching experiments.

Pre-requisite: EDUC1000

#### EDUC2051 中國歷史課程與教學 I CHINESE HISTORY CURRICULUM AND TEACHING I

本科旨在介紹中學中國歷史科課程,以及與課程有關之教學方法,而中國歷史發展過程,亦會涉及,使學生能應付日後在中學教授中國歷史課程之用。This course provides students with an overview of the curriculum and teaching of the secondary school Chinese history. Through a systematic introduction to historical events, they are expected to become competent history teachers.

Pre-requisite: None

#### EDUC2052 中國歷史課程與教學 II CHINESE HISTORY CURRICULUM AND TEACHING II

本科旨在介紹中學中國歷史科課程,以及與課程有關之教學方法,而中國歷史發展過程,亦會涉及,使學生能應付日後在中學教授中國歷史課程之用。This course provides students with an overview of the curriculum and teaching of the secondary school Chinese history. Through a

systematic introduction to historical events, they are expected to become competent history teachers.

Pre-requisite: None

#### EDUC2055 VISUAL AND PERFORMING ARTS - VISUAL ART

Artworks of different genres have been delighting people from all ages and all places. We enjoy their beauty and their articulation, but we know nothing or very little about their creation process. The practice of aesthetic appreciation of art not only enables us to enjoy art through deeper understanding of the works, but also enables us to recognize and realize our creative potential and capability, as well as cultivates and broadens our vision of artistic culture. The course will be taught in two parts: Firstly, Introduction to visual and performing arts, which includes common lectures on What is Art? Art and Culture, Understanding Art Genres, Approaches to Art Appreciation. Secondly, Introduction to Visual Arts Appreciation, which includes lectures designed to equip the students with basic knowledge of the different visual art forms and teach them how to appreciate and interpret such artworks by illustrating the relationship between form/style to theme/culture. Masterpieces from different regions/places reveal not merely local colors, but also profound cultural contents, echoing profound problems of life for seeing and understanding the world.

Pre-requisite: None

#### EDUC2056 VISUAL AND PERFORMING ARTS - DRAMA

This course is composed of two major components, art introduction and drama performance. This course acquaints students with vocabulary and concepts for critiquing and analyzing visual and performing arts; it examines the function of arts from social and global perspectives; and it encourages students to develop judgment in visual and performing arts' analysis and criticism. Students will gain an overview of the historical movements and ideas in different forms of arts across eras and cultures. In the drama performance component which follows, students will be introduced to the form and function of dramatic literature in its relationship to theatrical performance. Study of plays as texts leads into the rehearsal and performance of short plays. Pre-requisite: None

#### EDUC2057 VISUAL AND PERFORMING ARTS - MUSIC

The music course aims to provide fundamental knowledge of music to all UM students so as to encourage them to experience and enjoy music in their lives. This introductory course of music covers scopes of both Western and Oriental music which include their historical development/styles, musicians and their composition/performance. Traditional academics focus mainly on Western music. However, in this era, world music is gaining more attention than before as the concept of globalization is getting its role. Therefore, this course covers one-third of contents in Oriental music. The general education of music helps students to appreciate and enjoy music listening with comprehension. As the result, students' attitude and experience toward arts enhanced and elevated.

Pre-requisite: None

#### EDUC2063 MUSICIANSHIP II

This course is the continuation of Musicianship I. It aims to develop knowledge in understanding intermediate music theory, sight singing, and ear training accurately. Besides, in order to follow the international trends of music teaching, recorder training will also be included in the course. Students are expected to be able to play elementary recorder songs by end of the semester. Furthermore, piano training will continue to be included and students will be able to play songs with the intermediate level by end of the semester. At last, the teacher will analyze several different music text books from the great China regions, such as, Macao, Hong Kong, Taiwan and China in order to better prepare students a global perspectives and understanding in music teaching.

Pre-requisite: EDUC1054 or equivalent (by audition)

#### EDUC2064 TEACHING OF MUSIC I

This 1.5 credit hour course aims at equipping students with knowledge and skills of teaching music at pre-primary level in Macao background. Students will learn some basic concepts of music teaching including principle of preparing lesson plan, and techniques of designing and demonstrating music elements incorporated in activities.

Pre-requisite: EDUC1054

#### EDUC2065 TEACHING OF MUSIC II

Based on the prior 1.5 credit hour course experiences, students in this course will explore further on some popular music education theories. Students will have more chances to demonstrate teaching music creatively with proper musical language. These include selecting and editing good music literature as material, creating rhythmic movement and instruments for kids, and building their own music library for long-term teaching, etc. Pre-requisite: EDUC2064

EDUC2066 VISUAL ART II: THEORY AND PRACTICE

Visual art as an articulate form of visual culture is capable of displaying the dynamic cultural relationships between/among different academic disciplines and life domains. Its products are not merely "decorations" to please the eyes; they respond to life's profound problems through expression of their creators' cultural, historical, and life concerns. The course aims not only to familiarize students with the languages of traditional and contemporary Chinese and Western visual arts, but also to help them explore the relationship between visual art and life through art practice, leading them to understand the beauty, style and culture of art through experimenting with different media and techniques.

Pre-requisite: EDUC1060

#### EDUC2067 TEACHING OF VISUAL ART

The course provides students with an opportunity to understand visual art education in both local and global contexts. While studying curriculum design and the diverse modes of teaching in visual art (interactive, integrative and interdisciplinary), students will also be led to examine the role of visual art in education and given an opportunity to design a curriculum in visual art education.

Pre-requisite: EDUC1060

#### EDUC3000 INTEGRATING IT INTO TEACHING AND LEARNING

The aim of this course is to equip the students with the latest theoretical knowledge in multimedia learning, practical skills on computer tools, and a critical understanding of the application and value of IT in teaching and learning so as to allow students to implement, integrate and manage IT in their actual classroom environment.

Pre-requisite: None

#### EDUC3001 EDUCATIONAL ADMINISTRATION

This course allows students to understand the basic concepts of educational administration. Students will study and discuss Macau educational acts and decrees. They will also learn the basic theories related to educational administration, such as theories with regard to motivation, leadership, communication and organizational decision-making. Attempts will be made to make this course related to the educational reality in Macau.

Pre-requisite: None

#### EDUC3002 EDUCATIONAL RESEARCH

The main aim of this course is to enable a qualified teacher to use, understand, analyze and evaluate research outcomes. The course includes: (1) the basics of educational research, (2) structure and procedures of education research, (3) research variables, (4) hypotheses and topics, (5) literature review, (6) on-line search, (7) sampling, (8) questionnaires, (9) correlation analyses, (10) interviews, (11) case studies, (12) evaluation of research reports, (13) educational research ethics, etc. Pre-requisite: None

#### EDUC3003 INTRODUCTION TO SPECIAL EDUCATION

This course is designed to provide an introduction to the characteristics of children with special needs or disabilities. Emphasis will be put on several types of children with special education needs—learning disabilities, emotional and behavioural disorders, attention deficit and hyperactivity, autism, and mild intellectual disability. This course also provides some practical guidelines on how to teach in inclusive classrooms.

Pre-requisite: EDUC1000 and EDUC2003

#### EDUC3004 INTRODUCTION TO SPECIAL EDUCATION

This course helps students to understand more about children with special needs. It introduces the definitions, causes, characteristic and categories of the disabilities in early childhood. The content will also cover instructional theories, principles and tactics, assistance methods, IEP and programme planning, assessment for children with special needs, and positive attitude. Through this course, students will be able to help these children more effectively with early intervention or special education programmes to assist their potential developments. In addition, students will be taught how to make use of the pre-school and school-age special education measures and services in Macao in order to help those children and their families, and they will understand the effects and importance of parents' and professional teams' participation in the education of children who have special needs.

Pre-requisite: EDUC1000 and EDUC2003

#### EDUC3005 CLASSROOM MANAGEMENT (SECONDARY)

This course is designed to give students a broad overview of classroom management, including its base in theory, application in practice and implication. At the theoretical level, topics include different approaches to class management, establishing effective rules and procedures and classroom management systems. At the application level, topics include managing individual student behaviour, managing behaviour in a variety of instructional formats and examining the causes of and solutions to disruptive and noncompliant behaviour and classroom management problems that are within the control of the classroom teacher. The goal of the course is to help students develop their own approach to build an inclusive, productive and well-structured learning environment conducive to high levels of student support and accomplishment. Pre-requisite: EDUC1000 and EDUC2003

#### EDUC3006 TEACHER ETHICS AND TEACHER PROFESSIONAL DEVELOPMENT

The aim of this course is to prepare students to develop teachers' professional morality. After that, they can give their students 'whole-person' education by integrating teachers' instruction, their model and their environment. The experience and the development of teacher's professional morality are fully represented in the different relationships in their work, including facing themselves, their colleagues, students, students' professional ethics, and how to use and develop these theories reasonably in their teaching lives. Pre-requisite: None

#### EDUC3007 & EDUC3008 學科教學法 I(中文) 學科教學法 II(中文) SUBJECT-BASED TEACHING METHODS I (CHINESE) SUBJECT-BASED TEACHING METHODS II (CHINESE)

本課程旨在將理論與實踐結合,使學生增加和深化中文教學專業知識。掌握教學理論和方法,因應不同情況,採用適當方式,引導他人用心學習。

先修科目: EDUC1047 為 EDUC3007 的先修科目 EDUC3007 為 EDUC3008 的先修科目

# EDUC3009 中國歷代詩詞曲賞析與教學 THE APPRECIATION AND TEACHING OF POETRY, LYRIC AND VERNACULAR SONGS

本科旨在講授中國古代韻文 —— 詩、詞、曲 —— 的意義、特點、形式與異同;以唐宋詩詞、

元曲為主要教材;就作品的題材、意境、情韻、寫作技巧等詳加闡釋,引導學生賞析與研習;促 使每個學生寫作詩、詞、曲各一首,並在課堂上演示,以收理論與實踐相結合之效,藉以培養學 生教授詩、詞、曲的學養,以及日後擔任教師的教學能力。 先修科目:沒有

#### EDUC3010 中國思想史與教育 HISTORY OF CHINESE THOUGHTS AND EDUCATION

本科旨在使學員掌握中國思想的基本特質和義理及其與教育的關係。教學重點包括:先秦儒家思想、墨子思想、法家思想、老莊哲學、兩漢思想、隨唐佛學和宋明理學。本科並著重探討如何把 傳統中國思想經過批判的繼承與創造的詮釋,使之能與教育思潮進行檢討與反省。 先修科目:沒有

#### EDUC3011 EDUCATIONAL POLICY AND PRACTICE IN MACAO

This course aims to broaden and deepen students' understanding of the Macao education system from a policy study perspective. Students are provided with analytical tools to comprehend and examine educational policies and their implementation from the political transition period to the post-1999 era. The course begins with a brief historical background of developments in Macao, and the empirical analysis of policies will commence with the 1991 Law 11/91/M and extend to the post-1999 Chief Executive Annual Policy Address. Pre-requisite: None

#### EDUC3012 科舉與中國教育 CIVIL EXAMINATION AND TRADITIONAL EDUCATION IN CHINA

科舉制度是設立科目進行考試、用以選拔官吏的制度,實行共約一千三百年,對中國政治、經濟 和社會各層面產生深刻的作用。到了清末,隨著西力東漸和國力不振的環境下,科學制度終於被 新式學堂所取代。學員在完成本課程後,對科舉與中國教育的緊密關係將能更全面地把握,並明 瞭其對中國教育所造成的巨大影響。本課程亦就科舉制度與中國政治、社會流動、廢科舉興學堂 的過程和影響予以深入探討,讓學員瞭解中國社會文化變遷的核心因素。 先修科目:沒有

#### EDUC3013 ASSESSMENT IN SCIENCE EDUCATION

Formative classroom assessment advances learning by providing feedback to teachers and students about learning attainment. The course focuses on how evidences of learning can be collected through classroom formative assessment and evaluated by teachers for instructional purposes. Students will explore new assessment approaches capable of collecting data on learning across STEM content areas and Bloom's cognitive levels. The class will explore new information infrastructures that support student learning and classroom assessment. The roles of teachers and learners in supporting assessment of this kind will be discussed. Pre-requisite: None

#### EDUC3014 I MUSIC: MUSIC, ME, & THE SOCIETY

'I Music' means each participant (student) will make music. The course applies socio-cultural and psychological perspectives to present music as functional art as well as all-time media for connecting the self and the society. Students are encouraged to explore, identify, and analyze various forms of musical events that occur in their daily lives and their community. To enforce critical thinking on music's role in the students' personal and social lives, an interactive approach is used, including singing favorite songs or playing instruments, to introduce views of personality and culture, visiting local performing groups/musicians to nurture potential musicians, debating controversial views of music from research findings, and attending concerts. Afterward, each student conceptualizes the richness and power of music in human lives and in the globe. Pre-requisite: None

#### EDUC3015 中國古代歷史教育 ANCIENT HISTORY TEACHING IN CHINA

本科以培養學員掌握中國古代傳授和傳播歷史知識和觀念的活動為重心。課程以中國歷史教育發展的興衰為主線,並就歷史教材與歷史讀物、門閥政治與歷史教育、科舉考試與歷史教育、蒙學

教育與歷史教育等方面作出較深入的探索。在完成本課程後,學員將對歷史教育的價值與貢獻有 更全面的認知。 先修科目:沒有

#### EDUC3016 LITERATURE, HISTORY AND READING 文史通論與閱讀教學

本科旨在協助學生了解文史基本範疇相關知識與閱讀教學之關係,使學生明瞭閱讀教學之要點, 認識如何在文史基礎上配合閱讀教學,為日後在中學教授中文課程作出準備。 先修科目:沒有

#### EDUC3017 中國現當代文學作品與教學

#### MODERN AND CONTEMPORARY CHINESE LITERATURE AND ITS TEACHING

本科在於通過教學,使學生掌握中國現當代文學發展的過程;瞭解其間部分重要作家的創作概況, 熟悉並掌握他們代表作的思想及藝術特色;要求學生通過分析評述,提高對現當代文學作品的評 判和鑒賞能力,加深學生對中國優秀文化的認識和理解。本科主要教授中國現當代重要作家的著 名作品。此外,並指導學生就該等作品,編寫教材,採用合適的教學法,以便日後在教學實踐中 靈活正確運用。

先修科目:沒有

#### EDUC3018 SOCIO-CULTURAL ASPECTS OF ENGLISH LANGUAGE TEACHING

This course deals with the social, political, and cultural dimensions of English language teaching. It aims at developing among the students an understanding of the socio-cultural situatedness of ELT pedagogy and associated political dynamics, the international spreading of English and its impacts, and the role of intercultural competence in successful language learning. Topics to be covered include language identity, World English, globalisation and localisation related to ELT, and sociolinguistic relativity and causes of miscommunication.

Pre-requisite: EDUC2018 and EDUC2019

#### EDUC3019 CREATIVE IDEAS IN THE ENGLISH LANGUAGE CLASSROOM

This course will first review the different stages of an English language lesson and the steps and procedures for teaching the four skills, grammar and vocabulary. While building upon students' existing knowledge of language teaching and introducing to them categories and samples of creative activities that encourage ESL/EFL learners' fluency, flexibility, elaboration and originality, the course aims at cultivating in students the concept of creativity in language teaching and developing their competence in designing English lessons with creative ideas and fun but without sacrificing the important element of meaningful practice of target language items. The course will provide students with hands-on experience in planning and conducting creative English lessons through the development of teaching plans and micro-teaching. Pre-requisite: EDUC2018 and EDUC2019

#### EDUC3020 SOCIAL AND CULTURAL ACTIVITIES

Based on the best practices in early childhood education, the course aims to help students understand the importance of the social domain in the kindergarten curriculum. Through this course, students will learn the designing of social and cultural activities, study the teaching and learning strategies in this area, and master the methods of helping young children develop social awareness and social competence in a democratic, culturally diverse and interdependent world. Pre-requisite: EDUC2001 and EDUC2003

#### EDUC3021 HEALTH AND CARE FOR YOUNG CHILDREN

Childhood is the earliest, most vulnerable and difficult nursing stage and also the most important stage in our lives. This course will equip students with the knowledge and understanding of children's growth, health and care, the foundation of the pre-primary education field. It will introduce how to provide children with appropriate nutrition and how to handle their common diseases, injury and safety. Topics include principles of children's growth, their behavioural and emotional characteristics, analysis of the positive and negative factors and ways to provide a safe and healthy environment for growing children. Students can apply the theories and knowledge in kindergartens to promote health education and to work towards the goal of holistic health and care.

Pre-requisite: None

#### EDUC3023 EDUCATIONAL TECHNOLOGY IN EARLY CHILDHOOD EDUCATION

This course aims at enhancing teacher trainees' understanding of various applications of educational technology, so as to empower them to use technology effectively in kindergartens. It provides an overview of the latest development of technology for teaching and learning, with an emphasis on its use with appropriate instructional designs in the early childhood education (ECE). To achieve this end, this course will examine how to integrate instructional methodology with contemporary educational technology within ECE learning contexts and how to fulfil the objectives of the ECE curriculum based on instructional methodology in supporting young learners' development in different disciplinary areas, resolve issues arising in this process and take up related challenges with confidence and efficacy.

#### EDUC3024 CURRICULUM AND INSTRUCTION IN EARLY CHILDHOOD EDUCATION

This course seeks to introduce course participants the principles of curriculum development and design, grounded on contemporary theories of learning and the ECE curriculum standards promulgated in Mainland, Taiwan, Hong Kong and selected western countries. Influential ECE curriculum models practiced in local and abroad will be introduced. With reference to the ECE teaching materials commonly used in Macao kindergartens, course objectives, contents, implementation and evaluation will be elucidated to help participants plan a course that is educationally appropriate to the pre-primary children. Course participants are taught to base on influential models of integrated thematic study to practice individually configured education. Pre-requisite: EDUC1000 and EDUC1013

#### EDUC3025 ENGLISH LANGUAGE LEARNING IN EARLY CHILDHOOD

This course is intended to introduce practical strategies in teaching pre-primary pupils English as a second or foreign language through the use of various language activities such as games, songs, nursery rhymes, role plays, and story-telling. Course participants also have opportunities to learn how to design and adapt different teaching materials and resources in order to develop pre-primary pupils' learning interest and maximize their learning outcomes in the classroom. The course also helps participants to develop their own English phonological, grammatical and lexical competence.

Pre-requisite: None

#### EDUC3026 GUIDANCE IN EARLY CHILDHOOD

This course aims at equipping students of early childhood education with the knowledge of guidance and counselling so that they are able to take up the role of teacher-counsellors. This course will introduce classical and contemporary theories in guidance and counselling and include five components to facilitate the united growth of young children: basic concepts of guidance and counselling, personal growth, personal and social education, problem behaviours in early childhood, and counselling techniques. Various approaches of working with families in guiding children's behaviours are also covered.

Pre-requisite: EDUC2003

#### EDUC3027 ASSESSING YOUNG CHILDREN

To enable students a comprehensive understanding of young children's learning and development, this course provides an overview of educational assessment and introduces the principles and practices of authentic assessment which is highly valued in early childhood education. It explains why and how infants and young children should be assessed, discusses the contexts for authentic assessments, illustrates multiple strategies for collecting information on children's learning and development, and highlights the importance of conducting systematic

observations and recording in the information collecting process. Through this course, students will understand how to utilize assessment information in improving the curriculum and teaching quality and facilitating parent-school partnership. Assessment practices will be linked to the local curriculum guideline which also underpins authentic assessment as the principal means of assessing young children. Ethical issues in this area will also be discussed. Pre-requisite: EDUC1013 and educ3024

#### EDUC3028 INTEGRATED GENERAL STUDIES AND SCIENTIFIC ACTIVITIES

This course aims to introduce the content of general studies and scientific activities and the concept that young children's living activities are undertaken in the natural and social environment. The course will help students introduce to children the different operational methods such as observation, comparison, communication, measurement, inference and forecast. The design of scientific games in this course will encourage children to take an active role in constructing scientific concepts and cognition. The content of this course includes (1) objective, meaning, affective manner and value of scientific inquiry; (2) objects; (3) exercise and energy; (4) living things; (5) the earth; (6) living things and the environment and (7) life education. Pre-requisite: None

#### EDUC3029 CHILDREN'S LANGUAGE AND LITERATURE

This course elucidates issues in language acquisition and children literature to teacher trainees. Course participants are empowered to enhance the literacy development of children through literature. Topics covered include: (1) major theories of language acquisition; (2) definition, typology, values and educational functions of children literature; (3) relationships between language and literature for children; (4) application of children literature in language teaching. Pre-requisite: None

#### EDUC3031 EDUCATIONAL EVALUATION

This course seeks to introduce basic assessment notions and methodologies to students so that they can make use of the assessment feedback and interpretation professionally to improve teaching and learning, to monitor children's all-round development and report their progress up to the age of late childhood (0-8 years). Guided by contemporary theories of learning and human development, course participants are empowered to design and administer assessment tools that tie in well with the course objectives and classroom processes of the early childhood education curriculum. At the end of the course, teachers should be conversant with the "know-what, "know-how", and "know-why" of formative curriculum-embedded assessment, and feel competent to apply the knowledge and skills acquired in authentic home and schooling contexts.

Pre-requisite: EDUC1000

#### EDUC3032 DRAMA TEACHING IN EARLY CHILDHOOD

Drama helps preschoolers to learn through expressing themselves through movement, music, arts and language, and it is a good way to enhance creative learning. This course will guide and encourage students to help and lead children in exploring and improvising non-structured dramas. It will teach them how to choose books and themes, develop imagination and social skills of children, inspire their creative expressions, and organize and structure activities for their learning in the practical teaching environment.

Pre-requisite: None

#### EDUC3033 EDUCATION PLANNING AND CREATION OF LEARNING ENVIRONMENT

This course aims to help students understand that a planned and diversified learning environment can allow children to choose their preferred environment according to curriculum, interests and abilities. Through specific and creative experiments, this course helps students understand how children learn and behave in different kinds of environments. From the planning of learning areas, placement and execution, students will be able to arrange appropriate learning environments for children, to have good interactions with them and to arouse their interest in learning. The content will also cover suggestions for different teaching activities and the link

between curriculum planning and the design of learning environment. Pre-requisite: None

#### EDUC3035 DIGITAL RESOURCES APPLICATION IN KINDERGARTEN

In order to help teacher trainees in building digital portfolios and teaching resources, this course deals with the basic principles and practice of designing and developing multimedia and webbased resources based on the latest development in information technology. Pre-requisite: None

#### EDUC3036 ASSESSMENT AND IMPROVEMENT OF EFFECTIVE TEACHER - CHILD INTERACTIONS IN EARLY YEARS EDUCATION 0-8

This course is focused on theories and practices related to effective teaching in early childhood classrooms serving children birth through 8. Students will gain a deep knowledge and understanding of the types of moment-to moment teacher-child interactions that foster learning and development among young children. They will learn to identify specific teaching behaviors that support effective emotional, behavioral and instructional support interactions. Moreover, students will also be given ample opportunities to practice observational skills for identifying effective interaction behaviors as well as reflecting on their practice. Pre-requisite: None

#### EDUC3037 CURRICULUM & INSTRUCTION OF PRIMARY MATHEMATICS

This course aims to develop basic curriculum knowledge and teaching ability in mathematics for primary teachers.

- 1. Primary Mathematics Curriculum outline in Macao and others
- 2. The lesson design and example for mathematics concept development
- 3. Preparation of lesson plans, worksheets design, and example
- 4. Mathematics exercise design
- 5. Expanding the word problems --- design review & current design issues and solutions
- 6. Word Problem posing and design
- 7. The method of assessment and instructional design
- 8. Geometry Teaching Practice and example
- 9. Examples and lesson design of Calculation topics
- 10. The school observation
- 11. Teaching Practice Sharing
- Pre-requisite: EDUC2033

#### EDUC3038 小學中文教學 TEACHING OF CHINESE IN PRIMARY SCHOOLS

本課程旨在引導學生學習拼音、識字、閱讀、寫作、說話/聆聽、書法等教學理論與方法,擴充其 中國語文教學專業知能(語文知識、學習策略知識、語文技能、自我調整運用學習策略能力、鑑 賞能力、教學方法、學習輔導能力,與課程綱要)。教師將結合討論教學、示範教學、問題導向學 習、合作學習等教學策略,藉由精心設計的問題,引導學生分析教材、掌握小學生需求、選用適 當的教學法、設計教學活動與評量活動。學生將從教師的教學設計與教學示範中親自感受學生中 心的小學中文科教學活動,並且親身體驗多元評量的歷程。 先修科目:EDUC3040

#### EDUC3039 TEACHING OF SOCIAL STUDIES IN PRIMARY SCHOOLS

This course aims to equip student teachers with the knowledge of Macao society and skills of teaching so that they will become competent teachers. It includes the objectives of subject curriculum, content design, teaching procedures, teaching activities and assessment. Arrangements will focus on learning innovations, with emphasis on process and methods, encouraging independent thinking and cooperative learning and inquiry learning. Learning activities include visits, group discussions, interviews and investigations so that student teacher will develop the ability to design and arrange various extracurricular activities and optimize teaching and learning environment.

Pre-requisite: EDUC1000

#### EDUC3040 小學中文課程與教材 CHINESE CURRICULUM AND COURSE MATERIALS IN **PRIMARY EDUCATION**

本課程以促進學員對小學語文科的課程內容、傳統語文教學、本澳及鄰近地區的語文課程發展暨 未來改革有全面瞭解,並就小學語文課程所涉及的教材與教學資料的編輯與選擇加以全面掌握, 以提升學員對小學語文課程之認識及專業修養,並進一步提高其教學水平。 先修科目: EDUC1000

#### EDUC3043 TEACHING OF VISUAL ART

The course introduces the issues, concepts, philosophy and content of visual arts teaching to assist students in developing confidence, knowledge, and skills in the theory and practice of teaching visual arts. The emphasis of the course is on visual arts curriculum and lesson planning. motivational strategies, art classroom management, and alternative assessment in visual arts. Students will participate in extensive field experiences exploring methods and materials appropriate to the teaching of visual arts in a primary school setting.

The course content includes topics on "principles of visual arts teaching," "methods of visual arts teaching," "visual arts teaching: planning and design," "visual arts teaching: classroom organization and management," "evaluation of visual arts teaching," etc. Pre-requisite: EDUC1060 and EDUC2066

#### EDUC3044 CLASSROOM MANAGEMENT

This course aims to introduce classroom communication and classroom management, so that primary teachers are able to effectively manage their classrooms and to facilitate their teaching and student's learning. Topics in classroom management are developing the relationship among teachers, students and parents, understanding the learning needs of students, increasing students' learning motivation, setting rules, discipline management, problem behaviors management, and helping individual student self-manage.

Pre-requisite: EDUC2001 and EDUC2003

#### EDUC3045 RESEARCH IN MATHEMATICS EDUCATION

Mathematics educators world-wide formulate research questions to solve perplexing problems and address salient issues in mathematics education to meet the needs of the students. For instance, lesson studies are conducted to help build up a learning organization and professional learning communities in schools. Course participants will be studying empirical research reports that address some of these contemporary issues. Under the guidance of their instructor, they are expected to write a review of an issue in mathematics education with implications for teaching and learning in everyday mathematics classrooms.

Pre-requisite: EDUC2038

#### EDUC3046 ADVANCED PIANO ACCOMPANIMENT FOR GENERAL MUSIC CLASSROOM

The course aims at further training and enhancing students' piano accompaniment skills in teaching elementary students in the music classroom. Topics will include helping students integrate musical elements articulately into the practical skills of piano accompaniment for the music class. Moreover, discussion and interpretation of sensitivity of piano practice to various forms of children music, such as nursery rhymes, marching, and general children music will also be included in the class . The course will require students to learn several pieces of children music and practically perform these pieces for their classmates and teachers. Pre-requisite: EDUC1054 and EDUC2063

#### EDUC3047 TEACHING OF ENGLISH IN PRIMARY SCHOOLS I

The course aims to equip participants with knowledge of primary English language teaching curriculum and strategies to help primary students develop the skills necessary for effective reading and writing. It examines the important issues related to planning, delivering and evaluating English language instruction, explores recent developments in teaching reading and writing skills, and discusses pedagogical implications for the Macao context. Course participants will be helped to make connections between theory and practice and between international literature and local practice. They will be encouraged to engage in critical reflection, challenge accepted principles, and critique their own practice. Pre-requisite: None

#### EDUC3048 TEACHING OF ENGLISH IN PRIMARY SCHOOLS II

The course helps students to develop practical skills for teaching grammar and vocabulary in primary English school classrooms in Macao. The course also helps students to further develop their own grammatical and lexical competence and awareness. Pre-requisite: None

#### EDUC3049 TEACHING OF SCIENCE AND TECHNOLOGY

This course aims to train participants' skills and abilities in teaching science and technology in primary schools so as to make professional preparations for teaching primary science (natural studies). This course will help participants know the features and tendencies of contemporary primary science education, learn the concepts, theories, and methods of science and technology teaching, and recognize current situations and existing problems in primary science (natural studies) teaching in Macao. The content of this course includes the nature of science and technology, the curriculum of primary science, processes and methods of scientific inquiry, processes and methods of technological design, and teaching design and assessment of science and technology in primary science. Lectures and demonstration, group discussion, hands-on activities, technological design, and microteaching will be adopted as teaching methods in this course

Pre-requisite: None

#### EDUC3050 SUBJECT BASED TEACHING METHODS (SECONDARY MATHEMATICS)II

This course focuses on empowering course participants to write teachable lesson plans and programme of study pertaining to two key domains of secondary mathematics curriculum: numbers and algebra; and statistics and probabilities. Due attention is paid on professional treatment of a number of issues that have a bearing on successful meaningful student learning: educational objectives in accordance with key stages of secondary education; mathematical literacy, competencies, and thinking underpinning various pedagogic and instructional models; history of development of mathematics in different cultures; psychology of mathematics learning, particularly for Chinese learners and different gender; use of calculators and ICT tools for mathematics education; and good balance of assessment of learning and assessment for learning.

Pre-requisite: EDUC2049

#### EDUC3051 LEARNING TECHNOLOGY FOR SECONDARY MATHEMATICS TEACHING

The use of dynamic mathematics software can not only help students develop a better understanding of abstract mathematics concepts, but also help students look into the essence of mathematics and develop a positive attitude towards mathematics learning. This course aims at enhancing student teachers' understanding of various applications of learning technologies. so as to empower them to use the contemporary technologies effectively in secondary mathematics teaching and learning. Specifically, the course provides an overview of the latest development of learning technologies, with emphases on its effective use with appropriate instructional designs. To achieve this end, this course will examine how to integrate contemporary learning technologies with recommended instructional methodologies within secondary mathematics learning contexts so as to fulfill the objectives of the mathematics curriculum standards. After completion of the course, student teachers will be able to integrate the acquired learning technologies to support students' development in mathematics education, and take up related challenges with confidence and efficacy.

Pre-requisite: EDUC3050

EDUC3052 中學歷史教學 METHODS OF TEACHING IN SECONDARY SCHOOL HISTORY 本科旨在培訓學生認識教授中學歷史科的過程和技巧,使他們成為合格教師。本課程的內容包括 中學歷史科教學理論、課程目標、課程內容、教學技巧及評核方法。學生需按課程內的教學環節

設計合適的教學情境。 先修科目:沒有

#### EDUC3053 世界歷史課程與教學 WORLD HISTORY CURRICULUM AND TEACHING

本科旨在介紹中學世界歷史科課程,以及與課程有關之教學方法,而世界歷史發展過程,亦會涉及,使學生能應付日後在中學教授有關世界歷史課程之用。 先修科目:沒有

#### EDUC3056 SCIENCE EDUCATION IN SECONDARY SCHOOLS

The objective of this course is to enable students to understand the ideas, concepts, principles, and issues involved in science teaching in secondary schools, and to help them acquire relevant strategies and methods of science curriculum development, science teaching in classrooms, and assessment of science teaching. The course content includes the nature of science, science curriculum development, materials for science teaching, instructional strategies in science, assessment in science teaching, and science teacher development. A distinctive feature of this science is the various opportunities provided for students to exercise, reflect, and evaluate these strategies and methods through microteaching, personal reflections, and group discussions. Pre-requisite: APAC1001 and EDUC1000

#### EDUC3057 SCIENTIFIC INQUIRY AND PRACTICAL WORK IN SECONDARY SCHOOLS

The objective of this course is to help students learn the ideas and practice of scientific inquiry in the laboratory environment of secondary schools. The course content includes the concept of scientific inquiry, the roles and types of practical wok, and instructional strategies of practical work. In this course, students are provided with various opportunities to enact the ideas of scientific inquiry in classrooms, and most of the hours of this course are spent in the laboratory. Specifically, the experimental contents relevant to physics, chemistry, and biology are involved respectively.

Pre-requisite: EDUC3056

#### EDUC3058 ORFF AND KODALY MUSIC TEACHING METHODS

This course provides student teachers with advanced study of music teaching methodologies in the general music classroom, with the main focus on applications of the internationally well-known Orff Music Method and Kodaly Music Method. Moreover, the course will cover music learning theories combined with appropriate lesson planning for the music class. Students taking this course will have a concrete understanding of how to conduct and teach a music class at the elementary level. Furthermore, different music textbooks and materials ill also be analyzed and discussed in this course.

Pre-requisite: EDUC1054 and EDUC2063

#### EDUC3059 EMERGING PEDAGOGIES OF STEM TEACHING

This course focuses on STEM implementation at the classroom level with the focus on learner centered instruction. Student will explore both traditional and emerging teaching approaches that support STEM inquiry-based learning. Developing appropriate STEM learning actives that aligning with learning objectives and the development of learning products will be emphasized. The use of assessments to facilitate learning will be discussed. The roles of teachers and learners in supporting learning of this kind will be discussed. The class will also explore and use various technologies; digital media and STEM resources coordinated by FST's Centre for Science & Engineering Promotion that support STEM education and learning. For this course, in addition to vivid demonstrations and innovative hand-on experiences, students are required to intern with academic staff and graduate students in FST on a research/design project. Pre-requisite: None

#### EDUC3060 EXTENSIVE READING AND LANGUAGE TEACHING

This is a course for pre-service secondary English teachers that aims to introduce the techniques of using literature and graded readers as extensive reading content for stimulating language

learning tasks and activities. A well-balanced language course should provide students equal opportunities for meaning-focused input, meaning-focused output, language-focused learning, and fluency development. Extensive reading of literature and graded readers provides the conditions needed for meaning-focused input and fluency development. Guidelines for selecting texts that are well-suited for particular language learners will be provided and samples of classroom language learning tasks designed for engaging students interactively with the texts will be reviewed. This course will also cover the principles in designing an extensive reading component for secondary English classes including independent extensive reading, class readers, reading circles, class/institution libraries, vocabulary coverage, and making the most of technology for extensive reading. While this course aims at enriching pre-service teachers' knowledge to bring extensive reading into the secondary English classroom, it will also provide hands-on experience in the design of tasks for language teaching and learning. Pre-requisite: EDUC2018 and EDUC2019

#### EDUC3061 TECHNOLOGY ENHANCED LANGUAGE LEARNING AND TEACHING

Using an authentic, practical, and hands-on approach, this course aims to inform pre-service secondary English language teachers about topics related to technology enhanced language learning and teaching. This course provides students a survey in language teaching related interactive technologies targeting listening, speaking, reading, writing, vocabulary, and grammar. Topics explored include: integrating technology into traditional language learning and teaching, enhancing language learning with digital technologies, web-based resources for language teaching, corpora and concordancers, multimedia, virtual worlds, digital game-based language learning, and the use of mobile technologies to assist and complement traditional language learning and teaching. Students in the course are expected to review and evaluate English language teaching and learning software and Web 2.0 tools for their usefulness in the secondary English language classroom. Students will also apply concepts to create and edit language content for an authentic technology enhanced language learning and teaching experience. Pre-requisite: None

#### EDUC3062 EDUCATIONAL PROBATION (INTERNSHIP)

The one-week course is designed for pre-service teachers (Primary Education Program) to observe how homeroom teachers manage classrooms and what and how subject-based instructional practices are implemented in grades 1 to 6 in the Greater Bay Area. Student teachers must follow the professional ethics of school teachers and the regulations of UM and the internship schools during the educational probation. In most cases, primary school teachers need to teach more than one subject when necessary. In order to expand student teachers' abilities in teaching different subjects, the subjects/classrooms will be randomly assigned to student teachers for teaching observation.

Note. Students' language proficiency will be considered. English stream students may be assigned to observe non-English teaching classrooms.

Pre-requisite: EDUC3000, EDUC3004, EDUC3037, EDUC3040 or EDUC3047

#### EDUC4000 SCHOOL COUNSELLING AND GUIDANCE

This course aims to introduce school counselling theories and classroom management techniques. It covers basic counselling knowledge and skills to facilitate the personal growth of teachers and their students. Furthermore, the course encourages teachers to practise their counselling skills within their school settings.

Pre-requisite: None

#### EDUC4001/EDUC4002/ SUPERVISED TEACHING AND SCHOOL EXPERIENCE EDUC4003/EDUC4004/ EDUC4022/EDUC4023

Placing student teachers in the actual classrooms of various Macao secondary schools for teaching practice and hands-on experience is an important component of teacher training and teacher education as well as a necessary step for them to develop from student teachers to frontline classroom teachers. There is regular and close supervision from FED supervisors, who

will see to it that TP students demonstrate competence and efficiency to meet the needs of their pupils by applying what they have learned over the years. Capable and experienced teachers in these schools are appointed to help as tutors/mentors and work in close collaboration with FED lecturers to provide guidance and pastoral care. Through regular meetings, detailed discussions and assessment during the process, student teachers are expected to make observable progress.

Pre-requisite: None

#### EDUC4006 中學中文章法教學

#### TEACHING OF ORGANIZATION OF WRITING IN SECONDARY SCHOOL

本科旨在揭示中文章法的意義與特色;闡釋章法學的地位與價值,介紹各類章法:「正襯類章法」、「因果類章法」、「知覺類章法」、「空間類章法」、「虛實類章法」、「凡目類章法」等;說明中學中 文章法教學之道,引導學生對各類章法論述、研讀與探討,以養成學生對中學中文章法教學的認 知與興趣,充實教授中學中文章法的能力。 先修科目:沒有

#### EDUC4007 論孟與教育 ANALECTS OF CONFUCIUS AND THE WORKS OF MENCIUS

本科旨在使學員把握論語與孟子的基本研究方法和義理。教學重點包括:孔孟的思辨方法、教育 思想、人文精神、人性本質、生命理想及德性實踐。課程著重從論語與孟子的文獻中, 擷取重要 篇章,加以詮釋, 抉發其深義, 以使學員對孔孟的儒學思想和教育精神有如實的理解與真切的體 驗。

先修科目:沒有

#### EDUC4008 中國教育史專題 TOPICS IN HISTORY OF CHINESE EDUCATION

本科以培養學員掌握中國教育史各個主要領域的知識為主。課程以專題方式進行,主要包括儒家教育思想、官學制度、考試制度、書院與蒙學、西式教育的傳播及澳門教育史等專題的深入探討。 在完成本課程後,學員當能較全面掌握中國教育發展的特徵和面貌。 先修科目:沒有

#### EDUC4009 文學評論與教學 CHINESE LITERARY CRITICISM AND ITS TEACHING

本科旨在介紹中國文學的傳統批評理論和文學批評的目的、意義、方法,揭示現代的批評理論, 培養學生就作家、作品、文學創作和文學現象加以評論的能力。此外,並指導學生就文學評論等 議題,編寫教材,採用合適的教學法,以便日後在教學實踐中靈活正確運用。 先修科目:沒有

#### EDUC4010 MING-QING FICTIONS AND ITS TEACHING 明清小說與教育

本科旨在讓學生通過閱讀、講解和分析,對明清小說的主要作品加深認識,為把小說作為教學材 料運用做準備,相關的教學技巧的亦會講授,使學生能應付日後在中學教授中文課程之用。 先修科目:沒有

#### EDUC4011 PRACTICAL CLASSROOM ENGLISH

This course focuses on the choice of right words and phrases and the appropriate techniques for teachers when they use English to give instructions, ask questions, make comments, give disciplinary intervention in the classroom and encourage their learners to respond in English. The course also examines the English classroom as a communicative context with regular patterns of communication that are negotiated between teachers and students and helps teachers develop ways of promoting more effective patterns of discourse in the English classroom. In particular, issues related to the medium of instruction and the code-switching phenomenon in Macao classrooms will be discussed.

Pre-requisite: EDUC2022 and EDUC2023

#### EDUC4012 LANGUAGE TESTING

The main aims of this course are to consider the principles and practice of assessment for

language learning and to enable course participants to apply essential understanding and techniques to construct and evaluate testing instruments for their particular teaching purposes. Upon completion of the course, course participants should be able to: determine how learning and testing may be integrated; follow standard procedures in constructing a testing instrument; use appropriate techniques to test learners' language skills; analyse and interpret test scores for students, teachers and parents; and judge the validity, reliability, practicality and impact of a test. Pre-requisite: EDUC2018 and EDUC2019

#### EDUC4015 TEACHING IN INCLUSIVE SETTINGS

The course focuses on the teaching skills and methods to general educators who are teaching in inclusive settings where children with special needs receive their education with ordinary children. Classroom modifications in curriculum, assessment, behavior management, and instructional methods are examined. Methods of establishing supportive networks among families, schools, and agencies are introduced. Several programmes designed for inclusive settings at preschool and kindergarten level are examined.

Pre-requisite: EDUC3003 / EDUC3004

#### EDUC4017 PHYSICAL EDUCATION III

The course aims to help students to understand the functions of human body through the study of sport psychology, kinesiology and biomechanics. The course will focus on the relationship between complex human movement structure and sports training. The students are expected to create training method in sports and physical education. Simple experiments will be conducted. It helps students to understand the importance of every human body movement to the developments of physical education and sports.

Pre-requisite: EDUC2036

#### EDUC4020 中國近現代史教學 TEACHING OF MODERN CHINESE HISTORY

本科旨在讓學生認識近現代中國在政治、經濟、社會等方面的重要歷史事件及變化,相關的課程 及教學方法,亦會涉及,使學生能應付日後在中學教授歷史課程之用。 先修科目:沒有

#### EDUC4021 澳門史教學 TEACHING OF MACAO HISTORY

本科旨在讓學生認識自十六世紀以來的澳門歷史及相關的教學方法,以便學生日後能夠在中學講 授澳門歷史科課程。課程內容包括澳門歷史大事,政府組織,經濟及社會發展等。 先修科目:沒有

#### EDUC6001 INTRODUCTION TO EDUCATION

This course aims to help students understand the general law of the human education system. From historical, theoretical and practical perspectives, the course explores (1) the fundamentals of education, (2) the relationship between education and social, political, economic and cultural developments, and (3) the relationship between education and human physical and mental developments (4) education purposes (teleology), and (5) the relationship between teachers and learners. It also discusses issues about education systems/structure, curriculums and instruction, moral education, educational management, etc.

Pre-requisite: None

#### EDUC6002 EDUCATIONAL PSYCHOLOGY

Educational Psychology includes both psychology and education. The course aims to introduce theories and practices of educational psychology, which includes (1) the fundamentals of educational psychology, (2) the relationship between psychology and education, and the (3) application of educational psychology.

Pre-requisite: None

#### EDPC6003 TEACHER ETHICS

The aim of this course is to prepare students to develop teachers' professional morality. The

experience and the development of teacher's professional morality are fully represented in the different relationships in their work, including facing themselves, their colleagues, students, students' parents and society. The content of this course includes learning different principles of teachers' professional ethics, and how to use and develop these theories reasonably in their teaching lives.

Pre-requisite: None

#### EDUC6004 TEACHING PRACTICE

Though classroom observing, micro-teaching, listening to their supervisors' guidance on the design of teaching activities before their teaching practice, and discussing thoroughly their performance after teaching practice and how to improve it in the future, etc, the teacher-trainees' teaching professional standards can be improved continuously. Pre-requisite: None

#### EDUC6011 CLASSROOM ASSESSMENT

This course focus on the necessary knowledge of classroom assessment ranging from, but not limited to, validity and reliability, functions, forms, instruments, design of various assessment tools. Both traditional assessment methods such as multiple choices, fill-in-blanks, cloze measures, essays, etc, and alternative assessment methods such as portfolio, journals, etc, will be included. Important concepts such as formative Vs summative; high Vs low steak assessment will be covered. The importance of the coherence among instructional objectives, classroom teaching and assessment will be emphasized. Pre-requisite: None

#### EDUC6012 INFORMATION TECHNOLOGY IN EDUCATION

This course, aiming to enhance students' understanding of using information technology in teaching and learning, provide an overview of contemporary technology, with emphasis on technology relating to education in schools. It examines the current methodologies and issues in integrating different technologies in teaching and learning contexts. Pre-requisite: None

#### EDUC6101 COUNSELING AND GUIDANCE

This course aims to introduce school counseling theories and classroom management techniques. It covers basic counseling knowledge and skills to facilitate the personal growth of teachers and their students. Furthermore, the course encourages teachers to practise their counseling skills within their school settings.

Pre-requisite: None

#### EDUC6102 CURRICULUM AND PEDAGOGY (SUBJECT BASED)

It aims to provide in-service teachers at secondary level with basic concepts and principles of curriculum and instruction. Topics include curriculum development and implementation, teaching principles and strategies, teaching evaluation, and classroom conditions that influence teaching and learning. This course features subject based characteristics. Students will be led to discuss the issues and problems related with these topics in their subjects (such as Chinese, English, mathematics, and science). And the connection between the theories of curriculum and pedagogy and subject based teaching practice will be highlighted. Pre-requisite: None

#### EDUC6201 CURRICULUM AND PEDAGOGY

It aims to provide in-service teachers at primary level with basic concepts and principles of curriculum and instruction. Topics include curriculum development and implementation, teaching principles and strategies, teaching evaluation, and classroom conditions that influence teaching and learning. Students will be helped to link theories of curriculum and pedagogy with their teaching practice in setting objectives, selecting and organizing contents, and implementing and evaluating curriculum in various subjects they teach in primary schools. Pre-requisite: None

#### EDUC6202 SCHOOL COUNSELING AND GUIDANCE

This course aims to introduce school counselling theories and classroom management techniques. It covers basic counselling knowledge and skills to facilitate the personal growth of teachers and their students. Furthermore, the course encourages teachers to practise their counselling skills within their school settings.

Pre-requisite: None

#### EDUC6301 HEALTH AND CARE IN EARLY CHILDHOOD

Childhood is the earliest, most vulnerable and difficult nursing stage and also the most important stage in our lives. This course will equip students with the knowledge and understanding of children's growth, health and care, the foundation of the pre-primary education field. It will introduce how to provide children with appropriate nutrition and how to handle their common diseases, injury and safety. Topics include principles of children's growth, their behavioural and emotional characteristics, analysis of the positive and negative factors and ways to provide a safe and healthy environment for growing children. Students can apply the theories and knowledge in kindergartens to promote health education and to work towards the goal of holistic health and care.

Pre-requisite: None

#### EDUC6302 EARLY CHILDHOOD DEVELOPMENT

The aim of this course is to instil into teachers, who work with 0 to 8-year-old children, a thorough understanding of the developmental changes at this stage of life, the role that genetics play in human development, as well as some common childhood disorders. Different theories of child development are introduced to provide students with an all-rounded knowledge of children's united growth which lays the foundation for effective teaching and learning. Pre-requisite: None

#### EDUC6303 INTEGRATED LEARNING

This course will focus on the integrated learning approach to curriculum design and development for pre-schools and explore the meanings, functions, teaching processes, designs, practices and evaluations related to the integration education. Rather than stressing basic concepts and theoretical foundation, this course will emphasise the application of theories in practice, with the aim to train students to become effective teachers who can apply principles of integrated learning to lesson planning.

Pre-requisite: None

#### EDUC6501 EDUCATIONAL ADMINISTRATION

This course allows students to understand the basic concepts of educational administration. Students will study and discuss Macao educational acts and decrees. They will also learn the basic theories related to educational administration, such as theories with regard to motivation, leadership, communication and organizational decision-making. Attempts will be made to make this course related to the educational reality in Macao. Pre-requisite: None

#### EDUC6502 INTRODUCTION TO SPECIAL EDUCATION

This course aims at providing students with knowledge, understanding and care of pupils with special needs so as to further their education professional knowledge and development. By means of different teaching activities, students will have better understanding of (1) definitions, characteristics and causes of pupils with various special needs; (2) educational emphases and needs of these pupils; (3) contemporary situations of special education in Macao, and skill-training and employment situations of teenagers; and (4) the latest trends in contemporary special education.

Pre-requisite: None

#### EDUC6503 EDUCATIONAL RESEARCH

The main aim of this course is to enable a qualified teacher to use, understand, analyze and

evaluate research outcomes. The course includes: (1) the basics of educational research, (2) structure and procedures of education research, (3) research variables, (4) hypotheses and topics, (5) literature review, (6) on-line search, (7) sampling, (8) questionnaires, (9) correlation analyses, (10) interviews, (11) case studies, (12) evaluation of research reports, (13) educational research ethics, etc. Pre-requisite: None

#### EDUC6504 SOCIOLOGY OF EDUCATION

This is an introductory course on the Sociology of Education. It provides a brief introduction to the basic sociological concepts and perspectives. By applying these concepts and perspectives, the course intends to let participants have a broad and profound understanding of Macao society and its educational system.

Pre-requisite: None

#### EDUC6505 EDUCATIONAL TECHNOLOGY IN EARLY CHILDHOOD SETTINGS

This course aims at enhancing teacher trainees' understanding of various applications of educational technology, so as to empower them to use technology effectively in kindergartens. It provides an overview of the latest development of technology for teaching and learning, with an emphasis on its use with appropriate instructional designs in the early childhood education (ECE). To achieve this end, this course will examine how to integrate instructional methodology with contemporary educational technology within ECE learning contexts and how to fulfil the objectives of the ECE curriculum based on instructional models. After completion of the course, teacher trainees will be able to integrate educational technology in supporting young learners' development in different disciplinary areas, resolve issues arising in this process and take up related challenges with confidence and efficacy.

Pre-requisite: None

#### EDUC6506 ASSESSING YOUNG CHILDREN

To enable students a comprehensive understanding of young children's learning and development, this course provides an overview of educational assessment and introduces the principles and practices of authentic assessment which is highly valued in early childhood education. It explains why and how infants and young children should be assessed, discusses the contexts for authentic assessments, illustrates multiple strategies for collecting information on children's learning and development, and highlights the importance of conducting systematic observations and recording in the information collecting process. Through this course, students will understand how to utilize assessment information in improving the curriculum and teaching quality and facilitating parent-school partnership. Assessment as the principal means of assessing young children. Ethical issues in this area will also be discussed. Pre-requisite: None

#### EDUC6507 PARENTAL EDUCATION AND INVOLVEMENT

Family plays an important role in the child's upbringing. The course aims to explore how we, as teachers, can empower the parents to play a role in the positive development of the child. Emphasis is put on possibilities and strategies concerning the implementation of parent education and parental involvement in the local school context. Topics include: integrated approach to building staff-parent partnerships, family relationship and personal growth, disciplining methods and principles, parental ethics, development and implementation of parent education, and family-school collaboration.

Pre-requisite: None

### EDUC6508 GUIDANCE AND COUNSELING IN EARLY CHILDHOOD

This course aims at equipping students of early childhood education with the knowledge of guidance and counselling so that they are able to take up the role of teacher-counsellors. This course will introduce classical and contemporary theories in guidance and counselling and include five components to facilitate the united growth of young children: basic concepts of

guidance and counselling, personal growth, personal and social education, problem behaviours in early childhood, and counselling techniques. Various approaches of working with families in guiding children's behaviours are also covered.

Pre-requisite: None

#### EDUC6509 INCLUSIVE EDUCATION

This course aims at introducing students to the development, rationale and principles of inclusive education as a foundation of the field, and to the policy, general situation and resources with regard to inclusive education in Macao. The course provides guidelines on various elements of inclusive lessons and classes. The content includes child learning and classroom settings, programme and lesson planning, and assessment and classroom management of children with special needs or behavior problems. In addition, to guard students from work-stress as future inclusive teachers, the course will help them develop observation and analysis skills to note differences among young children and to understand children with disabilities in the inclusive classroom. It will also provide students for special needs and how to work effectively with professional groups and parents.

Pre-requisite: None

#### EDUC7001 RESEARCH METHODS IN EDUCATION

This course aims at developing in students an understanding of quantitative and qualitative methods of collecting, analyzing, and interpreting data in educational research. Quantitative topics include application of statistical concepts/procedures, graphs, numerical summaries; normal distribution, correlation/regression analyses, probability, statistical inferences for one or two samples, hypothesis tests, chi-square tests, and factor analysis. Qualitative topics include data analyses in case studies, observations, and ethnography studies. Pre-requisite: None

#### EDUC7051 QUALITATIVE RESEARCH IN EDUCATION

This is the intermediate master's level course on qualitative method. Students will learn two central issues in qualitative research: 1) design and implement a scientifically valid qualitative study; 2) Analyzing qualitative data. This course will expose students to different paradigms in qualitative research including but not limited to: ethnography, grounded theory, participatory action research, and case study. The purpose of this course is to provide working knowledge to students to conduct qualitative study using various qualitative methods, as well as helping students to understand their limitation.

Pre-requisite: Research method in education

#### EDUC7052 QUANTITATIVE RESEARCH IN EDUCATION

This is the intermediate master's level course on quantitative method. Students will have the opportunity to learn a variety of statistical methods. The primary methods to be introduced will include: multiple regression, factor analysis, principal component analysis, analysis of variance and covariance. Other advanced statistical technic such as multilevel models, structural equation models, and causal inference models will be introduced. The purpose of this course is to lay the foundation for quantitative analysis of education issues. Practical issues such as analyzing quantitate data with statistical tools will be covered to provide hands-on experience to students. Pre-requisite: Research method in education

#### EDUC7053 ACTION RESEARCH

This course provides a foundation for educators to become active inquirers in the day-to-day experiences that occur in a classroom. It explores evidenced-based techniques and strategies that guide instructional decision-making and positively impacts educational practices. Pre-requisite: None

#### EDUC7101 PRINCIPLES OF CURRICULUM AND INSTRUCTION

This course aims to provide an overview on the principles and theories of curriculum and instruction. The introduction of these theories and principles provides learners a broad perspective on the basic curriculum questions regarding the purposes, content, design, and structure of educational programmes as well as learning and teaching theories and the relationship between the two.

Pre-requisite: None

#### EDUC7102 CURRICULUM DESIGN AND IMPLEMENTATION

This course intends to equip learners with the theories and practical skills of designing curriculum and managing curriculum change. The present curriculum design and implementation process in schools/Macao will be discussed and analyzed. Curriculum theories, design, and implementation experiences from other countries/places and possible adaptation will also be explored.

Pre-requisite: None

# EDUC7103 EVALUATION OF CURRICULUM, INSTRUCTION, AND STUDENT PERFORMANCE

This course seeks to equip learners with strategies and techniques used in the evaluation of curriculum programmes, instruction, and student performance. The assumptions, strengths, and weaknesses associated with various strategies will be critically analyzed. Learners work through evaluation problems related to particular curriculum programmes and instructional techniques; and develop assessment tools appropriate to their teaching assignments. Special attention is given to authentic assessment, performance assessment, portfolios, self-evaluation, and cooperative assessment.

Pre-requisite: None

#### EDUC7151 SEMINARS ON CURRICULAR ISSUES (SUBJECT-BASED)

This weekly 3-hour seminar explores current global issues of curriculum, instruction and learning in the subject areas of Chinese, English and Mathematics. In addition, emergent issues of curriculum, instruction and learning in these three subject areas in Macao, China, Taiwan, and Hong Kong will also be discussed.

Pre-requisite: None

#### EDUC7152 MULTIMEDIA TECHNOLOGY IN INSTRUCTIONAL DESIGN

This course provides the learners with basic principles and practice in design, development, and production of multimedia instructional material through multimedia laboratory and computerized video editing studio.

Pre-requisite: None

#### EDUC7153 INTELLIGENCE AND CREATIVITY

This course covers contemporary theories of intelligence, intellectual development and creativity, and their implications for educational practices and psychological research. Pre-requisite: None

#### EDUC7154 MATHEMATICS LEARNING & TEACHING

Based on Mathematics learning and teaching theories and research findings, the course aims to help student teachers study the basic knowledge of the subject, teaching and learning strategies, methods of assessment and the application of technology in Mathematics teaching and learning.

Pre-requisite: None

#### EDUC7155 CHINESE LANGUAGE LEARNING & TEACHING

Based on Chinese Language learning and teaching theories and research findings, the course aims to help student teachers study the basic knowledge of the subject, teaching and learning strategies, methods of assessment and the application of technology in Chinese teaching and

learning. Pre-requisite: None

#### EDUC7156 SECOND LANGUAGE LEARNING & TEACHING

Based on Second Language learning and teaching theories and research findings, the course aims to help student teachers study the basic knowledge of the subject, teaching and learning strategies, methods of assessment and the application of technology in Second Language teaching and learning.

Pre-requisite: None

#### EDUC7157 SCIENCE LEARNING & TEACHING

Based on Science learning and teaching theories and research findings, the course aims to help student teacedci762hers study the basic knowledge of the subject, teaching and learning strategies, methods of assessment and the application of technology in Science teaching and learning.

Pre-requisite: None

#### EDUC7158 SOCIAL STUDIES LEARNING & TEACHING

Based on Social Studies learning and teaching theories and research findings, the course aims to help student teachers study the basic knowledge of the subject, teaching and learning strategies, methods of assessment and the application of technology in Social Studies teaching and learning.

Pre-requisite: None

#### EDUC7159 MORAL DEVELOPMENT & TEACHING

Based on moral development and teaching theories and research findings, the course aims to equip student teachers with the basic knowledge of the subject, teaching and learning strategies, methods of assessment and the application of technology in moral education. Pre-requisite: None

#### EDUC7160 CURRICULUM & INSTRUCTIONAL LEADERSHIP

Following the threads of major curriculum and instruction theories, this course explores curriculum and instructional leadership in practice and theory, schools as learning communities and the innovation of curriculum and school culture for purpose of improving teacher quality and learning effectiveness.

Pre-requisite: None

#### EDUC7161 SPECIAL TOPICS IN CURRICULUM & INSTRUCTION

This graduate level course covers the current and new topics, new trends, and new research findings, in the area of curriculum and instruction. The actual topics may differ as this course is offered at different times, to reflect the new developments and directions of this field. The graduate level course will expose the students to the new thoughts, new developments. Pre-requisite: None

#### SCIENCE EDUCATION

#### EDUC7162 THEORIES OF SCIENCE TEACHING AND LEARNING

This course aims to provide students with concepts, theories and principles of science teaching and learning, which are necessary for their teaching practice and future studies. Topic of this course include nature of science, theories of science learning, conception changes in science learning, methods and strategies of science teaching, scientific inquiry, practical work in science teaching, ICT in science teaching. Studies on exemplary teaching practice will be emphasized in this course. Pre-requisite: None

#### EDUC7163 STUDIES ON SCIENCE CURRICULUM

The course aims to provide students with these topics in the field of science curriculum development: historical perspectives of science curriculum, science curriculum in social contexts, principles and theories of science development, patterns of science curriculum development, and analysis of science curriculum. Special attention will be put on the practice of implementing the current science curriculu and teaching materials in Macao and China. The current research tendency of science curriculum in international literatures will also be involved. Pre-requisite: None

#### EDUC7164 THE EVALUATION OF SCIENCE TEACHING AND LEARNING

This course aims to equip students with the concepts, theories, and practical skills of conducting evaluations on science teaching and learning. Topics include assessment and evaluation in science teaching, theoretical assumptions of evaluation in science teaching and learning, various evaluation techniques in science teaching and learning, science curriculum reform and evaluation, science teacher development and evaluation. Emphases will be put on authentic assessment and performance assessment in science teaching and learning. The large scale evaluation programmes, such as TIMSS, PISA, will be involved in this course.

#### EDUC7165 PROFESSIONAL DEVELOPMENT OF SCIENCE TEACHERS

This course is about the concepts, theories and practice of science teacher development with the purpose of laying a foundation for students' teaching practice and future studies. Topics include the learning of science teachers, science teachers' conception of teaching and learning, pedagogical content of knowledge in science teaching, school-based research and science teacher development, action research and science teacher development, science teachers' narratives, case studies of science teacher development, research tendency of science teacher development.

Pre-requisite: None

#### INFORMATION AND COMMUNICATION TECHNOLOGY IN EDUCATION

#### EDUC7166 ISSUES IN DISTANCE EDUCATION

The purpose of this course is to provide students with an overview of distance education theories in order to enhance students understanding of the communication tools and the different learning styles of distance education and develop students' understanding of the instructional design models used in developing distance learning courses. Students will be given an opportunity to learn various tools concentrating on different aspects of the technology: text, graphics, audio, animation, and video. Students will work in groups and take on different roles. The contexts for this course will be primarily interactive, collaborative, multi-disciplinary, and student-centered. A large portion of this course will be devoted to hands-on activities. Pre-requisite: None

#### EDUC7167 MULTIMEDIA DESIGN AND PRACTICE

The course is primarily concerned with the effective use of multimedia technologies in an educational context. It will examine the challenges involved in current methodology, research and other issues in applying multimedia in education. The practical and theoretical aspects of integrating various applications will also be examined in the context of the curriculum. Pre-requisite: None

#### EDUC7168 TRENDS & ISSUES IN INSTRUCTIONAL TECHNOLOGY

This course involves an examination of current issues in instructional technology. The issues include pedagogy, teaching and learning, historical development, policies, and research methodology in instructional technology etc. Learners are required participate actively in this course. Case studies, group discussion and seminar presentation will be used.

Pre-requisite: None

#### EDUC7169 INTEGRATING TECHNOLOGY FOR TEACHING AND LEARNING

The purpose of this course is to engage students in the theory, development and applications of learning technologies in teaching and learning context. An overview of theories in technology integrated teaching and learning will be discussed. Students are expected to form groups of learning communities that will involve in technology integration projects. They will be given opportunities to explore and learn new technology in supporting and transforming instruction and learning.

Pre-requisite: None

#### **CHINESE LANGUAGE EDUCATION**

# EDUC7170 SECONDARY SCHOOL CHINESE LANGUAGE CURRICULUM DESIGN AND TEACHING

This course explicates the design and teaching of secondary school Chinese language curriculum, in order to enhance students' knowledge about Chinese language curriculum design and teaching, and to heighten ability for and research interest in Chinese language teaching. Topics include basic concepts, categories, theories and design of curriculum; significance, objectives and techniques of teaching; principles and preparation of teaching design; preparation of teaching media; curriculum evaluation and teaching assessment; professional behavior of teachers.

Pre-requisite: None

#### EDUC7171 TOPIC STUDIES IN CHINESE WRITING

This course explicates and analyses the functions, theories and techniques of Chinese communication, in order to deepen students' knowledge of, and ability to apply, Chinese writing for the sake of teaching. Topics include connection between characteristics of the Chinese language and Chinese writing, sociolinguistics theories and phenomena of Chinese writing, writing of various kinds of Chinese practical writing, similarities and differences between practical writings prevailing in Macao, Hong Kong, Taiwan and Mainland China. Pre-requisite: None

#### EDUC7172 APPRECIATION AND TEACHING OF CHINESE LITERATURE

This course critically introduces and analyses Chinese literature, and cultivates the ability to appreciate and teach it on the part of students. Teaching materials are mainly classics from Pre-Qin Dynasty to the 20th Century. The teaching mode is to guide students to read, appreciate, and analyse genres such as poetry, prose, fiction and opera, and to sum up the teaching points concerned such as writing style, theme manifestation, story tension, characterization, and plot organization. Upon completion of this course, students are expected to be able to better appreciate and evaluate literature and to make use of literary works to design various kinds of teaching activities.

Pre-requisite: None

#### EDUC7182 LANGUAGE ARTS TOPIC STUDIES AND TEACHING

This course explicates significance, theories and skills of language arts, in order to strengthen students' understanding of language arts, to help them grasp techniques of language expression, to enhance their ability for language communication, and to heighten teaching effects. Topics include techniques of language expression, teaching language of teachers, topics, skills and manners of public speaking, public speaking teaching, topic assignment, forms and techniques of debate, and debate teaching.

Pre-requisite: None

#### MATHEMATICS EDUCATION

#### EDUC7174 STUDIES ON MATHEMATICS CURRICULUM

The course aims to provide students with a critical study of current issues, trends, and the design and evaluation of mathematics curriculum. Topics will include: historical development of mathematics curriculum, principles and theories of mathematics development, patterns of mathematics curriculum development, alignment of mathematics curricula with standards, and analyses and comparisons of mathematics curricula. Special attention will be put on the practice of implementing the current mathematics curricula and teaching materials in Macao and China for the teaching tracks. The current research tendency of mathematics curriculum in international literatures will also be involved, for example, some advanced mathematics topics and mathematics projects.

Pre-requisite: None

#### EDUC7175 THEORIES OF MATHEMATICS TEACHING AND LEARNING

This course aims to provide students with concepts, theories, and principles of mathematics teaching, which are necessary for their teaching practice and further studies. Attention will be paid to the key ideas in four mathematics content areas (i.e., number and operations, algebra, geometry, and data analysis and probability) at both elementary and secondary levels, effective teaching strategies for implementing student-centered, content-based and technology-enhanced instruction. Lesson studies and exemplary teaching designs will also be emphasized. Pre-requisite: None

#### EDUC7176 THE EVALUATION OF MATHEMATICS TEACHING AND LEARNING

This course aims to equip students with the concepts, theories, and practical skills of conducting evaluations on mathematics teaching and learning. Topics will include: assessment and evaluation in mathematics teaching, theoretical assumptions of evaluation in mathematics teaching and learning, various evaluation techniques in mathematics teaching and learning, mathematics curriculum reform and evaluation, mathematics teacher development and evaluation. Emphases will be put on authentic assessment including discourse and performance assessment in mathematics classrooms. The large scale evaluation programmes, such as TIMSS, PISA, will be also covered.

Pre-requisite: None

#### EDUC7177 PREPARATION AND PROFESSIONAL DEVELOPMENT OF MATHEMATICS TEACHERS

This course is about the concepts, theories and practice of mathematics teacher development with the purpose of laying a foundation for students' teaching practice and further studies. Topics include: mathematics teachers' subject knowledge and pedagogical content knowledge, teachers' conceptions (or beliefs) of effective mathematics teaching and learning, school-based research and mathematics teachers' professional development, action research and mathematics teacher development, mathematics teachers' narratives, case studies of mathematics teacher development, research tendency of mathematics teacher development. Pre-requisite: None

#### ENGLISH LANGUAGE EDUCATION

# EDUC7179 CURRICULUM DESIGN AND MATERIALS DEVELOPMENT FOR ENGLISH TEACHERS

This course is designed to acquaint students with the strategies and principles of materials development for English language teaching. It aims to help students develop an understanding of the process of second language curriculum development in general, and of second language course design and materials preparation in particular. Theoretical discussions of different language learning models and instructional principles, and various approaches to curriculum

design and materials development will provide a basis for analysis. Course participants will have opportunities to engage in critical reflection on both theoretical and practical issues in second language curriculum design and materials development, as well as develop practical experience in designing English language curriculum and materials relevant to specific student populations. Pre-requisite: None

#### EDUC7180 PEDAGOGICAL GRAMMAR FOR ENGLISH LANGUAGE TEACHERS

This course provides opportunities for students to develop an understanding of the pedagogical grammar of the English language, and apply this knowledge in learning and teaching in a second language context. The course attempts to analyze grammar from an integrated perspective, drawing insights from both formalist and functional approaches. It also examines issues such as the extent to which ESL or EFL teachers should focus on rules or the regularities of language or they should focus more on vocabulary and how it affects grammaticality. Pedagogical implications link key grammatical phenomena to real communicative events in the context of school English classrooms.

Pre-requisite: None

#### EDUC7181 TEACHING SECOND LANGUAGE WRITING

This course provides opportunities to explore various perspectives on theory, research, and pedagogical applications in second language writing. The course aims to equip students with strategies to help second language learners develop the skills necessary for effective writing. Topics include the nature of L2 writing, approaches to teaching L2 writing, L2 writing processes, features of L2 writers' texts, beliefs and attitudes of L2 writers, feedback on L2 writing, L2 writing assessment, contexts for L2 writing, and L2 writing teacher education. Course participants will be helped to make connections between theory and practice and understand key issues that underlie second language writing, and acquire skills and techniques for planning, teaching and assessing second language writing.

Pre-requisite: None

# EDUC7183 SECOND LANGUAGE VOCABULARY ACQUISITION AND LANGUAGE TEACHING

This course provides opportunities to study about vocabulary in second language learning and teaching, including questions regarding how to select vocabulary for direct instruction, factors that influence incidental acquisition, strategies for deliberate learning and teaching, and assessment of vocabulary knowledge. A survey of pivotal published second language vocabulary acquisition research is provided for the purpose of evaluating the quality of the research and considering its practical implications for teaching. Pre-requisite: None

#### EDUC7201 THEORIES OF EDUCATIONAL ADMINISTRATION

This course addresses concepts, theories and current developments in educational administration. Educational organizations and their leadership, motivation, communication and decision making, as well as their development and effectiveness are examined. Pre-requisite: None

#### EDUC7202 EDUCATIONAL LAW AND POLICY ANALYSIS

This course addresses Educational laws, regulations and policies. The impacts of these laws, regulations and policies upon schools are analysed and examined. Students are encouraged to make suggestions about how to revise some Macao educational laws and policies. Pre-requisite: None

#### EDUC7203 EDUCATION AND DEVELOPMENT

This course emphasizes on application of theories in Social Sciences to education and socioeconomic development. Issues of discussion include: human capital theory, equality of opportunities, modernization, dependency theory, cultural imperialism, integration of the capitalist world system, and postmodernism. Pre-requisite: None

#### EDUC7251 ORGANIZATIONAL CHANGE AND DEVELOPMENT IN SCHOOLS

This course is a critical analysis of theoretical and practical aspects of organizational change and development in education. Various perspectives and strategies innovated and used by educational institutions to cope with organizational change and enhance development will be introduced. In-depth case analysis will be provided to illustrate applications of strategies of school effectiveness, school-based management, and organizational innovation. Pre-requisite: None

#### EDUC7252 SEMINAR OF SOCIAL CHANGE AND EDUCATIONAL REFORMS

This course looks at educational institutionalization and re-institutionalization through the lens of social change over time. First of all, it will trace the social origins and social constructions of modern educational systems since the Protestant Reformation came into effect in the 16<sup>th-</sup> century Europe. Secondly, it will focus much more attention on the landmarks of educational expansions and ameliorations around and after World War II. And finally, special efforts will be directed to issues of education in a so-called individualized society of late-capitalism in early 21<sup>st</sup> century. Scholars with specialties in related topics of this course will be invited to give talks and interchange with the class.

Pre-requisite: None

#### EDUC7253 SCHOOL ADMINISTRATION & MANAGEMENT

The course covers the practical aspects of school administration and management, with emphasis on personnel, finance and other resources, in order to equip students with a system of strategies for school expansion, leadership, administration, public relations, professional development and parental participation.

Pre-requisite: None

#### EDUC7254 SOCIOLOGICAL ANALYSIS OF EDUCATIONAL POLICY

This course focuses on a sociological study of the formulation of educational policy, taking into account historical, political, economic, social, cultural and religious factors, and analyzes the process of educational policies being transformed into law and action plans. Pre-requisite: None

#### EDUC7255 GROUP DYNAMICS

This course aims to help student teachers explore, from a socio-psychological aspect, the dynamics of teaching and learning in classrooms and schools as groups, norms and expectations, integration and disintegration, cooperation and conflicts, etc, and the possible ways to generate group dynamics through communication and coordination. Pre-requisite: None

#### EDUC7256 COMPARATIVE EDUCATION

While many of the educational practices are considered embedded in local context, there is increasing volume of conversations on educational issues globally. This course will take students to examine a series of critical educational issues from an international and comparative lens. Students will join the discussion on topics such as: accountability movement in educational management, globalized educational standard, teacher professional development, global education development agenda such as Education For All, etc. The aim of this course is to connect students with educational development discourse globally. The instructor will help students to develop awareness and critical thoughts of on-going debate related to educational equality, efficiency, and excellence.

Pre-requisite: None

#### EDUC7257 SPECIAL TOPICS IN EDUCATIONAL ADMINISTRATION

This graduate level course covers the current and new topics, new trends, and new research findings, in the area of educational administration. The actual topics may differ as this course is offered at different times, to reflect the new developments and directions of this field. The graduate level course will expose the students to the new thoughts, new developments, more

recent research and practice in the area of educational administration. Pre-requisite: None

#### EDUC7301 THEORIES AND STUDIES OF CHILD DEVELOPMENT

Consolidates knowledge on human development and its ecological contexts by highlighting the developmental stages of human beings at different stages of the life-span. Introduces the recent theories on human development that extend the classic theories on human development, social movements and their effects on human development. Emphasizes special features during the transitional periods from one stage to the next and the critical role that childhood plays in the later developmental stages. Discussions will also examine the ways in which different societies view human development and the issues pertaining to the culture and cognition of human development.

Pre-requisite: None

#### EDUC7302 COGNITION AND LEARNING IN THE EARLY YEARS

Provides students with an understanding of children's cognitive development and its implication on learning. Discusses theories on children's cognition such as those on children's memory system, what constitutes to children's conceptual changes, children's problem solving strategies and their sensory and perceptual system development. Overviews selected contemporary approaches such as topics on neuro-psychology, namely brain anatomy, brain development, the social brain and the effects of gender, culture, disorders, and life experiences on shaping a brain will be covered. Examines parents' influence and the roles of adult and child interactions on children's learning. This course will also link theory and practice by examining how young children learn and the role that early education plays in it.

r re-requisite. None

#### EDUC7303 CHILD PLAY STUDIES

The benefits of play have been associated with improvements in, for example, exploration and creativity, parent child bonds and healthy child development. This course will cover a range of international perspectives of play including the diverse interpretations of play, philosophical rationales underpinning play, and practices of play. In particular, the contemporary approaches and research methods to understanding children's play, the arguments for and against play as curriculum and/or approach, the issues concerning play advocacy and policy-making, as well as the possibility of promoting context appropriate play practice cross-culturally will be provided. Pre-requisite: None

#### EDUC7304 EARLY CHILDHOOD PROGRAMME QUALITY EVALUATION

Introduces indicators and procedures used in Macao, other Chinese regions and beyond, to assess the quality of provisions in kindergartens and nurseries. Highlights the importance that evaluation will not only be focused on the organization and personnel, curriculum and pedagogy, physical environment and resources, but also on the clients they serve, including parents, babies and young children. The aim of assessment is to build up synergy and capacity for the continual improvement of services rendered to its clients.

Pre-requisite: None

#### EDUC7353 CHILD LANGUAGE LITERACY DEVELOPMENT

This course provides an in-depth understanding of child language and literacy development from infancy through the adolescent years. Main focus will be endogenous linguistic and cognitive correlates of literacy acquisition, including letter-sound knowledge, phonology, morphology, grammar, fluency and vocabulary. Exogenous factors, including parenting, educational systems, and culture, will be also discussed. The course will also provide some exposure to the recent research on language and literacy disorders and bilingual literacy acquisition. Pre-requisite: None

#### EDUC7354 CHILD AND FAMILY EDUCATION

This course is parent-oriented, children-oriented, community-oriented and school-oriented, and

will have students explore what are effective parents, how to promote stable marriage relationship and understand its impacts on children's development, and why good ethics can promote better relationships among family members. It will also cover the methods of helping children understand their roles in a family, the use of the community-based resources and the importance of home-school relationship in early childhood education and family education. Pre-requisite: None

# EDUC7355 SPECIAL TOPICS IN EARLY CHILDHOOD EDUCATION AND CHILD DEVELOPMENT

This graduate level course covers the current and new topics, new trends, and new research findings, in the area of early childhood education and child development. The actual topics may differ as this course is offered at different times, to reflect the new developments and directions of this field. The graduate level course will expose the students to the new thoughts, new developments, more recent research and practice in the area of early childhood education and child development.

Pre-requisite: None

#### EDUC7356 STUDIES ON PRESCHOOL INCLUSION

Introduces latest research findings on serving children with special needs in inclusive early childhood settings. Highlights knowledge and skills to initiate and sustain quality inclusion programmes in Macao, other Chinese regions and beyond. By means of different activities such as synthesizing research findings and observing student-teacher interactions in inclusive classrooms, students will gain a deep understanding of philosophical, moral and legal foundations for early childhood inclusion. Moreover, student will identify and master effective strategies for building a high quality inclusion programmes such as making curriculum modifications and embedding learning opportunities in play and routine activities. Finally, student will prioritize targeted intervention services for individual child.

#### EDUC7401 EDUCATIONAL AND PSYCHOLOGICAL ASSESSMENT

This course introduces the concepts, principles, and methods in educational and psychological measurement to students. Topics include reliability, validity, item analysis, scores, and score reports. Emphasis is on construction, interpretation, use, and evaluation of assessments regarding achievement, aptitude, interests, attitudes, personality, and exceptionality. The integration of assessment data into a comprehensive psychological report including associated recommendations for intervention is an essential component of this course. Pre-requisite: None

#### EDPS7402 PSYCHOLOGY OF LEARNING

This course introduces psychological theories pertinent to the learning of students, and current views of how people learn. Particular focus is placed on linking theories to classroom situations. Topics included are: behavioristic, information- processing, constructivistic, and humanistic theories of learning.

Pre-requisite: None

#### EDUC7403 ADVANCED DEVELOPMENTAL PSYCHOLOGY

This course focuses on an integrated study of human development across the life span with implications for educational psychology. It aims at familiarizing students with current state of knowledge and major theories of human development with particular emphasis on childhood and adolescence. The interrelationship among biological, social-psychological, and educational factors that influence human development will be examined. In particular the influence of Chinese culture and context on development during the childhood and adolescence will be discussed.

Pre-requisite: None

#### EDUC7451 MOTIVATION AND LEARNING

This course explores how motivational principles can be applied to promote learning and instruction. Motivation topics may include achievement motivation, extrinsic and intrinsic motivation, attribution, goals and needs, interests, beliefs and values. Pre-requisite: None

Tre-requisite. None

#### EDUC7452 PSYCHOLOGY OF INSTRUCTION

This is a course in the application of theory and research in psychology to the analysis and design of teaching and learning. Instructional theories and models are introduced to meet the learning of diverse topics by different learners. Technology integration in the design and development of instruction is also explored.

Pre-requisite: None

#### EDUC7453 LEARNING DIFFICULTIES AND GUIDANCE

This course focuses on studying the characteristics and the causes of learning difficulties. The content includes a study of psychological characteristics of learning difficulties, diagnostic methods and tools, how to design individual educational programmes and provide psychological and learning guidance to students with learning difficulties. Pre-requisite: None

#### EDUC7454 EDUCATIONAL DIAGNOSIS AND INTERVENTIONS

This course provides an overview of theories, research, and practice on educational diagnosis and intervention, with an emphasis on individuals from early childhood to adolescence. The goal of this course is for students to understand the theories, implement the educational diagnosis, and give consultation to teachers for preventing academic, emotional, behavioral, and social problems among the students in primary and secondary schools.

Pre-requisite: Educational & Psychological Assessment

#### EDUC7455 BEHAVIORAL AND SOCIAL PROBLEMS AND GUIDANCE

This course provides an introduction on the characteristics of children/adolescents with emotional, behavioral, and social problems. The content will focus on how to implement intervention programmes for those children and adolescents in school settings. Pre-requisite: None

# EDUC7456 TEACHING STUDENTS WITH ATTENTION DEFICIT AND HYPERACTIVITY DISORDER

This course is designed to help educators work with students with ADHD in their inclusive classroom. The course will further define the symptoms, characteristics and treatment of ADHD, and offer strategies to use within the classroom and with parents. Pre-requisite: None

#### EDUC7457 SPECIAL TOPICS IN EDUCATIONAL PSYCHOLOGY

This graduate level course covers the current and new topics, new trends, and new research findings, in the area of educational psychology. The actual topics may differ as this course is offered at different times, to reflect the new developments and directions of this field. The graduate level course will expose the students to the new thoughts, new developments, more recent research and practice in the area of educational psychology. Pre-requisite: None

#### EDUC7501 ADVANCED EXERCISE PSYCHOLOGY

This programmes aims to introduce methods of the application of sport psychology in sport studies and the teaching of physical education. Students will have chances to familiarize with a range of techniques in learning. They will be invited to evaluate critically the sport chosen by different theoretical principles and research support for these procedures. Coaches and physical educators will find useful in this study as it covers the theoretical aspects of sport behavior and the establishment of a knowledge base for sport participation and performance development.

#### Pre-requisite: None

#### EDUC7502 CURRICULUM AND TEACHING OF PHYSICAL EDUCATION

This programme aims to provide participants with an opportunity to explore the socially constructed nature of schooling, curriculum, teaching and learning in the field of physical education and sport studies. Current issues on teachers' work will be investigated. Recent research and theory that examines the roles of teachers in facilitating students' learning will be reviewed and critiqued. The programme covers a series of core sessions in curriculum planning, assessment, school-based curriculum development, learning and effectiveness in teaching. Depending on the professional interests of participants, remaining sessions will be negotiated to ensure that current curriculum in physical education is examined.

#### EDUC7503 ADVANCED EXERCISE PHYSIOLOGY

The programme introduces the nature of human body and examines its biological nature to the teaching and learning of physical education. Students will have chances to focus on human anatomy, exercise physiology and its biomechanics principles to development of movement exercises. The programme also aims to promote an understanding of the variety of laboratory and field skills used in the biomechanical assessment of the exercising human. The purpose is to enhance human performance growth in physical education and sport through the knowledge of body science.

Pre-requisite: None

#### EDUC7551 COMPARATIVE PHYSICAL EDUCATION AND SPORT

This programme explores current programmes of physical education and sport development in various countries of the world and the reasons for their development, similarities and differences as well. Discussions will be concerned with the political, economic and philosophical ramifications affecting the development of physical education and sport programmes. Topics such as amateurism, apartheid, violence and Olympic movement will be included. Pre-requisite: None

#### EDUC7552 SPORTS, RECREATION AND LEISURE STUDIES

The programme provides a thorough review of the impact of sport, recreation and leisure to community and its educational processes to an individual's leisure lifestyle development. Different social and recreational theories will be examined. The aim is to enhance the growth of a health society through various physical and sport activities. The programme will also focuses on the role and impact of different group dynamic approaches and the awareness of these approaches to professional development in sports, recreation and leisure studies. Pre-requisite: None

#### EDUC7553 EFFECTIVE LEARNING AND LEARNING IN PHYSICAL EDUCATION

This programme examines ways in which current understanding of cognitive processes related in knowing and thinking are contributors to the process of learning. Consideration will be given to constructivist and generative approaches in learning and how schema theory facilitates the development of knowledge and problem-solving skill under the perspectives in physical education. Emphasis will also be placed on connections between such knowledge to the learning of physical activities in school. Issues of transfer of learning, creativity and facilitation of self-regulation in the learner will be examined.

Pre-requisite: None

#### EDUC7554 EXERCISE AND NUTRITION

The course introduces the basic knowledge of nutrition and discusses the interactions between nutrition and exercise. Subject contents relating to diet, energy intake, expenditure, weight control and nutrient supplements for leisure, entertainment or competitions are also addressed. After the course, students will be able to apply related knowledge to serve different people in sports. Pre-requisite: None

#### EDUC7555 SPORTS SOCIOLOGY

Sociology and philosophy are the fundamental platform for study of physical education and sport. This programme aims at equipping students with a philosophical mind and serves as tool for the critical examination of the subject. This programme initiates participants into considering current and possible future practice in the teaching of physical education in schools and promotion of sport in society by three sub-disciplines: philosophy, sociology and history in physical education and sport. Apart from a global perspective, the social and historical contexts of mainland China, Macao and Hong Kong will also be investigated.

Pre-requisite: None

#### EDUC7556 PHYSICAL ACTIVITY AND HEALTH

This course covers identifying the role of lifestyle behaviors to reach optimal health and wellbeing. Base on a holistic understanding of health, the principles and the latest research findings will be used to examine human behaviors and factors that affect involvement in regular physical activities.

Pre-requisite: None

#### EDUC7557 SPECIAL TOPICS IN PHYSICAL EDUCATION & SPORT STUDIES

This course covers the current and new topics, new trends, and new research findings, in the area of physical education and sport studies. The actual topics may differ as this course is offered at different times, to reflect the new developments and directions of this field. In this graduate level course, students will engage in more recent research and practice in the area of physical education and sport studies.

Pre-requisite: None

#### EDUC7601 THEORIES IN COUNSELING PROFESSION

This course provides an overview of classical and contemporary theories in counseling to consolidate a foundation on which various counseling techniques and services are built. Ethical issues in the counseling profession are also addressed. Pre-requisite: None

#### EDUC7602 EDUCATIONAL & PSYCHOLOGICAL ASSESSMENT

This course introduces to students the concepts, principles, and methods in educational/psychological measurement. Topics include reliability, validity, item analysis, scores, score reports (for example grades). Emphasis is on construction, interpretation, use, and evaluation of assessments regarding achievement, aptitude, interests, attitudes, personality, and exceptionality. The integration of assessment data into a comprehensive psychological report including associated recommendations for intervention is an essential component of this course. Pre-requisite: None

#### EDUC7603 ADVANCED COUNSELING SKILLS

This course attempts to reinforce students' counseling skills by role-play and demonstrations in a class setting. These micro-counseling sessions will be recorded with the use of audio-visual equipment for later discussions, reflective thinking, critical evaluation by peers and the respective instructor. Students will be closely supervised to advance in confidence, competence, and counseling techniques. The course will also focus on the development and maintenance of the counseling relationship.

Pre-requisite: None

#### EDUC7651 CAREER COUNSELING

This course introduces students to a variety of career counseling strategies needed to provide guidance for prospective graduates and human resources in the work force within the current context of economic shift, high unemployment and change in job nature. The course also gives an overview of issues in the pursuit of a career such as gender and socio-economic status. Pre-requisite: None

#### EDUC7652 GROUP COUNSELING

This course examines both the theory and practice of group counseling. It is a combination of didactic and experiential activities. Uses of groups for growth, prevention, and therapy are explored. Students will learn a basic understanding of group leadership roles, therapeutic factors of group counseling, and stages of group process. They will observe and participate in the dynamics of group interaction.

Pre-requisite: None

#### EDUC7653 FAMILY COUNSELING

This course examines the various factors constituting to familial problems such as dissatisfactory marriage, family violence, divorce, and child-abuse. Theories and assessments of different interventions as well as solution-focused and emotion-focused approaches to relationship therapy will be practised through role-play of family interviewing. The course will also overview the shift in the value system within the local context.

Pre-requisite: None

#### EDUC7654 ABNORMAL PSYCHOLOGY IN ADOLESCENCE

This course will focus on the current issues in adolescent psychopathology. Students will learn to explore how biological, psychological, and sociocultural factors contribute to the development of adolescent psychopathology. It will also discuss the impact of psychopathology on the individual, the family and the community. The examination of etiology, treatment and prevention approaches for adolescence will be included.

Pre-requisite: None

#### EDUC7655 SPECIAL TOPICS IN SCHOOL COUNSELING

This graduate level course covers the current and new topics, new trends, and new research findings, in the area of school counseling. The actual topics may differ as this course is offered at different times, to reflect the new developments and directions of this field. The graduate level course will expose the students to the new thoughts, new developments, more recent research and practice in the area of school counseling.

Pre-requisite: None

#### EDUC7656 COUNSELING PRACTICUM I

This course provides students who are training to become school counselors with the opportunity to incorporate the knowledge and skills grown in prior and concurrent learning experiences and apply them in practical settings. Students are expected to complete a minimum of 100 hours of in-direct and direct service with clients under close supervision of an experienced psychologist/counselor. Target clients can be from educational settings or the local community. Individual and group debriefing sessions will be scheduled on a regular basis. Pre-requisite: None

#### EDUC7657 COUNSELING PRACTICUM II

This course requires counselors-in-training to participate in advanced individual and group clinical practice with intensive guidance on counseling skills, problem-solving, and interpersonal relationships. Students are expected to further complete a minimum of 100 hours of direct service with clients under close supervision of an experienced psychologist/counselor. Target clients can be from families, educational settings or the local community. Individual and group debriefing sessions will be scheduled on a regular basis. Pre-requisite: EDUC7656

Pre-requisite. EDUC/050

#### EDUC8001 QUALITATIVE RESEARCH METHODS

This course is designed to introduce graduate students to qualitative research, including the epistemological underpinnings of different approaches to qualitative research, the social theoretical paradigms informing different approaches, ethical considerations and issues of reflexivity/positionality/legitimacy, and the methodological nuts-and-bolts in conducting qualitative inquiry. Class readings will be of three types: epistemological/theoretical issues of

research paradigms, 'how-to' pieces that stress techniques and ethical conducts, and empirical examples. We will approach qualitative methods used by researchers in several disciplines (primarily anthropology, sociology, and education). Students are expected to work on their ongoing pilot projects throughout the semester, prepare to discuss the process of each stage in class, demonstrate grasp of epistemological, ontological, ethical, and methodological issues and debates gleaned from course readings and be ready to critique them, and complete the final write-up of their pilot project as the final product of the class.

Pre-requisite: Introducing Qualitative Research, or equivalent; or based on instructor's consent.

#### EDUC8002 APPLICATIONS OF ADVANCED QUANTITATIVE METHODS

This course provides coverage of some widely-used advanced quantitative methods in education and other social and behavioral sciences (e.g., psychology, sociology, political science, etc.). Application of these advanced quantitative methods in evidence-based research is often important for the quality of the research products, and is often expected by internationally competitive journals. The major topics covered in this course are: multiple regression analysis (review), hierarchical linear modeling (HLM), exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and structural equation modeling. Both conceptual understanding of these topics and analytical implementation of these techniques in practice will be emphasized. This course will provide the analytical foundation for doctoral students in using these more advanced analytical approaches in evidence-based empirical research.

Pre-requisite: Introducing Quantitative Research, or equivalent; or based on instructor's consent.

#### EDUC8003 RESEARCH ETHICS

This course is intended to provide a foundation for PhD students to think critically about what it means to be an ethical researcher. During this course students will critically analyse research ethics topics and case studies, and learn how to conduct a research project from an ethical standpoint. By understanding and reflecting upon research ethics-specific issues, students will assimilate the importance of scientific integrity while acquiring key reasoning skills that will significantly increase the scientific quality and impact of their future research. Pre-requisite: None

#### EDUC8004 RESEARCH WRITING

The purpose of this course is to provide PhD students with necessary instruction of advanced research writing skills in their fields. Students will be taken through the process of reviewing literature and writing academic articles. During this course, students will conduct an actual research study in their field, and write up the finding as an academic manuscript. This would be done through lectures, small group discussion, and individual consultation. Students will be fully in charge of their own research project and encouraged to develop their own writing style. Pre-requisite: None

#### EDUC8005 INTRODUCTION TO EDUCATIONAL RESEARCH

The purpose of this course is to provide an introduction to a variety of research approaches and procedures common to the field of education. Conceptual, procedural and analysis issues from a wide variety of areas will be covered. Students will have a good awareness of the range of procedures that may be applied to different types of research and the guidelines to be used in selecting a set of appropriate research methods. This course will become a primary mechanism by which students develop a broad sense of the discipline of education and use the knowledge to identify possible thesis topics.

Pre-requisite: None

#### EDUC8006 INTRODUCING QUALITATIVE RESEARCH

This course is designed for students with little or no prior experience with qualitative research methods. The aim of the course is to familiarize students with various aspects of qualitative research strategies, as practiced by educational researchers. The course, conducted in the form of a seminar, covers a wide range of issues to help students to design, conduct, evaluate, and reflect upon qualitative research work. This introductory course can serve as a prerequisite, but

not necessary if students already have prior knowledge in the subject matter, to the "Qualitative Research Methods" course.

### Pre-requisite: None

#### EDUC8007 INTRODUCING QUANTITATIVE RESEARCH

This course is designed for students with little or no prior experience with quantitative research methods. This course provides an introduction to quantitative methods used in educational research, particularly descriptive statistics and elementary inferential statistics. Topics include formulating research questions, research design, sampling, descriptive analysis, bivariate relationships, regression, analysis of variance etc. This course is required for all students enrolled in the doctoral programme of FED.

Pre-requisite: None

#### EDUC8100 EDUCATIONAL LEADERSHIP AND POLICY ANALYSIS

The making and analysis of education policy has become more complex in the 21<sup>st</sup> Century as a result of political, economic and cultural changes to education. Thus, the goals of this course are to provide participants a critical awareness of issues, challenges and global.transnational policies facing leaders in education in the reginal and internationally during times of fervent change. The course design is structured to respond to the needs of future/potential/current leaders from all sectors and across all levels of education. This course will enable participants to examine concerned education issues and policy through the lens of educational leadership. Additionally, this course also examines the theoretical and methodological approaches to be considered in studying policy in a regional as well as a global context. Topics will include social justice and equity issues, for instance, gender; standards and accountability; models of governance, and the legal and the institutional framework of governance across the three educational levels.

Pre-requisite: None

#### EDUC8101 ORGANIZATION AND LEADERSHOP: FROM THEORIES TO PRACTICES

This course is designed to promote reflective skills of educational professionals in the application of theoretical knowledge to address complex problems and make informed decisions. By familiarizing current and aspiring educational leaders with theoretical assumptions, limitions and practical implications of different organization and leadership models, learners should be able to apply their knowledge to develop creative strategic approaches to problem-solving and decision-making in applied settings. It is the objective of this course to help contemporary school leaders develop as effective and reflective leaders.

Pre-requisite: None

#### EDUC8102 RESEARCH METHODS IN EDUCATION

The purpose of this course is to provide an introduction to a variety of research approaches and procedures common in the field of education. Conceptual, procedural and analytical issues from a wide variety of areas will be covered. Students will develop a good awareness of the range of methods that may be applied to different types of research and the guidelines to be used in selecting a set of appropriate research methods. This course will become a primary mechanism by which students develop a broad sense of the field of education and the use such knowledge to identify possible research topics.

Pre-requisite: None

#### EDUC8103 ORAGANIZING FOR LEARNING

Changes in educational technology and neuroscience are dramatically affecting the way students learn and the way schools are organized. The first part of this course is designed for K–12 educational leaders who want to initiate and implement technological change at the district and regional levels. The second part of this course will integrate research from neuroscience to transform the school into a learning organization. By integrating the latest technologies and instructional design principles, students can prepare to develop and lead technology-supported solutions to learning issues in the K–12 classroom, and leadership challenges in K-12 school

#### settings. Pre-requisite: None

#### EDUC8104 DATA AND DECISION

Decision-making in schools involves the systematic collection and analysis of data of different forms on the design, implementation, and the effectiveness of programmes or projects. This course will provide an overview of various perspectives and approaches to educational evaluation. Major theories and analytical tools will be discussed. Students will be given the opportunity to critically examine these different approaches to answer questions about classroom projects, educational policy and programmes. Students have the chance to apply the theories covered in the course through case study analyses. Students gain an understanding of theories, applications, and approaches within the context of formal programme evaluation. Pre-requisite: None

#### EDUC8105 COMPARATIVE AND INTERNATIONAL EDUCATION

The comparative perspective has been an important lens through which educators understand our own education practices. This course aims to analyze different education systems around the world and introduce students to new education reforms and innovation in different countries. Students will be introduced to the new thinking of school organization and reflect upon existing practices. In the course, students will discuss diverse issues such as equity, achievement, marketization, cultural influence with cross-country comparisons of regulatory frameworks, and the role of culture.

Pre-requisite: None

#### EDUC8106 RESEARCH WRITING AND ETHICS

This course has been designed to suit the needs of doctoral students conducting educational research. The course aims to develop and sharpen doctoral students' academic and professional writing skills and strategies in Chinese and English, and build their proficiency and confidence as

academic writers. Students will be equipped with the genre structure of research writing (e.g., introduction, literature review and discussion) and learn how to report empirical research in research articles and theses/dissertations.

Pre-requisite: None

#### EDUC8107 SPECIAL TOPICS SEMINAR

This seminar is a mixture of various topics that are relevant to school leaders. Each topic will be made up of a two-day workshop with experts from different fields inside and outside UM. Students will be divided into groups to discuss, evaluate, and present their group work as the assessment. Example topics include, but are not limited to: resource management in K-12, school case study, crisis management and law in education, change and development for educational institutions, values and ethics for school leaders, school governance and intersystems relations, etc. Each student will attend at least four such seminars and produce a group report.

Pre-requisite: None

#### EDUC8108 PRACTICE IN ACTION

This course in the first of practicum series that aims to provide field experience to students to understand the world of educational practitioners. Students will inquire and discover issues by intervieweing, observing, engaging in field research, or other appropriate means. Students will meet with and eventually embed themselves into organizations with key educational leaders from and throughout China. Alternatively, for students who already work in a leadership position, FED faculty members wil follow and observe their work during the field experience. Each student will produce a report as an assessment.

Pre-requisite: None

#### EDUC8109 INDEPENDENT STUDY

This course is the second of practicum series that aims to provide field experience to students with an aim to understand the world of educational practitioners. The aim of the course is to guide students to disseminate their research and observation results through presentation, policy briefs, and/or practitioner journal publications to making a meaningful contribution to practice and/or policy issues. Student will work with a supervisor on a research topic of choice. This course provides meaningful pre-thesis research experience that would prepare the student for more sophisticated research.

Pre-requisite: None

#### EDUC8199 DOCTORAL THESIS

This is the most significant learning experience of the programme. It is designed for EdD students to apply theories and experience learned in the courses and to independently conduct an applied research project examining an educational issue. Students will demonstrate their expertise in on a chosen topic and provides an intellectual contribution to the practice and educational leadership and management.

#### GEST1004 QUANTITATIVE REASONING FOR SCIENCE AND TECHNOLOGY

This course aims at providing a solid foundation of one variable calculus for science and technology students. The topics include basic reasoning skills, limit and continuity, derivative and its applications, integral and its applications. Pre-requisite: None

## HSCI1002 INTRODUCTION TO BIOLOGICAL SCIENCES

Biology is the study of life. With the objective of introducing students to the fields of biological and biomedical sciences, this course covers the following fundamental aspects or principles of biological sciences: basic unis of life, genetic basis of life, evolution and biodiversity, development and function, and ecology and environment. Although all three domains or five kingdoms of life will be covered, the course will focus more on animals and humans. Pre-requisite: None

#### HSCI1003 GENERAL AND CLINICAL BIOCHEMISTRY

This course introduces the molecular basis of biological processes through the logic of chemistry. Topics covered include the structure and function of biomolecules, biochemistry techniques, basic metabolic pathways, and a brief introduction to the biochemical bases of relevant disease states.

Pre-requisite: None

#### HSCI2000 CELL AND MOLECULAR BIOLOGY

This course aims to provide an introduction to the principles of modern cell and molecular biology, and build a foundation for students to initiate and develop the process of inquiry-based learning and discovery in biology and medical sciences. The course will discuss fundamental molecular biology of the cell, current molecular genetic techniques, cell structure and function, and signal transduction pathways.

Pre-requisite: HSCI1002

#### HSCI2002 GENERAL AND CLINICAL MICROBIOLOGY

This course provides students with a broad-based foundation in the basic concepts of general and clinical microbiology. Topics covered include an overview of microbiology with basic information on bacteria, fungi, protozoa and viruses, a discussion of microbial physiology and genetics, and an introduction to microbial pathogenesis and the host response, providing a conceptual basis for understanding pathogenic microorganisms and the mechanisms by which they cause diseases in the human body. Successful completion of this course will prepare students for more advanced courses in related fields.

Pre-requisites: HSCI1002 and HSCI1003

#### HSCI2004 GENETICS AND EPIGENETICS

This course introduces the basic principles of classical and molecular genetics and epigenetics, focusing on how biological information is stored, expressed, changed, and transmitted. Topics covered include inheritance, gene structure, expression and regulation, molecular genetic techniques, population and evolutionary genetics, followed by a discussion of the role of epigenetics in biological phenomena.

Pre-requisites: HSCI1000 and HSCI1002

#### HSCI2005 DEVELOPMENT AND AGING

This lecture discusses animal development with focus on initiation and construction of an organism and the underlying molecular and genetic basis. Topics covered include an overview of developmental biology, the molecular mechanisms of development, cell commitment and early embryonic development, and the vertebrate development process. A final section will be devoted to a discussion of the aging process, including the evolutionary, biochemical, genetic and cellular mechanisms of aging, as well as age-related diseases.

Pre-requisites: HSCI1002 and HSCI2000

#### HSCI2006 PHYSIOLOGY AND PATHOPHYSIOLOGY

This course provides an introduction to the structure and function of the major physiological organ systems of the human body, how various body processes are integrated and regulated, and how perturbations in physiological regulatory mechanisms and anatomy result in pathophysiology. Common diseases and disorders of each system are covered, and emphasis is given on cardiovascular, pulmonary, hepatic, renal and reproductive systems. Pre-requisites: HSCI1003 and HSCI2000

#### MATH1001 LINEAR ALGEBRA I

Systems of Linear Equations and matrices. Gaussian elimination. Determinants. Cramer's rule. Euclidean Spaces. Addition and scalar multiplication of vectors. Linear transformations. Vector Spaces. Linear independence and linear dependence. Pre-requisites: None

#### MATH1002 LINEAR ALGEBRA II

Vector Spaces. Basis and dimension. Matrices, row spaces, column spaces and null spaces. Rank and nullity. Inner product spaces. Inner products and orthonormal bases. Gram-Schmidt process. Least square problems and orthogonal matrices. Eigenvalues and eigenvectors. Diagonalization, orthogonal diagonalization. Linear transformations. Kernel and range. Inverse linear transformations. Similarity. Additional topics include quadratic forms, unitary, normal, Hermitian matrices, and canonical forms. Pre-requisites: MATH1001

#### MATH1003 INTERMEDIATE CALCULUS

Definite integrals. Fundamental theorem of calculus. Applications of definite integrals. Approximations of definite integrals. Sequence and series. Power series and Taylor series. Pre-requisite: GEST1004

#### MATH1004 GEOMETRY

Euclidean geometry, Euclidean space, inner product, distance, and angle. Isometries. Vectors in planes and spaces. Lines and planes and surfaces in 3-dimensional space. Linear transformations, projections, orientations and determinants, isomorphisms, and general linear groups. Symmetries and regular polyhedrons. Affine geometry. Affine spaces and affine transformations. Brief discussion on the development of various geometries such as Euclidean and non-Euclidean ones.

Pre-requisite: None

#### MATH2002 MULTIVARIABLE CALCULUS

Vectors and analytic space geometry. Norms, convergence of vector sequences, open and closed sets, compact sets. Curves, Frenet frames, surfaces. Functions of several variables.

Partial derivatives and their applications, linear approximation, differential, Taylor's formula. Method of Lagrange multiplier. Inverse function theorem, implicit function theorem. Multiple integrals. Green's Theorem. Line and surface integrals. Gauss and Stokes' Theorems. Pre-requisite: GEST1004

#### MATH2003 MATHEMATICAL ANALYSIS I

The axioms for the real number system. Countable and uncountable sets. Sequence of real numbers. Nested intervals theorem. Bolzano-Weierstrass theorem, Cauchy criterion and Heine-Borel Theorem. Limits and continuity of functions. Properties of continuous functions. Pre-requisite: GEST1004

#### MATH2004 MATHEMATICAL ANALYSIS II

Differentiation. Mean value Theorem. L'Hopital's Rule. Inverse function theorem. Integration. Upper and lower integrals. Riemann integrals. Fundamental theorem of calculus. Elementary functions. Series of numbers. Tests for convergence. Series of functions. Uniform convergence. Power series and Taylor series.

Pre-requisite: MATH2003

#### MATH2005 PROBABILITY

Sample space, random events, and probability. Discrete and continuous random variables. Distributions, densities, joint distribution, and marginal distributions. Conditional probability and independence. Moments, mean, variance, covariance, Chebyshev's inequality, and momentgeneration functions. Special probability distributions, densities, and their applications. Pre-requisite: GEST1004

#### MATH2006 APPLIED STATISTICS

Sampling distributions: Chi-square distribution, t-distribution, and F-distribution. Laws of large number and Central limit theorems. Estimation: theory and application. Hypotheses testing: theory and application. Linear regressions, correlation analysis, linear statistical model. The analysis of variance: theory and application. Introduction of statistical computing software. Pre-requisite: MATH2005

#### MATH3000 ORDINARY DIFFERENTIAL EQUATIONS

First-order differential equations. Second-order linear differential equations. Higher order linear differential equations. Systems of differential equations. Power series solutions of linear differential equations, Sturm-Liouville problems. Laplace transforms. Existence and uniqueness theorem of first-order differential equations. Simple modeling problems. Pre-requisite: MATH1003

#### MATH3001 COMPLEX ANALYSIS

Complex numbers. Polar coordinates. Functions of a complex variable. Limits. Derivatives of complex functions. Cauchy-Riemann equations. Harmonic functions, harmonic conjugates. Elementary complex functions, Mobius transformations. Contour integrals. Cauchy-Goursat Theorem. Cauchy integral formula. Liouville's theorem. Maximum moduli of functions. Taylor series. Laurent series. Residue theorems. Evaluation of improper integrals. Rouche's theorem. Pre-requisite: MATH1003

#### MATH3003 ABSTRACT ALGEBRA

Groups. Cyclic groups and permutation groups. Cosets and Lagrange theorem. Homomorphisms. Normal subgroups and factor groups. Group action and counting. Rings. Integral domains. Ring homomorphisms. Ideals and quotient rings. Field of quotients. Rings of polynomials. Introduction to Fields.

Pre-requisite: MATH1001

#### MATH3004 PARTIAL DIFFERENTIAL EQUATIONS

Characteristics, classification of PDE, separation of variables, Fourier transform, and Laplace

transform. Well-posedness of the wave and the heat equations. Boundary value problems for the Laplace and Poisson equations. Separation of variables. Pre-requisites: MATH2002 and MATH3000

#### MATH3007 HISTORY OF MATHEMATICS

We will explore some major themes in mathematics-calculation, number, geometry, algebra, infinity, formalism--and their historical development in various civilizations, ranging from the antiquity of Babylonia and Egypt through classical Greece, the Middle and Far East, and on to modern Europe. We will see how the earlier civilizations influenced or failed to influence later ones and how the concepts evolved in these various civilizations. Pre-requisite: None

#### MATH3013 MATHEMATICAL MODELING

Modeling techniques for analysis or decision-making. The detailed content in this course can vary from extending students' training and understanding in applied mathematical knowledge to further study in specific areas in applied mathematics. Pre-requisite: MATH1003

#### MATH4000 ELEMENTARY NUMBER THEORY

Divisibility theory of the integers, primes, unique factorization, congruence. Fermat's little theorem, Diophantine equations. Quadratic residues and quadratic reciprocity laws, primitive roots. Pell's equations and continued fractions.

Pre-requisite: None

## PROGRAMMES OF STUDY Faculty of Health Sciences

## **Doctoral Degree Programme**

AREA OF STUDY

Biomedical Sciences

# FACULTY OF HEALTH SCIENCES Doctoral Degree Programme

## **Doctor of Philosophy**

Biomedical Sciences

Compulsory Major		Credits
HSCI8003	Research Ethics	
HSCI8004	Methodologies in Biomedical Sciences	3
HSCI8005	Critical Scientific Reading, Writing and Analysis	3
HSCI8006	Advanced Molecular Cell Biology	3
Required El	ective	Credits
Students are	e required to take 1 course from the following:	3
HSCI8118	Advanced Genetics and Bioinformatics	
HSCI8119	Advanced Biomedical and Chemical Engineering	
Doctoral Th	esis	Credits
HSC18999	Doctoral Thesis	18
Total Credits:		30

# FACULTY OF HEALTH SCIENCES Master's Degree Programme

## **Master of Science**

• Global Public Health

Compulsory Major		Credits
CMED7018	Bio-Statistics	3
HSCI7002	Biomedical Sciences	3
HSCI7005	Toxicology and Environmental Health	3
HSCI7006	Epidemiology	3
HSCI7007	Advanced Nutrition and Food Safety	3
HSCI7008	Health Systems and Policy	3
HSCI7009	Case Analysis of Global Health Crisis: Managing Epidemics	3
Required Ele	ective	Credits
Students are	required to take 1 course from the following:	3
CMED7004	Social Medicine	
HSCI7001	Artificial Intelligence in Medicine	
HSCI7003	Digital Biomedicine	
HSCI7004	Healthcare Analytics	
Project Repo	ort	Credits
HSCI7898	Project Report	6
Total Credit	s:	30

# FACULTY OF HEALTH SCIENCES Bachelor's Degree Programmes

## **Bachelor of Science**

• Biomedical Sciences

Year I		Credits
Compulsory	Major	
APAC1004	General Physics	4
APAC1005	Physics Lab	1
HSCI1000	General Chemistry	3
HSCI1001	General Chemistry Lab	2
HSCI1002	Introduction to Biological Sciences	3
HSCI1003	General and Clinical Biochemistry	3
HSCI1004	Biochemistry Lab	1.5
HSCI1005	Organic Chemistry	4
HSCI1006	Organic Chemistry Lab	2
MATH1007	Introduction to Probability	1
Languages a	and Skills*	
	English Language Courses or Free Electives	6
Community	and Peer Education	3
General Edu	cation	
GELH1000	Chinese Language and Culture (Area of Literature & Humanities)	3
GEST1003	Quantitative Reasoning for Health Sciences (Area of Science & Technology)	3

**Total Credits:** 

39.5

Year II		Credits
Compulsory	Major	
CISC1001	Programming Science	3
CISC1004	Introduction to Computer Science	3
HSCI2000	Cell and Molecular Biology	3
HSCI2001	Cell and Molecular Biology Lab	1.5
HSCI2002	General and Clinical Microbiology	3
HSCI2003	Microbiology Lab	1.5
HSCI2004	Genetics and Epigenetics	3
HSCI2006	Physiology and Pathophysiology	3
HSCI2007	Physiology Lab	1.5
HSCI2008	Human Anatomy	3
HSCI3002	Immunology and Infectious Diseases	3
HSCI3003	Biostatistics and Experimental Design	3
Languages a	and Skills*	
	English Language Course or Free Elective	3
	Chinese/Portuguese Language Course or Free Elective	3
General Edu	cation	
	1 General Education Course	3
Total Credits	s:	40.5

Compulsory MajorHSCI2005Biology of Development and AgingHSCI3000Neuroscience and Neurodegenerative DiseasesHSCI3001Endocrinology and Metabolic DiseasesHSCI3004Genomics and BioinformaticsHSCI3005Genetics, Genomics and Bioinformatics LabGeneral EducationGEGA1000Macao and Chinese Civilization (Area of Global Awareness)GESB1000Ethics, Values, Law and Society (Area of Society & Behaviour)	
HSCI3000       Neuroscience and Neurodegenerative Diseases         HSCI3001       Endocrinology and Metabolic Diseases         HSCI3004       Genomics and Bioinformatics         HSCI3005       Genetics, Genomics and Bioinformatics Lab         General Education         GEGA1000       Macao and Chinese Civilization (Area of Global Awareness)	
HSCI3001Endocrinology and Metabolic DiseasesHSCI3004Genomics and BioinformaticsHSCI3005Genetics, Genomics and Bioinformatics LabGeneral EducationGEGA1000Macao and Chinese Civilization (Area of Global Awareness)	3
HSCI3004       Genomics and Bioinformatics         HSCI3005       Genetics, Genomics and Bioinformatics Lab         General Education       GEGA1000         Macao and Chinese Civilization (Area of Global Awareness)	3
HSCI3005       Genetics, Genomics and Bioinformatics Lab         General Education       GEGA1000         Macao and Chinese Civilization (Area of Global Awareness)	3
General Education GEGA1000 Macao and Chinese Civilization (Area of Global Awareness)	3
GEGA1000 Macao and Chinese Civilization (Area of Global Awareness)	1.5
GESB1000 Ethics, Values, Law and Society (Area of Society & Behaviour)	3
	3
2 General Education Courses	6
Languages and Skills*	
CISC1000 Information Technology Fundamentals and Practices	3
Total Credits:	
Year IV	Credits

Compulsory	Major	
HSCI4000	Graduation Project I	3
HSCI4001	Cancer Biology and Therapy	3
HSCI4002	Stem Cell Biology and Regenerative Medicine	3
HSCI4005	Graduation Project II	3
HSCI4006	Public Health	3
HSCI4007	Translational Medicine	3
Required Ele	ctive	
Students are	required to take 1 course from the following:	3
HSCI2009	Pharmacology	
HSCI4004	Drug Discovery and Development	
HSCI4009	Toxicology	
General Edu	cation	
	1 General Education Course	3
Total Credits	:	24
GRAND TOT	AL:	132.5

\*Students who test out of some or all of the Languages and Skills course(s) are required to make up the credits by taking additional Free Elective(s). Please visit the Registry's webpage (https://reg.um.edu.mo/current-students/curriculum-model/ug-curriculum-model/languagesand-skills/) for more details about the test out criteria.

# FACULTY OF HEALTH SCIENCES Bachelor's Degree Programmes

## **Bachelor of Science**

• Bioinformatics

Year I		Credits
Compulsory	/ Major	
HSCI1000	General Chemistry	3
HSCI1002	Introduction to Biological Sciences	3
HSCI1003	General and Clinical Biochemistry	3
HSCI1004	Biochemistry Lab	1.5
MATH1001	Linear Algebra I	3
MATH1007	Introduction to Probability	1
Languages	and Skills*	
	English Language Courses or Free Electives	6
	Chinese/Portuguese Language Course or Free Elective	3
Community	and Peer Education	2
General Edu	ication	
GELH1000	Chinese Language and Culture (Area of Literature & Humanities)	3
GEST1003	Quantitative Reasoning for Health Sciences (Area of Science &	3
	Technology)	
	1 General Education Course	3
Total Credit	S:	34.5

		Credit
Compulsory	/ Major	
CISC1001	Programming Science	3
CISC1004	Introduction to Computer Science	3
HSCI2000	Cell and Molecular Biology	3
HSCI2001	Cell and Molecular Biology Lab	1.5
HSCI2002	General and Clinical Microbiology	3
HSCI2004	Genetics and Epigenetics	3
HSCI2006	Physiology and Pathophysiology	3
HSCI3002	Immunology and Infectious Diseases	3
HSCI3003	Biostatistics and Experimental Design	3
Languages	and Skills*	
	English Language Course or Free Elective	3
CISC1000	Information Technology Fundamentals and Practices	3
Community	and Peer Education	1
General Ed	ucation	
GEGA1000	Macao and Chinese Civilization	3
Total Credit	s:	35.5
Year III		Credit
Compulsor	/ Major	
CISC2003	Object Oriented Programming and Data Structures	3
CISC3000	Introduction to Database Systems	3
HSCI2008	Human Anatomy	3
	Human Anatomy Genomics and Bioinformatics	3 3
HSCI3004		-
HSCI3004 HSCI3005	Genomics and Bioinformatics	3
HSCI3004 HSCI3005 HSCI3006	Genomics and Bioinformatics Genetics, Genomics and Bioinformatics Lab	3 1.5
HSCI3004 HSCI3005 HSCI3006 HSCI3016	Genomics and Bioinformatics Genetics, Genomics and Bioinformatics Lab Advanced Bioinformatics	3 1.5 3
HSCI2008 HSCI3004 HSCI3005 HSCI3006 HSCI3016 HSCI3017 Required El	Genomics and Bioinformatics Genetics, Genomics and Bioinformatics Lab Advanced Bioinformatics Evolutionary Biology Medical Genetics	3 1.5 3 3
HSCI3004 HSCI3005 HSCI3006 HSCI3016 HSCI3017	Genomics and Bioinformatics Genetics, Genomics and Bioinformatics Lab Advanced Bioinformatics Evolutionary Biology Medical Genetics	3 1.5 3 3
HSCI3004 HSCI3005 HSCI3006 HSCI3016 HSCI3017	Genomics and Bioinformatics Genetics, Genomics and Bioinformatics Lab Advanced Bioinformatics Evolutionary Biology Medical Genetics ective 2 Required Elective Courses	3 1.5 3 3 3
HSCI3004 HSCI3005 HSCI3006 HSCI3016 HSCI3017 Required El	Genomics and Bioinformatics Genetics, Genomics and Bioinformatics Lab Advanced Bioinformatics Evolutionary Biology Medical Genetics ective 2 Required Elective Courses	3 1.5 3 3 3
HSCI3004 HSCI3005 HSCI3006 HSCI3016 HSCI3017 Required El	Genomics and Bioinformatics Genetics, Genomics and Bioinformatics Lab Advanced Bioinformatics Evolutionary Biology Medical Genetics ective 2 Required Elective Courses	3 1.5 3 3 3 6

Year IV		Credits
Compulsor	y Major	
HSCI4000	Graduation Project I	3
HSCI4005	Graduation Project II	3
HSCI4006	Public Health	3
HSCI4007	Translational Medicine	3
HSCI4011	Pharmacoinformatics	3
HSCI4012	Bioinformatcs in Action	3
Required El	lective	
	1 Required Elective Course	3
General Ed	ucation	
	2 General Education Courses	6
Total Credit	ts:	27
GRAND TO	TAL:	131.5

List of Required Elective Courses:		Credits
CISC1006	Probability and Statistics	3
CISC2002	Numerical Methods and Computation	3
CISC3011	Digital Image Processing	3
CISC3012	Artificial Intelligence	3
CISC3015	Data and Information Visualization	3
CISC3023	Machine Learning	3
HSCI3014	Pharmacy Administration	3
HSCI4010	Pharmaceutical Economics and Policy	3

\* Students who test out of some or all of the Languages and Skills course(s) are required to make up the credits by taking additional Free Elective(s). Please visit the Registry's webpage (<u>https://reg.um.edu.mo/current-students/curriculum-model/ug-curriculum-model/languages-and-skills/</u>) for more details about the test out criteria.

# FACULTY OF HEALTH SCIENCES Bachelor's Degree Programmes

## **Bachelor of Science**

## • Pharmaceutical Sciences and Technology

Year I		Credits
Compulsory	/ Major	
APAC1004	General Physics	4
APAC1005	Physics Lab	1
CISC1004	Introduction to Computer Science	3
HSCI1000	General Chemistry	3
HSCI1001	General Chemistry Lab	2
HSCI1002	Introduction to Biological Sciences	3
HSCI1003	General and Clinical Biochemistry	3
HSCI1004	Biochemistry Lab	1.5
HSCI1005	Organic Chemistry	4
HSCI1006	Organic Chemistry Lab	2
MATH1007	Introduction to Probability	1
Languages	and Skills*	
	English Language Courses or Free Electives	6
Community	Community and Peer Education	
Total Credit	s:	35.5

Year II		Credits
Compulsory	/ Major	
APAC3005	Physical Chemistry	3
CISC1001	Programming Science	3
HSCI2002	General and Clinical Microbiology	3
HSCI2003	Microbiology Lab	1.5
HSCI2006	Physiology and Pathophysiology	3
HSCI2008	Human Anatomy	3
HSCI2009	Pharmacology	3
HSCI2010	Pharmacology Lab	1.5
HSCI2011	Analytical Chemistry	3
HSCI2012	Analytical Chemistry Lab	2
HSCI2013	Medicinal Chemistry	3
HSCI3003	Biostatistics and Experimental Design	3
Languages	and Skills*	
	English Language Course or Free Elective	3
Community	and Peer Education	1
Total Credit	s:	36

Year III		Credits
Compulsory	/ Major	
HSCI3008	Biopharmaceutics and Pharmacokinetics	3
HSCI3009	Chinese Medicine	3
HSCI3010	Pharmaceutics	3
HSCI3011	Pharmaceutics Lab	1.5
HSCI3012	Pharmaceutical Analysis	3
HSCI3013	Pharmaceutical Analysis Lab	1.5
HSCI3014	Pharmacy Administration	3
Required Ele	ective	
	1 Required Elective Course	3
Languages a	and Skills*	
CISC1000	Information Technology Fundamentals and Practices	3
General Edu	ication	
GEGA1000	Macao and Chinese Civilization (Area of Global Awareness)	3
GESB1000	Ethics, Values, Law and Society (Area of Society & Behaviour)	3
	1 course from area of Society and Behaviour	3

55	
1 course from area of Science and Technology	3

# Total Credits:

-	•

Year IV		Credits
Compulsory	Major	
HSCI4000	Graduation Project I	3
HSCI4005	Graduation Project II	3
HSCI4009	Toxicology	3
Required El	ective	
	2 Required Elective Courses	6
Languages	and Skills*	
	Chinese/Portuguese Language Course or Free Elective	3
General Edu	ication	
GELH1000	Chinese Language and Culture (Area of Literature & Humanities)	3
GEST1004	Quantitative Reasoning for Health Sciences (Area of Science & Technology)	3
	1 course from area of Literature and Humanities	3
	1 course from area of Global Awareness	3
Total Credit	S:	30
GRAND TO	TAL:	137.5
List of Requ	ired Elective Courses:	Credits
HSCI3007	Biomedical Materials	3
HSCI3015	Phytochemistry	3

HSCI3015	Phytochemistry	3
HSCI4004	Drug Discovery and Development	3
HSCI4006	Public Health	3
HSCI4007	Translational Medicine	3
HSCI4010	Pharmaceutical Economics and Policy	3
HSCI4011	Pharmacoinformatics	3

\* Students who test out of some or all of the Languages and Skills course(s) are required to make up the credits by taking additional Free Elective(s). Please visit the Registry's webpage (<u>https://reg.um.edu.mo/current-students/curriculum-model/ug-curriculum-model/languages-and-skills/</u>) for more details about the test out criteria.

# **Course Description**

### DOCTORAL DEGREE PROGRAMME

### HSCI8003 RESEARCH ETHICS

This course provides students with an understanding of the need for research ethics and the responsibility of the researcher (the student); the most common types of academic dishonesty (such as fabrication and plagiarism); how to avoid committing acts of academic dishonesty (such as through using citations and references); and how the University deals with students who have been proven to have committed acts of academic dishonesty (The University's 'Rules on Handling Student Academic Dishonesty' will be outlined).

### HSCI8004 METHODOLOGIES IN BIOMEDICAL SCIENCES

This course aims to equip students with basic knowledge and general techniques commonly used in Biomedical Science research. Students will learn the scientific jargon, basic biology, and theories associated with each technique so that students can perform and understand common research methods. This course aims to help them with their research, project design, Qualifying Examination and graduate with PhD in "Biomedical Sciences". Pre-requisite: None

### HSCI8005 CRITICAL SCIENTIFIC READING, WRITING AND ANALYSIS

This course aims to provide training and instruction in the methods and practice of critically reading, writing, and analysing scientific text. Students will learn reading strategies, annotation methods, and techniques in outlining and summarizing a text. Students will also learn essential structure and writing techniques for manuscripts and proposals. The course is activity based and students will participate in reading, analysing and writing exercises. Pre-requisite: None

### HSCI8006 ADVNACED MOLECULAR CELL BIOLOGY

This course aims to provide a comprehensive coverage at advanced level on topics in molecular and cell biology, such as DNA and Gene Editing, Gene Expression, Cytoskeleton and Intracellular Mobility, Mitochondria and Bioenergetics, ER-Golgi and Protein Sorting, Proteasome and Protein Degradation, Lysosome and Autophagy, cell signalling, cell cycle, cell death, etc. This course will be taught by professors from FHS with the relevant background. The model of teaching includes both lecture and paper discussion. The students will be assessed via closed-book essay questions.

Pre-requisite: None

### HSCI8118 ADVANCED GENETICS AND BIOINFORMATICS

The course aims to provide advanced knowledge in genetics and bioinformatics, new progress in both theoretical and methodological aspects, and future perspectives in the field. It will combine the lecture and literature analysis, with student presentation and discussion on specific topics.

Pre-requisite: None

### HSCI8119 ADVANCED BIOMEDICAL AND CHEMICAL ENGINEERING

This course aims to: 1) provide the students the underlying principles of biomedical imaging Xray CT, SPECT, PET, optical imaging, and MRI; 2) emphasize emerging nanotechnologies and biomedical applications including nanomaterials, nanoengineering, nanotechnology-based drug delivery systems, nano-based imaging and theranostic systems, nanotoxicology, and translating nanomedicines into clinical investigation; and 3) explore the process of drug development, from target identification to final drug registration, involving target selection, lead discovery using computer-based methods, combinatorial chemistry/high-throughput screening, safety evaluation, bioavailability, clinical trials, and the essentials of patent law. Pre-requisite: None

### HSCI8999 DOCTORAL THESIS

This course spans six consecutive semesters. During the study period, students are required to perform independent research work under the supervision of the thesis supervisor. After successfully completing the qualifying examination and proposal assessment, a written thesis and an oral defence presenting the research findings with intellectual analysis are necessary for the assessment of the eligibility of graduation by the end of the study. Pre-requisite: None

### MASTER'S DEGREE PROGRAMME

### HSCI7001 ARTIFICIAL INTELLIGENCE IN MEDICINE

This course introduces the concept of artificial intelligence (AI) in medicine, the associated big data analysis, and analytic programming. Medical AI is the use of algorithms and software to approximate human cognition in the analysis of complex medical data including those in global public health. AI is currently transforming healthcare delivery and is augmenting doctors' roles in medicine. This course covers analytic programming (predominately in R), big data analysis, and application for AI in medicine and global public health. The goal of this course is to develop students' understanding and to confer hands-on analytical skills for AI in medicine on them. It is also covers topics in global public health.

Pre-requisite: None

### HSCI7002 BIOMEDICAL SCIENCES

This course introduces the essential biological knowledge to students with non-biology background in order for them to understand, explain and evaluate the basic concepts of precision medicine. It uses cancer as a model disease to illustrate how precision medicine can provide better, individually tailored healthcare solutions to patients. The course introduces the methods of discovering the causes of cancer, the techniques to perform accurate diagnoses, the mechanisms of cancer therapies, and the different strategies for cancer treatment. In addition, basic knowledge on immunology, microbiology and infectious diseases will be introduced in this course, topics such as "Viruses," "Bacteria," "Immune System," "DNA analysis" will be added to the existing topics

Pre-requisite: None

### HSCI7003 DIGITAL BIOMEDICINE

This course introduces the knowledge in digital medicine, technologies, and the associated big data and analysis to students with non-biology background, focusing on the public health issues with the global insights. Digital medicine is the convergence of digital technologies (including genomic technologies) with medicine, living, and society to enhance the efficiency of medicine delivery and make medicines more personalized and precise. This course covers high-throughput (HT) genotyping, HT phenotyping, artificial intelligence, big data analysis, public database, proteomics and other omics. The goal of this course is to develop students' understanding of digital medicine and required analytical skills for the exciting possibilities towards creating a new paradigm of precision medicine.

### HSCI7004 HEALTHCARE ANALYTICS

Healthcare analytics is one of the fastest growing industries in our economy. Healthcare analytics allows for the examination of patterns in various healthcare data in order to determine how clinical care can be improved. This course introduces the essential elements of healthcare analytics to students with non-healthcare background, and provides them with an overview of population health informatics, clinical informatics, imaging informatics, mobile healthcare and their contributions to precision medicine. The goal of this course is to develop students' understanding of healthcare analytics and analytical skills to comprehend healthcare data. Pre-requisite: None

### HSCI7005 TOXICOLOGY AND ENVIRONMENTAL HEALTH

The course covers basic concepts, knowledge and methods in toxicology, including the disposition of toxic substances by the body, how toxic substances react with biomolecules and lead to target organ toxicity / non-organ directed toxicity, knowledge about toxic substances, as well as applications of toxicology in environmental health and other application areas. Pre-requisite: None

### HSCI7006 EPIDEMIOLOGY

The course covers basic principles in epidemiology and risk management, including the tools of epidemiology, methods involved in measuring disease frequency, causes, morbidity, and mortality of diseases. Additionally, the course is designed to help students to apply the epidemiological knowledge to the real case studies and to find solution for the disease control and public policy. Finally, the course will prepare students to critically evaluate published epidemiological studies and communicate the scientific findings with science community, government policymakers, and general population in community.

Pre-requisite: CMED7018 Bio-statistics

### HSCI7007 ADVANCED NUTRITION AND FOOD SAFETY

The course provides students with the advanced knowledge on human nutrition and food safety with the huge rise in diet-related health problem and in food safety emergencies. It focuses on nutrition and human health, and food safety problem (e.g. microbes, pesticides, food additives, allergens, industrial chemicals, and hazardous substances during cooking), as well as food risk assessment and management. It also introduces students to the serious effects of diet-related diseases/disorders and provides them with the knowledge of food risk assessment and management. This course is of great interest to students because its contents are relevant to our daily life.

Pre-requisite: None

### HSCI7008 HEALTH SYSTEMS AND POLICY

This course aims to introduce how global health systems function, how health policy is shaped and implemented, and the role of health system research for evidence-based policy-making and implementation. There are two key aspects to this course: (1) knowledge and understanding; and (2) skills and abilities. To help students build their knowledge background in global health systems and policy, major theories and frameworks for health systems and policies and how they are applied in different national contexts are introduced. A systematic approach in learning the interrelationship of context, content, process and actions during health policy development are covered. An integration of such knowledge into the analysis of health systems and policy implications, and the formulation of skillset required to participate in health systems research and development work are also emphasized.

Pre-requisite: None

### HSCI7009 CASE ANALYSIS OF GLOBAL HEALTH CRISIS: MANAGING EPIDEMICS

Public health emergencies take a terrible toll, both on human life and global economy. This course introduces strategies for managing epidemics, using COVID-19, SARS, AIDS (HIV), pandemic influenza, Ebola virus disease, yellow fever, Zika, cholera, and plague as examples. It covers the pathophysiology of different diseases, the principles of testing, tracing and isolation (TTI), the expert guidance from World Health Organization (WHO) for effective epidemic responses, and lessons learned from success and failure in managing epidemics. Pre-requisite: None

### HSCI7898 PROJECT REPORT

An individual project provides the opportunity to plan and execute a significant project of research, investigation or development, and to integrate learning and put the techniques learnt throughout the master programme into practice under an academic supervision. Students carry out high-level coordinated academic and practical work with an aim to solve a real global problem in public health, including collecting and processing real data, designing and implementing

analytical methods and tools, and applying, evaluating and critically assessing data analysis, visualization and prediction techniques. Pre-requisite: None

### BACHELOR'S DEGREE PROGRAMME

### HSCI1000 GENERAL CHEMISTRY

This course introduces the fundamental principles and concepts of chemistry to lay a foundation for future learning for students majoring in health sciences. The major areas covered in this course include atomic and molecular structure, chemical reactions and stoichiometry, energy and thermochemistry, chemical bonding, gases, chemical kinetics, chemical equilibrium, and introductory organic chemistry.

Pre-requisite: HSCI1001 General Chemistry Lab (or concurrent enrolment) [except the students of BSc in Bioinformatics]

#### HSCI1001 GENERAL CHEMISTRY LAB

This laboratory course supplements the lecture course General Chemistry and provides students with hands on learning experience on qualitative and quantitative experimental techniques for investigating the properties and reactions of chemical substances.

Pre-requisite: HSCI1000 General Chemistry (or concurrent enrolment)

#### INTRODUCTION TO BIOLOGICAL SCIENCES HSCI1002

Biology is the study of life. With the objective of introducing students to the fields of biological and biomedical sciences, this course covers the following fundamental aspects or principles of biological sciences: basic unis of life, genetic basis of life, evolution and biodiversity, development and function, and ecology and environment. Although all three domains or five kingdoms of life will be covered, the course will focus more on animals and humans. Pre-requisite: None

#### HSCI1003 GENERAL AND CLINICAL BIOCHEMISTRY

This course introduces the molecular basis of biological processes through the logic of chemistry. Topics covered include the structure and function of biomolecules, biochemistry techniques, basic metabolic pathways, and a brief introduction to the biochemical bases of relevant disease states.

Pre-requisite: None

#### HSCI1004 **BIOCHEMISTRY LAB**

This course aims to provide a hands-on opportunity for students to learn the basic experimental methods and instruments used in a biochemistry laboratory, and develop analytical and problem solving skills that will be required for the pursuit of their career in the health science area. Major topics covered include protein expression, concentration determination and gel electrophoresis, western blotting, chromatography, and enzyme kinetics. Students will also practice literature search and data presentation through the semester.

Pre-requisite: HSCI1003 General and Clinical Biochemistry (or concurrent enrolment)

#### HSCI1005 **ORGANIC CHEMISTRY**

This course aims to provide students with an understanding of the basic principles of organic chemistry. Topics covered include nomenclature, structure, properties, stereochemistry, synthesis, and reactions of the major classes of organic compounds including hydrocarbons, alkyl halides, alcohols, ethers, aldehydes, ketones, carboxylic acids and their derivatives. aromatic compounds, amines, carbohydrates, amino acids, and nucleic acids. Further topics cover spectroscopic analysis of organic compounds.

Pre-requisite: HSCI1000 General Chemistry

### HSCI1006 ORGANIC CHEMISTRY LAB

This laboratory course supplements the lecture course Organic Chemistry and provides students learning experience in hands on experimental techniques. The course covers basic experimental skills in organic chemistry, including the synthesis of common organic compounds, the selection of synthetic route, and the characterization of organic compounds. Students observe and record experimental phenomena, identify problems, analyse problems, and develop problem-solving skills.

Pre-requisites: HSCI1000 General Chemistry

HSCI1001 General Chemistry Lab HSCI1005 Organic Chemistry (or concurrent enrolment)

### HSCI2000 CELL AND MOLECULAR BIOLOGY

This course aims to provide an introduction to the principles of modern cell and molecular biology, and build a foundation for students to initiate and develop the process of inquiry-based learning and discovery in biology and medical sciences. The course will discuss fundamental molecular biology of the cell, current molecular genetic techniques, cell structure and function, and signal transduction pathways.

Pre-requisite: HSCI1002 Introduction to Biological Sciences

### HSCI2001 CELL AND MOLECULAR BIOLOGY LAB

This laboratory course applies concepts learned in Cell and Molecular Biology lecture to a molecular biology research project, with an aim to introduce students to in vitro techniques utilized in a modern biological research lab. While it is not possible to cover all the methods and technologies in a single semester, the fundamental skills taught in this course will provide a basis for understanding many more complex approaches. Topics covered include RNA isolation, agarose gel electrophoresis, PCR, restriction enzyme digestion, DNA cloning, bacterial transformation, plasmid DNA isolation, mammalian cell culture, DNA transfection, fluorescence microscopy, and sub-cellular fractionation.

Pre-requisites: HSCI1002 Introduction to Biological Sciences

HSCI2000 Cell and Molecular Biology (or concurrent enrolment)

### HSCI2002 GENERAL AND CLINICAL MICROBIOLOGY

This course provides students with a broad-based foundation in the basic concepts of general and clinical microbiology. Topics covered include an overview of microbiology with basic information on bacteria, fungi, protozoa and viruses, a discussion of microbial physiology and genetics, and an introduction to microbial pathogenesis and the host response, providing a conceptual basis for understanding pathogenic microorganisms and the mechanisms by which they cause diseases in the human body. Successful completion of this course will prepare students for more advanced courses in related fields.

Pre-requisites: HSCI1002 Introduction to Biological Sciences

HSCI1003 General and Clinical Biochemistry

### HSCI2003 MICROBIOLOGY LAB

This course provides an opportunity for students to gain hands-on experience on basic microbiology methods and techniques. Topics covered include basic microscopy, aseptic technique, media preparation, bacterial growth and culture, staining methods, biochemical tests of microbes, effects of physical and chemical agents on bacteria, and eukaryotic organisms and viruses.

Pre-requisite: HSCI2002 General and Clinical Microbiology (or concurrent enrolment)

### HSCI2004 GENETICS AND EPIGENETICS

This course introduces the basic principles of classical and molecular genetics and epigenetics, focusing on how biological information is stored, expressed, changed, and transmitted. Topics covered include inheritance, gene structure, expression and regulation, molecular genetic techniques, population and evolutionary genetics, followed by a discussion of the role of epigenetics in biological phenomena. Pre-requisite: None

### HSCI2005 BIOLOGY OF DEVELOPMENT AND AGING

This lecture discusses animal development with focus on initiation and construction of an organism and the underlying molecular and genetic basis. Topics covered include an overview of developmental biology, the molecular mechanisms of development, cell commitment and early embryonic development, and the vertebrate development process. A final section will be devoted to a discussion of the aging process, including the evolutionary, biochemical, genetic and cellular mechanisms of aging, as well as age-related diseases.

Pre-requisites: HSCI1002 Introduction to Biological Sciences

HSCI2000 Cell and Molecular Biology

### HSCI2006 PHYSIOLOGY AND PATHOPHYSIOLOGY

This course provides an introduction to the structure and function of the major physiological organ systems of the human body, how various body processes are integrated and regulated, and how perturbations in physiological regulatory mechanisms and anatomy result in pathophysiology. Common diseases and disorders of each system are covered, and emphasis is given on cardiovascular, pulmonary, hepatic, renal and reproductive systems.

Pre-requisites: HSCI1003 General and Clinical Biochemistry

HSCI2000 Cell and Molecular Biology

### HSCI2007 PHYSIOLOGY LAB

This course aims to provide an opportunity for students to learn the basic experimental skills of physiology and to develop analytical and problem solving skills for studying human physiology and the whole biomedical sciences. Major experiments to be covered include experiments on endocrine system, cardiovascular system, respiratory system, digestive system and urinary-reproductive system. In some experiments, lab animals will be used.

Pre-requisite: HSCI2006 Physiology and Pathophysiology (or concurrent enrolment)

### HSCI2008 HUMAN ANATOMY

This course introduces human anatomy and histology, the concept of primary tissues, the basic embryology of the nervous, cardio-vascular, gastrointestinal and musculoskeletal systems. Clinical relevance of the anatomy is also emphasized.

Pre-requisite: HSCI1002 Introduction to Biological Sciences

### HSCI2009 PHARMACOLOGY

This course provides the introductory overview of the pivotal role played by pharmacology in drug development and the multidisciplinary nature of drug discovery. Major areas covered include molecular mechanisms as well as systematic effects of drugs. Appropriate methods and analysis for investigating and evaluation of the pharmacological effects in drug development are discussed with examples of commonly used medical drugs and new medicines development. Pre-requisite: HSCI1002 Introduction to Biological Sciences

### HSCI2010 PHARMACOLOGY LAB

This course provides laboratory practice experience to students, and allow them to involve in the basic drug-discovery pipeline in person. It focuses on the evaluation of mechanisms of drug action, drug-receptor interaction, receptor target distribution, and systematic metabolism, and toxicity. Students learn the practical skills of how to evaluate pharmacological effects of medicine, and get up-to-date information on drugs used in the clinics.

Pre-requisite: HSCI2009 Pharmacology (or concurrent enrolment)

### HSCI2011 ANALYTICAL CHEMISTRY

This course introduces the basic theory, principle and knowledge of chemical analysis and instrumental analysis, which include titrimetric analysis, gravimetric analysis, electrochemical analysis, spectroscopic analysis and chromatographic analysis. Sampling, error and statistical analysis applied to analytical chemistry are also included. Pre-requisite: HSCI1000 General Chemistry

### HSCI2012 ANALYTICAL CHEMISTRY LAB

This course introduces the experimental methods, instruments and data analysis used in analytical chemistry to the students, and assists the students in developing analytical and problem solving skills that are required for the pursuit of their career in the area of pharmaceutical science. Major topics covered include titrimetric analysis, gravimetric analysis, electrochemical analysis, spectroscopic analysis and chromatographic analysis. Students are required to perform literature search and data presentation during the semester.

Pre-requisites: HSCI1001 General Chemistry Lab

HSCI2011 Analytical Chemistry (or concurrent enrolment)

### HSCI2013 MEDICINAL CHEMISTRY

This course covers the chemical principles of drug design and drug action and provides an introduction to research in areas of bioorganic chemistry, bioinorganic chemistry, medicinal chemistry, pharmaceutical chemistry, and biotechnology.

Pre-requisite: HSCI1005 Organic Chemistry

### HSCI3000 NEUROSCIENCE AND NEURODEGENERATIVE DISEASES

This course aims to provide a systematic introduction to the mammalian nervous system. Topics covered include basic neuroanatomy, the electrophysiological properties of neural cells, sensory and motor systems, the structural and functional organization of the human brain, and an introduction to neural degenerative diseases.

Pre-requisite: HSCI2006 Physiology and Pathophysiology

### HSCI3001 ENDORCRINOLOGY AND METABOLIC DISEASES

The course introduces the roles of hormones, the pathophysiologic process by which hormonal secretion is abnormal, and characteristics and treatments of various endocrine disorders to students. A number of metabolic diseases that pertain to defects in hormone production or signaling will be covered in the course. Main topics in the course include principles and practice of endocrinology, adrenal disorders, metabolic diseases, thyroid hormones and disorders, calcium homeostasis and metabolic bone disease, pituitary hormones and pituitary gland disorders, sex hormone disorders, and endocrine emergencies.

Pre-requisite: HSCI2006 Physiology and Pathophysiology

### HSCI3002 IMMUNOLOGY AND INFECTIOUS DISEASES

This course provides a basic knowledge of the immune response and its involvement in health and disease, as well as an introduction to infectious disease, including the pathophysiology, clinical presentation and therapeutic management of common infectious diseases. Knowledge from this course will enable students to gain a broad foundation base and prepare them for advanced courses in the health care or medical research field.

Pre-requisite: HSCI2002 General and Clinical Microbiology

### HSCI3003 BIOSTATISTICS AND EXPERIMENTAL DESIGN

The course provides students with an understanding of basic concepts of data analysis and statistical inference in the medical and health sciences, with an emphasis on the application of statistical methods to the design and interpretation of biological experiments and comparative data. Specific topics include tools for describing central tendency and variability in data, methods for performing inference on population means and proportions via sample data, statistical hypothesis testing and its application to group comparisons, issues of power and sample size in study designs, and random sample and other study types.

HSCI3004 GENOMICS AND BIOINFORMATICS

This course introduces fundamental concepts and tools in genomics and bioinformatics to provide students with a foundation for doing innovative research. The course emphasizes on various types of functional genomic data available and current computational methods for interpreting and integrating the data to make inferences about cellular function. Topics covered

include an introduction to genomics and bioinformatics, genomic sequencing, assembly and annotation, transcriptomics, proteomics, and application of genomic approaches. Pre-requisite: HSCI2000 Cell and Molecular Biology

### HSCI3005 GENETICS, GENOMICS AND BIOINFORMATICS LAB

This laboratory course aims to provide students a hands-on experience through a series of laboratory experiments, designed to examine various genetics phenomenon in order to better understand fundamental genetics principles. In addition, students will carry out experiments and data analysis related to the fields of epigenetics, genomics and bioinformatics, such as DNA and protein sequence analysis, data mining from different types of research databases, standard Bioinformatics analysis of next generation sequencing data, etc. This course will equip students with the basic knowledge to solve biological questions using a genetics, genomics and bioinformatics approach.

Pre-requisites: HSCI2004 Genetics and Epigenetics

HSCI3004 Genomics and Bioinformatics (or concurrent enrolment)

### HSCI3006 ADVANCED BIOINFORMATICS

This course provides both theory and practice of commonly used methods in the analysis of bioinformatics data. These methods include analysis of RNA, DNA, and protein sequence data, structure and function analysis, statistical methods, and techniques used in detection of disease associated genes and mutation loci. Analysis demos, practical work, and individual projects will be conducted in web and UNIX/LINUX environments.

Pre-requisite: HSCI2000 Cell and Molecular Biology

### HSCI3007 BIOMEDICAL MATERIALS

This course focuses on the science of medical implants, scaffolds and devices that are playing a significant role in the globally aging population. It comprises key concepts in the design and applications of natural and synthetic biomaterials in various forms for bone, dental, skin, vascular, liver, lung and neural tissue regeneration and relevant applications. This course integrates the fundamental pharmaceutical and biomedical sciences with the cutting-edge medical applications in the real world and prepares the students for broad career opportunities across academic, medical and industrial fields.

Pre-requisites: HSCI1000 General Chemistry

HSCI1002 Introduction to Biological Sciences

### HSCI3008 BIOPHARMACEUTICS AND PHARMACOKINETICS

This course introduces the basic principles of pharmacokinetics involved in understanding the onset, duration and termination of drug action. The essential factors governing drug disposition (absorption, distribution, metabolism and excretion) are elaborated. The mathematical basis on the model fitting process of the concentration-time data and the calculation of main pharmacokinetic parameters is introduced with hands-on practice. Drug-drug interactions-caused safety concerns are addressed in the context of the increasing trend in the prevalence of polypharmacy. Moreover, the metabolic function of gut microbiota and the role in drug disposition are updated. Finally, the relationship between pharmacokinetics and pharmacokinetics is explored to help understand clinical variability to drug response. Pre-requisites: HSCI1003 General and Clinical Biochemistry

HSCI2006 Physiology and Pathophysiology HSCI2011 Analytical Chemistry

### HSCI3009 CHINESE MEDICINE

This course focuses on the introduction of the basic theory of Chinese Medicine, and its application in clinic. It is divided into two parts, and in the first part, the essential theories of Chinese Medicine, including philosophical basis, fundamental concepts in Chinese Medicine and diagnostic methods are discussed. In the second part, the clinical applications of Chinese Medicine and scientific basis underlying the efficacy of Chinese Medicine are covered. Chinese Medicine has a systemic and complete theory and long-standing history. It is an exceptional

branch of traditional medicine seen throughout the world, and is a treasure of Chinese traditional culture. With its unique and comprehensive theoretical system and remarkable therapeutic effects on different types of diseases and conditions, Chinese Medicine represents a major modality of medical care and prevention of disease by using alone or combined with biomedicine. Pre-requisite: None

### HSCI3010 PHARMACEUTICS

This course introduces the preparation theory, formulation design, production technology, quality evaluation and other contents of pharmaceutical products for clinical applications. It assists the students in understanding the various dosage forms and drug delivery systems, and how medicinal and pharmaceutical substances are incorporated into them. Moreover, the applications of pharmaceutical technology on research and development of the Chinese medicine and healthcare product are introduced.

Pre-requisites: APAC3005 Physical Chemistry HSCI2009 Pharmacology

### HSCI3011 PHARMACEUTICS LAB

This course provides laboratory practice for the students in pharmaceutical development that helps students understand the knowledge of dosage form design and development, quality evaluation which have learned in Pharmaceutics.

Pre-requisite: HSCI3010 Pharmaceutics (or concurrent enrolment)

### HSCI3012 PHARMACEUTICAL ANALYSIS

The course provides a comprehensive introduction to analytical chemistry relevant for chemical quality control of pharmaceutical raw materials and final drug products. It explains the process of experimental results elaboration for determining the appropriateness of the analytical method used in quality control, demonstrates how to use the pharmacopoeia for the analysis of pharmaceutical active ingredients and impurities (identification, quantitative analysis), and familiarizes students with performing various analytical methods in pharmaceutical analysis and quality control.

Pre-requisites: HSCI1005 Organic Chemistry

HSCI2011 Analytical Chemistry

### HSCI3013 PHARMACEUTICAL ANALYSIS LAB

This course focuses on the basic aspects of pharmaceutical dosage forms and pharmaceutical analytical skills. Each laboratory experiment is designed to provide students with hands-on experience in executing elementary analytical skills and quality control tests for various dosage forms, which helps students understand how to perform experiment design and possible troubleshooting. Students can be familiar with the analytical technicalities and experimental design used for the qualitative and quantitative analysis and quality control of various active ingredients and pharmaceutical products.

Pre-requisites: HSCI2011 Analytical Chemistry

HSCI3012 Pharmaceutical Analysis (or concurrent enrolment)

### HSCI3014 PHARMACY ADMINISTRATION

This course introduces the pharmacy management which is an interdisciplinary field of pharmacy and social sciences. The principles and methods of social science are applied on the activities and management of modern pharmacy. In this course, students can understand the basic law of pharmaceutical activities, be familiar with the pharmaceutical management system and organization, master the basic content and method, master Chinese and international main laws and regulations, have the ability with drug development, manufacture, distribution, use and other aspects of management and supervision. The students apply the theory and knowledge of pharmacy management to guide the practice work. Pre-requisite: None

### HSCI3015 PHYTOCHEMISTRY

This course provides how natural products are normally classified according to their biosynthetic origins and chemical properties. A systematic study of natural products of medicinal and pharmaceutical importance to their identification, isolation, separation techniques are discussed. This course consists of lectures and lab experiments.

Pre-requisite: HSCI1005 Organic Chemistry

### HSCI3016 EVOLUTIONARY BIOLOGY

This course introduces the concepts in evolutionary biology, which serve as the foundation to understand biology and medicine, and to test hypotheses in scientific research. All life on Earth shares a last universal common ancestor that lived approximately 3.5 to 3.8 billion years ago, and has been shaped by repeated formations of new species, changes within species and loss of species throughout the evolutionary history of life on Earth. The course provides the opportunity for students to learn the history of life, evolutionary processes, the concepts of microevolution and macroevolution and speciation.

Pre-requisite: HSCI2000 Cell and Molecular Biology

### HSCI3017 MEDICAL GENETICS

This course introduces the concept of medical genetics which uses genetics principles for medical care of diagnosis, management, and counselling people with genetic disorders through using genomics, bioinformatics, gene therapy, personalized and predictive medicine. It covers topics in the principle of genetics, the use of genomics data and the controversial concerns of applying medical genetics in real life.

Pre-requisites: HSCI2000 Cell and Molecular Biology

HSCI2004 Genetics and Epigenetics

### HSCI4000 GRADUATION PROJECT I

The graduation project is an essential part of the degree. In this course, students work independently on a research project under the supervision of an academic faculty member, culminating in a written research proposal and an oral presentation at the end of the first semester. The project supervisor guides the student through the process and provides support and advice on all aspects of the project work.

Pre-requisite: None

### HSCI4001 CANCER BIOLOGY AND THERAPY

Cancer has a profound impact on our society and has been the driving force behind major research advances in medical sciences. This course provides a comprehensive overview of the biology, pathology and treatment of cancer. Specific topics covered include an overview of the field, molecular and genetic basis of cancer, cancer pathology, carcinogens, and current cancer therapies.

Pre-requisites: HSCI2000 Cell and Molecular Biology HSCI2004 Genetics and Epigenetics

### HSCI4002 STEM CELL BIOLOGY AND REGENERATIVE MEDICINE

This course covers a broad range of topics relevant to stem cell biology. This fast-moving field brings together many aspects of basic and applied biology and medicine, including development, regeneration/repair, and cancer. The course covers the following concepts and themes: pluripotency and reprogramming, pluripotent cell types, organ systems, stem cells and cancer, therapeutics and ethics. The lecture/discussion format gives students both a broad background and the opportunity to apply critical thinking skills to recent data in the field. Pre-requisite: None

### HSCI4003 PHARMACOLOGY AND CHEMICAL BIOLOGY

This course introduces principles of chemical biology and pharmacology with an emphasis on drug action in cell and organism levels. The course begins with an introduction of chemical biology; utilizing small molecules to understand biological functions and pathways, as a basic

knowledge to study pharmacology. The course then introduces the pharmacology of major categories of medications. This course also lays the foundation for future learning for students pursuing a career in drug discovery & development, clinical practice, medical research, or pharmaceutical industry.

Pre-requisite: HSCI1003 General and Clinical Biochemistry

## HSCI4004 DRUG DISCOVERY AND DEVELOPMENT

This course aims to provide students with an overview of the drug discovery and development process from the identification of novel drug targets to the introduction of new drugs into clinical practice. Topics covered include approaches to new drug discovery, drug design and synthesis, pharmacodynamics, pharmacokinetics, drug interaction, drug transportation, prodrug design and application, the drug development process, and drug design case studies. Pre-requisites: HSCI1003 General and Clinical Biochemistry

Juisites. Inou 1003 General and Clinical Biochemistry

HSCI4003 Pharmacology and Chemical Biology (or concurrent enrolment)

## HSCI4005 GRADUATION PROJECT II

The graduation project is an essential part of the degree. In this course, students work independently on a research project under the supervision of an academic faculty member, culminating in a final project report and an oral presentation at the end of the second semester. The project supervisor guides the student through the process and provides support and advice on all aspects of the project work.

Pre-requisite: HSCI4000 Graduation Project I

## HSCI4006 PUBLIC HEALTH

This course intends to survey the broad field of public health and serves as an introduction to the major issues of health and health care in general as well as in local community. The course defines and describes public health issues, and identifies potential problems and their solutions. Pre-requisite: None

## HSCI4007 TRANSLATIONAL MEDICINE

The aim of translational medicine is to translate knowledge, mechanisms and techniques discovered by basic scientific research into new approaches for diagnosis and treatment of diseases. This course focuses on the principles and practices of translational medicine as they apply to the development of a new drug (small molecules and/or biologics), device, or diagnostic. Topics covered include a historical perspective of translational medicine, emerging concepts in biomarker discovery, innovative drug development, cell therapies, translational bioinformatics, IRB & ethical considerations in human subject research, and human clinical trials. Pre-requisite: HSCI2000 Cell and Molecular Biology

## HSCI4008 INTRODUCTION TO PHARMACY AND PHARMACEUTICAL ALANYSIS

This course introduces pharmacy practice and pharmaceutical analysis to the students. Topics covered include the pharmacy profession, the medication experience, medication dosage forms, pharmaceutical analysis techniques, pharmacopoeial methods of analysis, and quality control of pharmaceuticals. Knowledge from this course helps prepare students for careers in pharmacy and pharmaceutical industry.

Pre-requisite: None

## HSCI4009 TOXICOLOGY

Toxicology examines the mechanisms of action of toxins and their potential to cause adverse or damaging effects upon the body. Assessment of these effects and characterization of their mechanistic basis is a critical area within drug discovery and development as well as clinical practice. This course provides an introduction to the basic principles of toxicology. Topics covered include mechanisms of toxicity, toxicokinetics, factors affecting toxicity, toxicological testing, diagnosis and treatment, and substance abuse. Pre-requisite: None

### HSCI4010 PHARMACEUTICAL ECONOMICS AND POLICY

This course aims to study pharmaceutical industry based on industry economics and health policy theory. The pharmaceutical industry and policy are presented and analyzed by combining industry evolution and global view in this course. Key management topics of pharmas, including strategic management (business model), R&D (pharmaceutical innovation), and marketing, etc., re introduced. Pharmacoeconomic evaluation of drugs are also studied in this course. Related academic work in the leading journals are studied and discussed in this course to improve students' understanding the frontier researches in pharmaceutical economics and policy. Pre-requisite: None

### HSCI4011 PHARMACOINFORMATICS

This course introduces computationally algorithmic methods in collection, transformation, storage, organization, distribution, retrieval, visualization, and analysis of pharmaceutical and healthcare information. It provides a unique opportunity for students to learn essential computational chemistry, bioinformatics, artificial intelligence, physiologically-based pharmacokinetic modelling and simulation, computer science and their applications in pharmacy and medicine.

Pre-requisites: HSCI1000 General Chemistry

HSCI1002 Introduction to Biological Sciences

### HSCI4012 BIOINFORMATCS IN ACTION

This course introduces the applications in bioinformatics and computational biology, covering the analyses of genomics, transcriptome, epigenome and multi-omics. It provides exposure and training in data analysis of bioinformatics and computational biology.

Pre-requisites: CISC1004 Introduction to Computer Science

HSCI3003 Biostatistics and Experimental Design

# PROGRAMMES OF STUDY Faculty of Law

# **Doctoral Degree Programmes**

### Specializations:

- Jurisprudence and Legal History
- Constitutional Law, Basic Law and Administrative Law
- Civil, Procedural and Commercial Law
- Criminal and Procedural Law
- International Law
- Comparative Law
- European Union Law
- International Business Law and Dispute Resolution
- Law on Technology and Medicine

	Credits
Compulsory Courses	
LAWS8001 Legal Research and Writing	3
LAWS8002 Research Ethics (Note1)	
Subtotal:	3
Required Elective Courses (Note2)	
LAWS8003 Comparative Legal System	3
LAWS8004 Comparative Judicial System	3 3
Subtotal:	3
LAWS8999 Doctoral Thesis	18
Total Credits:	24

Note:

1: This course will be conducted online.

2: Students are required to enroll in any one of the required elective courses.

# FACULTY OF LAW **Master's Degree Programmes**

# Master of Law (Chinese Language)

# Major: Constitutional Law, Basic Law and Administrative Law

		Credits
Compulsory	Courses	
LAWS7101	Constitutional Law	3
LAWS7102	Macao Basic Law	3
LAWS7103	Administrative Law and Administrative Litigation Law	3
LAWS7104	Jurisprudence and Legal Philosophy	3
LAWS7198	Project Report	6
•	ective Courses	10
4 required el	ective courses from the Required Elective Course List	12
Total Credits:		30

# Major: Criminal Law and Criminal Procedural Law

		Credits
Compulsory	Courses	
LAW\$7105	Criminal Law	3
LAWS7106	Crimial Procedural Law	3
LAWS7107	Criminology and Criminal Justice	3
LAWS7108	Foreign Criminal Law	3
LAWS7198	Project Report	6
•	ective Courses ective courses from the Required Elective Course List	12
Total Credits:		30

# Major: Civil Law and Intellectual Property Law

		Credits
Compulsory	Courses	
LAW\$7109	Property Law	3
LAWS7110	Contract Law	3
LAWS7111	Copyright and Industrial Property Law	3
LAWS7112	Biotechnology Law and Policy	3
LAWS7198	Project Report	6
•	ective Courses ective courses from the Required Elective Course List	12
Total Credits:		30

# Major: International Business Law

		Credits
Compulsory	Courses	
LAWS7113	Trade and Investment Law of China and Portuguese - speaking	
	Countries	3
LAWS7114	International Private Law	3
LAWS7115	Commercial Organizational Law	3
LAWS7116	International Sale of Goods Law	3
LAWS7198	Project Report	6
	ective Courses ective courses from the Required Elective Course List	12
Total Credits:		30

Required Ele	ctive Course List	Credits
LAWS7117	Classics in Law	3
LAWS7118	Economic and Trade Law of Europe	3
LAWS7119	World Trade Organization Law	3
LAWS7120	Maritime Law	3
LAWS7121	Seminar of the Special Administrative Region and Public	
	International Law	3
LAWS7122	International Arbitration	3
LAWS7123	Civil Procedure Law	3
LAWS7124	Tort Law	3
LAWS7125	Internet and Data Law	3
LAWS7126	Seminar of Civil Adjudication	3
LAWS7127	Environmental Law	3
LAWS7128	International Investment Law	3
LAWS7129	Legal Issues on "Belt and Road"	3
LAWS7130	Seminar of Hong Kong Basic Law and Hong Kong Law	3
LAWS7131	Legal System of the East Asia	3
LAWS7132	Case Studies for German Classic Private Law	3
Any one of the	e courses at the Master level offered by Faculty of Law	3

# FACULTY OF LAW Master's Degree Programmes

# Master of Law (Portuguese Language)

# Major: Juridical Sciences

-		Credits
Compulsory	Courses	
LAWS7221	Civil Law I	3
LAWS7222	Civil Procedural Law I	3
LAWS7223	Commercial Law I	3
LAWS7224	Criminal Law and Criminal Procedural Law I	3
LAWS7298	Project Report	6
•	ctive Courses (Students are required to take any four cou ired elective courses)	rses from the
LAWS7225	Civil I aw II	3
LAWS7226	Civil Procedural Law II	3
LAWS7227	Commercial Law II	3
LAWS7228	Criminal Law and Criminal Procedural Law II	3
LAWS7229	Chinese Private Law	3
LAWS7230	Private International Law	3
LAWS7231	History of Legal Cultures	3
LAWS7232	Health Law	3
Total Credits		30

# Major: Juridical Political Sciences

major. Jul	lacar i onticar sciences	Credits
Compulsory	Courses	orcano
LAWS7233		3
LAWS7234	Administrative Law I	3
LAWS7235	Public International Law I	3
LAWS7224	Criminal Law and Criminal Procedural Law I	3
LAWS7298	Project Report	6
	ective Courses (Students are required to take any four cou uired elective courses)	rses from the
0 1	Constitutional Law II	3
LAWS7237	Administrative Law II	3
LAWS7238	Public International Law II	3
LAWS7228	Criminal Law and Criminal Procedural Law II	3
LAWS7239	Chinese Constitutional Law	3
LAWS7240	Economic Law	3
LAWS7231	History of Legal Cultures	3
LAWS7241	International Criminal Law	3

### **Total Credits:**

30

# FACULTY OF LAW **Master's Degree Programmes**

# Master of Law in European Union Law, International Law and **Comparative Law (English Language)**

# Major: European Union Law

		Credits
Compulsory	Courses	
LAWS7301	Treaty Reforms in the EU	3
LAWS7302	Contemporary Issues in International Law	3
LAWS7303	Comparative Legal Systems	3
LLGC7000	Research Methodology and Legal Writing	3
LAWS7305	Institutional Law of the European Union	3
LAWS7306	Economic Law of the European Union	3
LAWS7398	Project Report	6
Required Ele	ective Courses	
2 required elective courses from the Required Elective Course List		6
Total Credits	S:	30

## Major: International Law

		Credits
Compulsory	Courses	
LAWS7301	Treaty Reforms in the EU	3
LAWS7302	Contemporary Issues in International Law	3
LAWS7303	Comparative Legal Systems	3
LLGC7000	Research Methodology and Legal Writing	3
LAWS7307	International Economic Law	3
LAWS7308	Law of International Organizations	3
LAWS7398	Project Report	6
Required Ele	ective Courses	
2 required el	ective courses from the Required Elective Course List	6
Total Credits	6:	30

....

### **Total Credits:**

# Major: Comparative Law

		Credits
Compulsory	Courses	
LAW\$7301	Treaty Reforms in the EU	3
LAWS7302	Contemporary Issues in International Law	3
LAWS7303	Comparative Legal Systems	3
LLGC7000	Research Methodology and Legal Writing	3
LAWS7309	Common Law	3
LAWS7310	Comparative Contract Law	3
LAWS7398	Project Report	6
Required Ele	ective Courses	
2 required el	ective courses from the Required Elective Course List	6
Total Credits	8:	30

	ctive Course List	Credits	
LAWS7322	External Law and Policy of the European Union	3	
LAWS7311	EU Competition Law	3	
LAWS7312	EU Environmental Law	3	
LAWS7313	EU Natural Resources and Energy Law	3	
LAWS7314	Foreign Investment Law	3	
LAWS7315	International Criminal and Humanitarian Law	3	
LAWS7316	Human Rights and Refugee Law	3	
LAWS7317	Legal Culture and Legal Pluralism	3	
LAWS7318	Maritime and Shipping Law	3	
LAWS7319	E-commerce and Information Technology Law	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	
LAWS7406	Introduction to Macau Law	3	
LAWS7407	Macau and Comparative Gaming Law	3	
LAWS7408	Advanced Issues of International Trade Law	3	
LAWS7409	Asian Business Law	3	
LAWS7410	Company Law	3	
LAWS7411	Law and Society	3	
LAWS7404	Intellectual Property Law in the Creative Economy	3	
LAWS7412	Money Laundering and Anti-Corruption Law	3	
LAWS7413	Private International Law	3	
LAWS7414	Consumer Protection Law	3	
LAWS7415	Commercial Contracts	3	
LAWS7320	Mooting	3	
LAWS7321	0	3 3 3 3 3 3 3 3	
	e courses at the Master Level offered by Faculty of Law	3	

# FACULTY OF LAW Master's Degree Programmes

# Master of Law in International Business Law (English Language)

		Credits
Compulsory	Courses	
LAWS7401	Transnational Law	3
LAWS7402	WTO and Regional Trade Law	3
LAWS7403	Dispute Resolution	3
LAWS7404	Intellectual Property Law in the Creative Economy	3
LLGC7000	Research Methodology and Legal Writing	3
LAWS7498	Project Report	6
	ective Courses ective courses from the Required Elective Course List	9
Total Credits	S:	30

Required Elective Course List		Credits
LAWS7311	EU Competition Law	3
LAWS7312	EU Environmental Law	3
LAWS7313	EU Natural Resources and Energy Law	3
LAWS7301	Treaty Reforms in the EU	3
LAWS7314	Foreign Investment Law	3
LAWS7315	International Criminal and Humanitarian Law	3
LAWS7316	Human Rights and Refugee Law	3
LAWS7308	Law of International Organizations	3
LAWS7317	Legal Culture and Legal Pluralism	3
LAWS7309	Common Law	3
LAWS7318	Maritime and Shipping Law	3
LAWS7319	E-commerce and Information Technology Law	3
LAWS7406	Introduction to Macau Law	3
LAWS7407	Macau and Comparative Gaming Law	3
LAWS7408	Advanced Issues of International Trade Law	3
LAWS7409	Asian Business Law	3
LAWS7410	Company Law	3
LAWS7411	Law and Society	3
LAWS7412	Money Laundering and Anti-Corruption Law	3
LAWS7413	Private International Law	3
LAWS7414	Consumer Protection Law	3
LAWS7415	Commercial Contracts	3
LAWS7320	Mooting	3
LAWS7321	Seminar Series	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
Any one of the	e courses at the Master Level offered by Faculty of Law	3

# FACULTY OF LAW **Master's Degree Programmes**

# Master of Law in Macau Law and Practice

# • Medium of instruction: Chinese and Portuguese Languages

Year I		Credits
First Semest	er	
LAWS7603	Legal Translation	3
LAWS7561	Portuguese Conversation for Legal Practice	3
LAWS7562	Advanced study of Public Law (in Portuguese)	3
Second Sem	ester	
LAWS7563	Advanced Study of Private Law (in Portuguese)	3
LAWS7564	Advanced Study of Public Administration and Civil Services	3
LAWS7510	Drafting of Bilingual Laws and Legal Translation	3
Subtotal:		18

Year II		Credits
First Semeste	er	
LAWS7604	Non-Litigation Dispute Resolution (in Portuguese)	3
LAWS7565	Bilingual Legal Writing (in Chinese and Portuguese)	3
LAWS7566	Bilingual Practical Affair of Lawyer (in Chinese and Portuguese)	3
Second Semester LAWS7593 Master Thesis		3
Subtotal:		12
Total Credits:		30

# FACULTY OF LAW Postgraduate Diploma in Law Programme

# Introduction to Macau Law

# • Medium of instruction: Chinese Language

		Credits
Preparation		
LAWS6001	Portuguese Language	2
LAWS6002		2
LAWS6003	History of Macau	2
First Quarter	r	
LAWS6004	Legal History of Macau	2
LAWS6005	General Theory of Civil Law	4
LAWS6006	Constitutional Law	3
LAWS6007	Criminal Law	3
LAWS6008	Public International Law	2
LAWS6009	Administrative Law I	3
LAWS6010	Public Administration	2
LAWS6011	Legal Language I	2
Second Qua	rter	
LAWS6013	Public Economic Law	2
LAWS6014	Criminal Procedural Law	4
LAWS6015	Obligation Law	4
LAWS6016	Property Law	3
LAWS6017	Civil Procedural Law I	4
LAWS6018	Administrative Law II	3
LAWS6012	Legal Language II	2
Third Quarte	r	
LAWS6019	Family and Succession Law	4
LAWS6020	Commercial Law	4
LAWS6021	Private International Law	4
LAWS6022	Notary and Registry Law	2
LAWS6023	Civil Procedural Law II	4
LAWS6024	The Judicial and Legal Profession	2
LAWS6025	Legal Language III	2
Total Credits	:	71

# FACULTY OF LAW **Bachelor's Degree Programmes**

# **Bachelor of Law**

### Medium of instruction: Chinese Language [Daytime] •

Year I		Credits
LAWS1000	Introduction to Law	3
LAWS1001	Introduction to Law (Legal Practice)	1
LAWS1002	Legal History	3
LAWS1003	Constitutional Law	3
LAWS1004	Constitutional Law (Legal Practice)	1
LAWS1005	Macao Basic Law	3
LAWS1006	Macao Basic Law (Legal Practice)	1
LAWS1007	Public International Law	3
LAWS1008	Public International Law (Legal Practice)	1
PORT1002	Oral Comprehension and Production Skills I	6
PORT1003	Written Comprehension and Production Skills I	6
PORT1004	Oral Comprehension and Production Skills II	6
PORT1005	Written Comprehension and Production Skills II	6
CPED1000	Residential College Experiential learning#	1

### Subtotal:

Y	ear	Ш

Year II		Credits
LAWS2000	General Theory of Civil Law I	3
LAWS2001	General Theory of Civil Law I (Legal Practice)	2
LAWS2002	General Theory of Civil Law II	3
LAWS2003	General Theory of Civil Law II (Legal Practice)	2
LAWS3000	Obligation Law I	3
LAWS3001	Obligation Law I (Legal Practice)	2
LAWS2004	Administrative Law I	3
LAWS2005	Administrative Law I (Legal Practice)	1
LAWS2006	Administrative Law II	3
LAWS2007	Administrative Law II (Legal Practice)	1
LAWS4000	Family Law	3
LAWS4001	Family Law (Legal Practice)	1
LAWS4002	Patrimonial Family Law and Succession Law	3
LAWS4003	Patrimonial Family Law and Succession Law (Legal Practice)	1
PORT2006	Oral Comprehension and Production Skills III	6
PORT2007	Written Comprehension and Production Skills III	6
PORT2013	Written Comprehension and Production Skills IV	6
LAWS2012	Economics	3
Subtotal:		52

Year III		Credits
LAWS3002	Obligation Law II	3
LAWS3003	Obligation Law II (Legal Practice)	2
LAWS3004	Labour Law	3
LAWS3005	Labour Law (Legal Practice)	1
LAWS3014	Property Law	3

44

## Subtotal:

46

31

173

Year IV		Credits
LAWS4006	Private International Law	3
LAWS4007	Private International Law (Legal Practice)	1
LAWS4004	Commercial Law III	3
LAWS4005	Commercial Law III (Legal Practice)	1
LAWS4008	Criminal Procedural Law	3
LAWS4009	Criminal Procedural Law (Legal Practice)	1
LAWS4011	Civil Procedural Law II	3
LAWS4012	Civil Procedural Law II (Legal Practice)	2
LAWS4013	Civil Procedural Law III	3
LAWS4014	Civil Procedural Law III (Legal Practice)	1
LAWS4034	Legal Consequences of Crime	3
LAWS4035	Legal Consequences of Crime (Legal Practice)	1
LAWS4010	Political Science	3
LAWS4016	Research and Internship	3

### Subtotal: Total Credits:

List of Elective Courses		Credits
LAWS1016	Public Economics	3
LAWS1017	Tax Law	3
LAWS1018	Comparative Legal Systems	3
LAWS1019	Environmental Law	3
LAWS1020	Registry and Notary Law	3
LAWS1021	Forensic Medicine	3
LAWS1030	Legal Philosophy	3
LAWS1023	Juridicial Practice	3
LAWS1024	General Theory of Chinese Law	3
LAWS1025	General Theory of Portuguese Law	3
LAWS1026	Portuguese Legal Language	3
LAWS1027	Introduction to Alternative Dispute Resolution	3
LAWS1028	Legal History of Macao	3

# In the case of course waiver on the course "CPED1000-Residential College Experiential Learning", students will be required to take the course "LAWS1015-Enhancement Learning Activities" in order to fulfil the credit requirement.

# FACULTY OF LAW **Bachelor's Degree Programmes**

# **Bachelor of Law**

### Medium of instruction: Chinese Language [Evening] •

Year I		Credits
LAWS1000	Introduction to Law	3
LAWS1001	Introduction to Law (Legal Practice)	1
LAWS1002	Legal History	3
LAWS1003	Constitutional Law	3
LAWS1004	Constitutional Law (Legal Practice)	1
LAWS1005	Macao Basic Law	3
LAWS1006	Macao Basic Law (Legal Practice)	1
PORT1002	Oral Comprehension and Production Skills I	6
PORT1003	Written Comprehension and Production Skills I	6
PORT1004	Oral Comprehension and Production Skills II	6
PORT1005	Written Comprehension and Production Skills II	6
CPED1000	Residential College Experiential learning#	1
Subtotal:		40

Year II		Credits
LAWS2000	General Theory of Civil Law I	3
LAWS2001	General Theory of Civil Law I (Legal Practice)	2
LAWS2002	General Theory of Civil Law II	3
LAWS2003	General Theory of Civil Law II (Legal Practice)	2
LAWS1007	Public International Law	3
LAWS1008	Public International Law (Legal Practice)	1
LAWS3004	Labour Law	3
LAWS3005	Labour Law (Legal Practice)	1
LAWS2004	Administrative Law I	3
LAWS2005	Administrative Law I (Legal Practice)	1
LAWS2006	Administrative Law II	3
LAWS2007	Administrative Law II (Legal Practice)	1
PORT2007	Written Comprehension and Production Skills III	6
PORT2013	Written Comprehension and Production Skills IV	6
LAWS2012	Economics	3
Subtotal:		41

Year III		Credits
LAWS3000	Obligation Law I	3
LAWS3001	Obligation Law I (Legal Practice)	2
LAWS3002	Obligation Law II	3
LAWS3003	Obligation Law II (Legal Practice)	2
LAWS3014	Property Law	3
LAWS3015	Property Law (Legal Practice)	1
LAWS3010	Criminal Law I	3
LAWS3011	Criminal Law I (Legal Practice)	2

LAWS3012	Criminal Law II	3
LAWS3013	Criminal Law II (Legal Practice)	2
LAWS3016	Administrative Law III	3
LAWS3017	Administrative Law III (Legal Practice)	1
PORT2006	Oral Comprehension and Production Skills III	6
Elective cour	se	3
Subtotal:		37

Year IV		Credits
LAWS4000	Family Law	3
LAWS4001	Family Law (Legal Practice)	1
LAWS4002	Patrimonial Family Law and Succession Law	3
LAWS4003	Patrimonial Family Law and Succession Law (Legal Practice)	1
LAWS3006	Commercial Law I	3
LAWS3007	Commercial Law I (Legal Practice)	1
LAWS3008	Commercial Law II	3
LAWS3009	Commercial Law II (Legal Practice)	1
LAWS4008	Criminal Procedural Law	3
LAWS4009	Criminal Procedural Law (Legal Practice)	1
LAWS3018	Civil Procedural Law I	3
LAWS3019	Civil Procedural Law I (Legal Practice)	2
LAWS4011	Civil Procedural Law II	3
LAWS4012	Civil Procedural Law II (Legal Practice)	2
Elective cours	Se l	3

33

Subtotal:

Year V		Credits
LAWS4006	Private International Law	3
LAWS4007	Private International Law (Legal Practice)	1
LAWS4013	Civil Procedural Law III	3
LAWS4014	Civil Procedural Law III (Legal Practice)	1
LAWS4004	Commercial Law III	3
LAWS4005	Commercial Law III (Legal Practice)	1
LAWS4034	Legal Consequences of Crime	3
LAWS4035	Legal Consequences of Crime (Legal Practice)	1
LAWS4010	Political Science	3
LAWS4016	Research and Internship	3
Subtotal:		22
Total Credits:		173

### **Total Credits:**

List of Elective Courses		Credits
LAWS1016	Public Economics	3
LAWS1017	Tax Law	3
LAWS1018	Comparative Legal Systems	3
LAWS1019	Environmental Law	3
LAWS1020	Registry and Notary Law	3
LAWS1021	Forensic Medicine	3

LAWS1030 LAWS1023 LAWS1024 LAWS1025 LAWS1026 LAWS1027 LAWS1028	Legal Philosophy Juridicial Practice General Theory of Chinese Law General Theory of Portuguese Law Portuguese Legal Language Introduction to Alternative Dispute Resolution Legal History of Macao	3 3 3 3 3 3 3 3 3
LAWS1028	Legal History of Macao	3

# In the case of course waiver on the course "CPED1000-Residential College Experiential Learning", students will be required to take the course "LAWS1015-Enhancement Learning Activities" in order to fulfil the credit requirement.

# FACULTY OF LAW **Bachelor's Degree Programmes**

# **Bachelor of Law**

### Medium of instruction: Chinese and Portuguese Languages ٠

Year I		Credits
LAWS1000	Introduction to Law*	3
LAWS1001	Introduction to Law (Legal Practice)*	1
LAWS1002	Legal History*	3
LAWS1003	Constitutional Law*	3
LAWS1004	Constitutional Law (Legal Practice)*	1
LAWS1005	Macao Basic Law*	3
LAWS1006	Macao Basic Law (Legal Practice)*	1
LAWS1007	Public International Law*	3
LAWS1008	Public International Law (Legal Practice)*	1
PORT1002	Oral Comprehension and Production Skills I	6
PORT1003	Written Comprehension and Production Skills I	6
PORT1004	Oral Comprehension and Production Skills II	6
PORT1005	Written Comprehension and Production Skills II	6
CPED1000	Residential College Experiential learning#	1
Subtotal:		44

Year II		Credits
PORT2006	Oral Comprehension and Production Skills III	6
PORT2007	Written Comprehension and Production Skills III	6
PORT2012	Oral Comprehension and Production Skills IV	6
PORT2013	Written Comprehension and Production Skills IV	6
PORT3019	Advanced Comprehension and Production Skills I	3
PORT3020	Advanced Comprehension and Production Skills II	3
Subtotal:		30

Year III		Credits
LAWS2000	General Theory of Civil Law I*	3
LAWS2001	General Theory of Civil Law I (Legal Practice)*	2
LAWS2002	General Theory of Civil Law II*	3
LAWS2003	General Theory of Civil Law II (Legal Practice)*	2
LAWS3000	Obligation Law I*	3
LAWS3001	Obligation Law I (Legal Practice)*	2
LAWS2004	Administrative Law I*	3
LAWS2005	Administrative Law I (Legal Practice)*	1
LAWS2006	Administrative Law II*	3
LAWS2007	Administrative Law II (Legal Practice)*	1
LAWS4000	Family Law*	3
LAWS4001	Family Law (Legal Practice)*	1
LAWS4002	Patrimonial Family Law and Succession Law*	3

LAWS4003	Patrimonial Family Law and Succession Law (Legal Practice)*	1
LAWS2012	Economics	3
Elective cours	e	3
Subtotal:		37

Year IV		Credits
LAWS3002	Obligation Law II*	3
LAWS3003	Obligation Law II (Legal Practice)*	2
LAWS3004	Labour Law*	3
LAWS3005	Labour Law (Legal Practice)*	1
LAWS3014	Property Law*	3
LAWS3015	Property Law (Legal Practice)*	1
LAWS3006	Commercial Law I*	3
LAWS3007	Commercial Law I (Legal Practice)*	1
LAWS3008	Commercial Law II*	3
LAWS3009	Commercial Law II (Legal Practice)*	1
LAWS3010	Criminal Law I*	3
LAWS3011	Criminal Law I (Legal Practice)*	2
LAWS3012	Criminal Law II*	3
LAWS3013	Criminal Law II (Legal Practice)*	2
LAWS3016	Administrative Law III*	3
LAWS3017	Administrative Law III (Legal Practice)*	1
LAWS3018	Civil Procedural Law I*	3
LAWS3019	Civil Procedural Law I (Legal Practice)*	2
Elective cours	se	3
Subtotal:		43

Year V		Credits
LAWS4006	Private International Law*	3
LAWS4007	Private International Law (Legal Practice)*	1
LAWS4004	Commercial Law III*	3
LAWS4005	Commercial Law III (Legal Practice)*	1
LAWS4008	Criminal Procedural Law*	3
LAWS4009	Criminal Procedural Law (Legal Practice)*	1
LAWS4011	Civil Procedural Law II*	3
LAWS4012	Civil Procedural Law II (Legal Practice)*	2
LAWS4013	Civil Procedural Law III*	3
LAWS4014	Civil Procedural Law III (Legal Practice)*	1
LAWS4034	Legal Consequences of Crime	3
LAWS4035	Legal Consequences of Crime (Legal Practice)	1
LAWS4010	Political Science	3
LAWS4016	Research and Internship	3
Subtotal:		31
Total Credits:		185

## **Total Credits:**

List of Elective Courses		Credits
LAWS1016	Public Economics	3
LAWS1017	Tax Law	3
LAWS1018	Comparative Legal Systems	3
LAWS1019	Environmental Law	3
LAWS1020	Registry and Notary Law	3
LAWS1021	Forensic Medicine	3
LAWS1030	Legal Philosophy	3
LAWS1023	Juridicial Practice	3
LAWS1024	General Theory of Chinese Law	3
LAWS1025	General Theory of Portuguese Law	3
LAWS1026	Portuguese Legal Language	3
LAWS1027	Introduction to Alternative Dispute Resolution	3
LAWS1028	Legal History of Macao	3

\* Compulsory legal courses

# In the case of course waiver on the course "CPED1000-Residential College Experiential Learning", students will be required to take the course "LAWS1015-Enhancement Learning Activities" in order to fulfil the credit requirement.

Students majoring in Bachelor of Law (Conducted in Chinese and Portuguese) have to complete at least 40% of the compulsory courses either in Portuguese or Chinese.

# FACULTY OF LAW Bachelor's Degree Programmes

# **Bachelor of Law**

# • Medium of instruction: Portuguese Language

Year I		Credits
LAWS1000	Introduction to Law	3
LAWS1001	Introduction to Law (Legal Practice)	1
LAWS1003	Constitutional Law	3
LAWS1004	Constitutional Law (Legal Practice)	1
LAWS1005	Macao Basic Law	3
LAWS1006	Macao Basic Law (Legal Practice)	1
LAWS1002	Legal History	3
LAWS1009	Economics I	3
LAWS1010	Economics II	3
LAWS1011	Chinese Language I	1
or		
LAWS1013	Translation Technics Chinese/Portuguese I	1
LAWS1012	Chinese Language II	1
or		
LAWS1014	Translation Technics Chinese/Portuguese II	1
CPED1000	Residential College Experiential Learning#	1
	Residential College Experiential Learning#	I
Subtotal:		24

Year II		Credits
LAWS2000	General Theory of Civil Law I	3
LAWS2001	General Theory of Civil Law I (Legal Practice)	2
LAWS2002	General Theory of Civil Law II	3
LAWS2003	General Theory of Civil Law II (Legal Practice)	2
LAWS2004	Administrative Law I	3
LAWS2005	Administrative Law I (Legal Practice)	1
LAWS2006	Administrative Law II	3
LAWS2007	Administrative Law II (Legal Practice)	1
LAWS2013	Public Economics	4
LAWS1007	Public International Law	3
LAWS1008	Public International Law (Legal Practice)	1
LAWS2008 or	Chinese Language III	1
LAWS2010	Legal Translation Chinese/Portuguese I	1
LAWS2009	Chinese Language IV	1
or LAWS2011	Legal Translation Chinese/Portuguese II	1
Subtotal:		28

Year III		Credit
LAWS3000	Obligation Law I	3
LAWS3001	Obligation Law I (Legal Practice)	2
LAWS3002	Obligation Law II	3
LAWS3003	Obligation Law II (Legal Practice)	2
LAWS3010	Criminal Law I	3
LAWS3011	Criminal Law I (Legal Practice)	2
LAWS3012	Criminal Law II	3
LAWS3013	Criminal Law II (Legal Practice)	2
LAWS3004	Labour Law	3
LAWS3005	Labour Law (Legal Practice)	1
LAWS1017	Tax Law	3
LAWS3020 or	Chinese Language V	1
LAWS3022	Legal English I	1
LAWS3021	Chinese Language VI	1
or	onnood Languago Vi	·
LAWS3023	Legal English II	1
Subtotal:		29

Year IV		Credits
LAWS3014	Property Law	3
LAWS3015	Property Law (Legal Practice)	1
LAWS4000	Family Law	3
LAWS4001	Family Law (Legal Practice)	1
LAWS4002	Patrimonial Family Law and Succession Law	3
LAWS4003	Patrimonial Family Law and Succession Law (Legal Practice)	1
LAWS3018	Civil Procedural Law I	3
LAWS3019	Civil Procedural Law I (Legal Practice)	2
LAWS4011	Civil Procedural Law II	3
LAWS4012	Civil Procedural Law II (Legal Practice)	2
LAWS3006	Commercial Law I	3
LAWS3007	Commercial Law I (Legal Practice)	1
LAWS3016	Administrative Law III	3
LAWS3017	Administrative Law III (Legal Practice)	1
LAWS4008	Criminal Procedural Law	3
LAWS4009	Criminal Procedural Law (Legal Practice)	1
Subtotal:		34

Year V		Credits
LAWS3008	Commercial Law II	3
LAWS3009	Commercial Law II (Legal Practice)	1
LAWS4004	Commercial Law III	3
LAWS4005	Commercial Law III (Legal Practice)	1
LAWS4006	Private International Law	3
LAWS4007	Private International Law (Legal Practice)	1
LAWS4013	Civil Procedural Law III	3
LAWS4014	Civil Procedural Law III (Legal Practice)	1

LAWS5000 LAWS5001 LAWS5002 LAWS1021 LAWS5004	General Theory of Chinese Law General Theory of Law Comparative Law Forensic Medicine Research and Communication Skills	4 4 3 1
LAWS5003 Subtotal: Total credits:	Research Paper	1 33 <b>148</b>

# In the case of course waiver on the course "CPED1000-Residential College Experiential Learning", students will be required to take the course "LAWS1015-Enhancement Learning Activities" in order to fulfil the credit requirement.

# **Course Description**

# DOCTOR OF PHILOSOPHY IN LAW

### LAWS8001 LEGAL RESEARCH AND WRITING

This course is designed to teach PhD students advanced legal research and writing skills. It is taught by a group of PhD supervisors mainly from the FLL. Depending on availability, high caliber legal academics from other law schools may also be invited to join the teaching team on a case by case basis. The course covers a wide range of topics of legal research and writing, such as jurisprudence, legal research methodologies, use of library resources, legal reasoning, preparation and writing of law journal articles, preparation and writing of PhD thesis, use of references, formality for legal writing, and critical legal thinking.

### ·

LAWS8002 RESEARCH ETHICS This course will be conducted online starting from Academic Year 2016/2017. For PhD students who were admitted in or before Academic Year 2015/2016 and have not taken or have not passed Research Ethics, students will take the online Research Ethics course offered in or after Academic Year 2016/2017. One credit will be assigned to their online Research Ethics course for the aforementioned students to fulfill the credit requirements for graduation. Pre-requisite: None

### LAWS8003 COMPARATIVE LEGAL SYSTEM

This course purports to offer advanced knowledge of comparative legal studies to PhD students. The FLL is strong in comparative law studies, which is also one of special strengths the FLL will further improve as part of FLL's strategic development plan. The course is taught in the mode of group teaching. Experts of different legal systems will share their knowledge with students in a number of essential areas of legal studies, such as constitutional law, civil law, commercial law, criminal law, procedural law, tort law, administrative law and private international law. The specific legal systems to be presented may vary slightly depending on availability of experts in any given time, and the general legal systems to be covered in many countries.

### LAWS8004 COMPARATIVE JUDICIAL SYSTEM

This seminar is designed to give the students deep understanding of judicial systems in different legal traditions of the world. The course will especially focus on Mainland China, Taiwan, and Japan as representing the civil law tradition and Canada, Australia, and the U.S as representing the common law tradition. The students can learn the similarity and difference between these two legal traditions through examinations of historical background, constitutional system, judicial review, judicial system, legal profession, interpretation and judicial process and civil and criminal procedure.

Pre-requisite: None

### LAWS8999 DOCTORAL THESIS

The PhD candidate must present a doctoral dissertation on a topic related to his or her area of specialization that demonstrates the results of original research and shows evidence of legal scholarship. According to the current regulations, the doctoral dissertation must be approved by the supervisor and PhD advisory committee. PhD dissertation must be submitted to the faculty in conformity with the requirement of thesis format. PhD oral defence examination should strictly follow the guidelines of the Graduate School and Faculty of Law. Pre-requisite: None

# MASTER OF LAW (CHINESE LANGUAGE)

### LAWS7101 CONSTITUTIONAL LAW

Theories and current status of contemporary theories of constitutional law: development of basic principles, content and of the functions of constitutional law, comparative studies on the principles, forms, characteristics, content and functions of political systems of the states; comparative studies on the principles, content, procedures and methods of the systems of election: comparative studies on the content, characteristics and development of the systems of human rights, comparative studies on the organization, formation, functions and powers (legislative power and supervisory power) of the system of legislation and the procedure of legislation; comparative studies on the organization, formation, functions and powers (efficiency and legitimacy), principles of operation of the administrative system and the development of political power; comparative studies on the organization, characteristics, independence and functions of the judicial system: comparative studies on the constitutional safeguards. constitutional construction and examination of violation of the constitution. Pre-requisite: None

### LAWS7102 MACAO BASIC LAW

Survey on theory of "One Country and Two Systems" and the Basic Law. Analysis the new issues arising from the practice. Subjects for discussion include relations between Government and the Special Administration regions, political, social, economic and cultural system and the relevant legal system.

Pre-requisite: None

### LAWS7103 ADMINISTRATIVE LAW AND ADMINISTRATIVE LITIGATION LAW

I. Historical evolution of administrative law. II. Sources of administrative law. III. Principles of administrative law and their new development. IV. Administrative organizations and civil servants law. V. Administrative act, classification of administrative acts, determinative nature of administrative act and its force of enforcement, VI. Administrative procedure, VII. Effectiveness of administrative act and errors in administrative act. VIII. Administrative litigation, jurisdiction of judicial organs, scope of administrative litigation, adjudication procedure, and remedy mechanism to verdict in administrative litigation.

Pre-requisite: None

### LAWS7104 ADMINISTRATIVE LAW AND ADMINISTRATIVE LITIGATION LAW

Many philosophical issues arise in connection with how we solve legal questions. This course introduces students to these issues and encourages critical thinking about them. Several guestions are explored, such as: what is law, the types of law, obligation or right, the relationship between law, morality, authority, and politics, and the rule of law. Pre-requisite: None

### LAWS7105 CRIMINAL LAW

I. Historical evolution of criminal law theories in the Continental Legal Family. II. Development and improvement of basic principles of the criminal law. III. Theories and schools of the constituent elements of crime. IV. Theories and laws on inchoate crime. V. Theories and laws on joint crime. VI. Theories and laws on justifications. VII. Evolution, functions and purposes of punishment. VIII. Classification and laws of punishment. IX. Theories and laws on the application of punishment. X. Theories and laws on the execution of punishment. XI. Theories and laws on the system of the specific part of the criminal law.

Pre-requisite: None

### LAWS7106 CRIMINAL PROCEDURAL LAW

Provisions in the Code of Criminal Procedure of Macao and theories of criminal procedure, models of criminal procedure, international human rights standards in criminal procedure, the power of investigation and its limits, systems of public prosecution and various models fair trial principles, the rights and responsibilities of the accused person, defense and legal aid, the system of evidence and exclusion of evidence, the rights and status of the victim, international mutual assistance in criminal matters, relevant trends and development in China and other jurisdictions, and other important topics.

Pre-requisite: None

### LAWS7107 CRIMINOLOGY AND CRIMINAL JUSTICE

This course is to familiarize students with the major issues in the field of criminology, i.e., various approaches to criminology, concepts of crime and law, theories of crime causation, types of crime, and the criminal justice system. In other words, we are studying the what, why and how of crime and justice. The course is characterized by class discussions, presentations, mini-lectures, guest lectures, field trips, videos, and a major research project. Pre-requisite: None

### LAWS7108 FOREIGN CRIMINAL LAW

I. General theory and principles of comparative criminal law. II. Characteristics of criminal law in Common Law System and Civil Law System. III. Comparative study on crimes and punishments in the main countries around the world. IV. The judicial organizations and its positions, powers and obligations in the main countries in the world. V. The status and rights of the accused, victims, witnesses, lawyers, etc. in the main countries in the world. Pre-requisite: None

### LAWS7109 PROPERTY LAW

This course discusses the distinctive property law in different legal systems. It contains introduction of property rights in general, internal principles, external principles, characteristics of real property rights, possession systems, special real property rights (ius in rem) (definitive order of dominance), real property rights of use and so on. Pre-requisite: None

### LAWS7110 CONTRACT LAW

This course discusses contract law in different countries and areas. It discusses mainly: general principles, formation, vitiating factors, exemption clauses, performance, discharge, breach, remedies and so on.

Pre-requisite: None

### LAWS7111 COPYRIGHT AND INDUSTRIAL PROPERTY LAW

With the rapid development of technologies and international trade, intellectual property (IP) has become one of the most important area in the study of the laws. This course aims to study the IP systems of the four regions and see how each system is similar or different from each other, whether the current IP system serves the need of the area, and how to propose an IP system that will increase the competitiveness for Greater China area. Pre-requisite: None

### LAWS7112 BIOTECHNOLOGY LAW AND POLICY

This course will examine a variety of legal, policy, and ethical issues related to biotechnology and society. Course topics will include examinations of genetically modified organisms, patenting genes, genetic testing, stem cell, and medical tourism from a variety of jurisdictions. The class also discusses the role of social media in informing the public of biotech knowledge and shaping the relevant public debate. This class is informative for anyone who are interested in exploring legal and ethical issues associated with the cutting-edge biotechnology. The issues are examined in a non-technical manner so the class is accessible for students of any backgrounds. Pre-requisite: None

# LAWS7113 TRADE AND INVESTMENT LAW OF CHINA AND PORTUGUESE – SPEAKING COUNTRIES

Combining closely the three engines of cooperation between China and the Portuguesespeaking countries (trade, investment and finance), the course uses a country-specific approach and addresses the real problems encountered by the Chinese enterprises in Brazil, Portugal and other lusophone countries. It scrutinizes the legal issues and risk aversion in the fields of energy and resources, infrastructure construction, agriculture, manufacturing, scientific and technological innovation, and information technologies. Topics cover commercial law, merger and acquisition, fiscal law, environmental law, labor law, energy law, administrative concession, technology transfer and dispute resolutions.

Pre-requisite: None

#### LAWS7114 INTERNATIONAL PRIVATE LAW

I. General theories of private international law (definitions, scope, origins, nature and history of private international law: subject of private international law, status of aliens in civil and commercial law, etc.). II. Conflict law (conflict of laws, rules of conflict law and application, applicable law and its determination: status and capacity of persons, act in law, agent, limitation, relationship of real right, relationship of intellectual property right, relationship of obligation, family relationship, relationship of succession and application of relevant laws). III. International unified substantial private law (general introduction to international unified substantial private law, international cargo transportation, international insurance, international payment, international guarantee, international protection of intellectual property rights. IV. Resolution of international civil and commercial disputes (definitions, international civil and commercial disputes, ADR, international commercial arbitration and international civil litigation).

Pre-requisite: None

#### LAWS7115 COMMERCIAL ORGANIZATIONAL LAW

This course focuses on different legal regulation concerning the private companies and public companies in distinctive countries and areas and discusses the major trends in commercial organizational law. All major issues of this course will be covered, including fundamental concepts (types of companies; limited liability; capital maintenance), the creation of companies, the capital, the shares, the organs of companies, the rights and obligations of shareholders, and the dissolution and liquidation of companies.

Pre-requisite: None

#### LAWS7116 INTERNATIONAL SALE OF GOODS LAW

This course is designed to help students understand the definition and sources of international sale of goods law, and the legal issues arising for the buyers and the sellers, in an international sale of goods transaction. It will examine the laws governing the international sale of goods, such as the Unidroit Principles, the United Nations Convention on the International Sale of Goods (CISG), and the International Chamber of Commerce (ICC). Pre-requisite: None

#### LAWS7198 PROJECT REPORT

The Project Report serves the purpose of demonstrating the ability to identify, discuss and summarize any legal topic, ideally of present practical relevance, as well as to evidence basic writing skills and in-depth knowledge in the selected legal field. To successfully complete the Project Report, a Faculty member competent in the selected legal field tutors the progress and finally approves the report.

Pre-requisite: None

#### LAWS7117 CLASSICS IN LAW

This course introduces students to great books, articles or judicial decisions in legal history. The students are required to read closely and critically one or two texts for each class. These classics will include, but not limited to: Hobbes, Rousseau, Hume, Bentham, Mill, Kelsen, Hart, Rawls, Dworkin. The course may also discuss Kant, Schmitt, Hayek, and other authors; or great judicial decisions in history.

Pre-requisite: None

#### LAWS7118 ECONOMIC AND TRADE LAW OF EUROPE

General Theories of Regional Economic Integration, Custom Unions of the EU, Free Movement of Persons within the EU, Freedom of Establishment and Services in the EU, European Monetary Union, Common Competition Rules of the EU, the EU Competences in Its External Economic and Trade Cooperation, Anti-Dumping and countervailing Rules of the EU, Safeguard Measures of the EU, Economic and Trade Relations between the EU and China as well as Macao. Pre-requisite: None

#### LAWS7119 WORLD TRADE ORGANIZATION LAW

The course is designed to offer an opportunity to students to pursue further studies in the area of WTO law. Contemporary legal issues of WTO law, in particular those which may have significant implications to Macao, Mainland China, Hong Kong and Taiwan are analyzed and discussed. Students' participation in class discussions is expected and encouraged. Pre-requisite: None

#### LAWS7120 MARITIME LAW

The course is designed to offer an opportunity to students to pursue further studies in the area of maritime law and shipping law. Contemporary legal issues and recent developments in the area of maritime law are discussed. Case study and class discussion are emphasized during the seminars. Special reference are to be made to Macao, Mainland China, Hong Kong, Taiwan and other neighboring economies, when appropriate. Pre-requisite: None

# LAWS7121 SEMINAR OF THE SPECIAL ADMINISTRATIVE REGION AND PUBLIC INTERNAIONAL LAW

I. History of international law and theories of international law; historical evolution of international law; compilation of international law; theoretical schools of international law. II. Theories on the law of treaties and international treaties. III. Theories on the subjects in international law; theories and practice of recognition and succession in international law. IV. Issues in international law on Macao. China's Sovereignty and Macao Special Administrative Region. The differences between treaties signed by central government and Macao. The status of Macao SAR in international organizations. V. International human rights law; development of international human rights law; influence of international human rights law on traditional international law. VI. New development in contemporary law of the sea. VII. Territorial air and the law of outer space. VIII. Diplomatic law and consular law. IX. Law on international organizations: the role of the United Nations, issues in amending the Charter of the United Nations, China and the United Nations and other international organizations. X. Resolution of international disputes, analyses of judgment on cases by the United Nations International Court. Pre-requisite: None

#### LAWS7122 INTERNATIONAL ARBITRATION

This course addresses arbitration as an alternative means to resolve international commercial disputes, and introduce some important organizations involved in the international arbitration, as well as their arbitration procedure issues, respectively. Pre-requisite: None

### LAWS7123 CIVIL PROCEDURE LAW

This course discusses the different system of civil procedure law in different countries and areas. It includes the introduction of civil procedure law, general frame of the action in civil jurisdiction, the right to a legal action, legal classification of the actions, concepts and features, interpretation and integration. Application in time and in space, theory and structure of procedural relation, the procedural act, dynamics of the procedural relation, formalities of the Ordinary Declaratory Process and so on.

Pre-requisite: None

#### LAWS7124 TORT LAW

This course will attempt to explain some of the basic rules which under the law of tort. First of all, the students shall have a critical knowledge of the general principles such as the constituting liability and methods of assuming liability after finishing this course. Meanwhile, this course shall introduce some specific areas of tort law, including the product liability, liability for motor vehicle traffic accident, liability for medical malpractice, liability for environmental pollution, liability for ultrahazardous activity, liability for harm caused by domestic animal, liability for harm caused by object, etc.

Pre-requisite: None

#### LAWS7125 INTERNET AND DATA LAW

This course mainly focuses on two overlapping areas from the comparative law perspective: Internet law and Data law. Internet Law is also known as Cyber Law, referring to the area of law that deals with the Internet's relationship to technological and electronic elements. Data Law is also named as Data Protection Law, teaching students the hybrid nature of data protection, data security, data exports, the rights of individuals, sensitive personal data, outsourcing personal data processing, and so on.

Pre-requisite: None

#### LAWS7126 SEMINAR OF CIVIL ADJUDICATION

The mission of this course is to build a bridge from the knowledge and principles in textbooks to the effective practice of law. As a training course, the teachers aim to help postgraduate students enrich their ability of legal analysis. The course shall offer students hands-on experience with analyzing the civil cases. Through the training of doing research in 'hard cases', students could advance their skills in theoretical debate, as well as extracurricular clinic training. Pre-requisite: None

#### LAWS7127 SEMINAR OF CIVIL ADJUDICATION

In light of the growing global concern for a sustainable development, this course covers the central laws and international bodies concerning the protection of the environment. As a cross-sectional problem the protection of the environment poses a multidisciplinary challenge of both local and global relevance. Therefore, this course discusses several urgent environmental problems, such as climate change, exhausting of nature resources, pollution of the air, water and the sea, and identifies the relevant legal responses to them and critically connects them to the global institutional framework set since the adoption of the United Nations Charter. Pre-requisite: None

#### LAWS7128 INTERNATIONAL INVESTMENT LAW

The course is designed to offer an opportunity to students to pursue further studies in the area of investment law, which is one of important subjects in legal studies today. Contemporary legal issues and important cases of foreign investment law are discussed. Some references are to be made, where appropriate, to those issues and new developments which are of special interests to students from the Greater China Area.

Pre-requisite: None

#### LAWS7129 LEGAL ISSUES ON "BELT AND ROAD"

OBOR Initiative involves many legal issues which may not be placed easily under the present category of trade law, investment law, commercial law, or contract law and etc. This course is designed to give students an opportunity to see many of international trade and commercial law problems in the practical context of the OBOR initiative. Cases and most recent materials will be shared and studied during the course. Students are expected to participate in the class discussions in various forms, including project presentation, and case discussions. Pre-requisite: None

#### LAWS7130 SEMIAR OF HONG KONG BASIC LAW AND HONG KONG LAW

The Hong Kong Basic Law gives survey on theory and practice of "One Country and Two

Systems" and the Hong Kong Basic Law, subjects for discussion include relations between the Central Government and the Special Administration regions, political, social, economic and cultural system and the relevant. The Hong Kong Law addresses the legal system in Hong Kong, it includes common law concepts and principles in Hong Kong's law, such as the sources of law in Hong Kong, the rule of law, and the related regulations and systems in specific legal departments.

Pre-requisite: None

#### LAWS7131 LEGAL SYSTEM OF THE EAST ASIA

Studies in legal systems of the East Asia including Chinese Mainland, the districts of Hong Kong, Macao and Taiwan, South Korea and Japan. Pre-requisite: None

#### LAWS7132 CASE STUDIES FOR GERMAN CLASSIC PRIVATE LAW

In this course, the professor will give students various classic cases in civil law. Students can discuss with each other and try to solve problems. However, the professor will give his detailed studies, comments and conclusions. Students will learn how to analyze a case in German way. It will help students lay the foundation for becoming a lawyer or a judge in the future. Pre-requisite: None

## **MASTER OF LAW (PORTUGUESE LANGUAGE)**

#### LAWS7221 CIVIL LAW I

The Civil Law will deal with three main themes: personal rights; contract law; law of tort. In the study of personal rights focus will be brought in the consequences of the informatics developments and genetic manipulation. In the study of contract law will focus mainly in the fulfilment of the creditor's rights. In tort law will deal along with classic themes also with recent developments in the field as product liability and environment damages. Pre-requisite: None

#### LAWS7222 CIVIL PROCEDURAL LAW I

Alternative Dispute Resolution in the Macao Special Administrative Region of the RPC. Mediation. Conciliation. Difference between conciliation and mediation. Arbitration. Domestic Arbitration. International Arbitration. Arbitration as a means to facilitate the fair and speedy resolution of disputes. The confidentiality. The arbitration agreement and its species. The parties in the arbitration proceedings. The arbitrators. The arbitration proceedings. General powers exercisable by arbitral tribunal. The arbitrat tribunal may make orders or give directions dealing with granting interim injunctions or directing provisional measures to be taken? Arbitration proceedings must to produce a settlement in a due period of time. The arbitrators responsibility. Pre-requisite: None

#### LAWS7223 COMMERCIAL LAW I

Company law: Amendments to articles of association. Mergers, division and transformation. Dissolution and liquidation. Shareholders duties and rights. Group of companies. Pre-requisite: None

#### LAWS7224 CRIMINAL LAW AND CRIMINAL PROCEDURAL LAW I

Relevant issues in substantive criminal law, such as: concept of crime and legal interest; causes excluding wrongfulness, causes excluding culpability and other grounds to exclude a penalty; determination of the criminal penalty; some types of crimes in particular (crimes against life, crimes against body integrity, crimes against honor, crimes against privacy; crimes against sexual self-determination, crimes against property). Pre-requisite: None

#### LAWS7225 CIVIL LAW II

Special contracts: sale, donation, lease, lend, mandate, gaming and betting, transaction and others. Developments in property law: land law, security interests in real property. Developments in family law: filiation and assisted procreation, protection of minors, marriage and matrimonial property, civil union, alimony. Developments in inheritance law: testate succession. New civil law issues.

Pre-requisite: None

#### LAWS7226 CIVIL PROCEDURAL LAW II

Interim judicial injunctions in the Civil Procedure if the Macao Special Administrative Region of the RPC. Characteristics. The urgency and provisionality. The dependency to a principal injunction. Species. Typical interim injunctions. Generic interim injunctions. The court and the competence for producing an interim settlement. The value and effects of the interim settlements. The judgment criteria and the possibility, or not, of appeal. The de jure condendo concerns in the Civil Procedure of the Macao Special Administrative Region of the RPC. Pre-requisite: None

#### LAWS7227 COMMERCIAL LAW II

I. Introduction. Standard contract. II. Modern commercial contracts: financing contracts (leasing and factoring); distribution agreements contract (agency contract, commercial concession contract and franchising contract); Banking contracts (documentary credits, independent quarantees on first demand): computer contracts: publicity contracts. Pre-requisite: None

#### LAWS7228 CRIMINAL LAW AND CRIMINAL PROCEDURAL LAW II

Relevant issues in criminal procedure, such as: phases of the criminal procedure; principles ruling the criminal procedure; participants in the criminal procedure, their roles, powers and responsibilities; special criminal procedures; criminal evidence; appeals. Pre-requisite: None

#### LAWS7229 CHINESE PRIVATE LAW

Legislative learning and compilation of the Civil Code of the People's Republic of China. Theoretical issues relating to the general Part of Civil Law. Contractual liability. Indirect liability for tort by ISP. Tort liability of third-party in breach of contract. Compensation of spiritual damages. Theories and legislation on real right. Legal issues on classified norms of state-owned assets. Issues relating to marriage agreement. Legislative issues on the system of husband-wife property. Legal issues of acting mother. Conflict in systems of adoption. Amendments to company law and investment to create business, legal issues relating to the law of group corporations. Civil law issues relating to enterprise merger and split. Property insurance. Insurance abandonment. Comparison of regulations on falsified commercial paper. Amendments to the law of intellectual property in China. Protection of patent for gene. Protection of copyright on the internet and so on.

Pre-requisite: None

#### LAWS7230 PRIVATE INTERNATIONAL LAW

I. Stand, specificity and characterization of International Trade Law. Methodological principles and orientations. II. Conflict of Laws. III. Conflict of jurisdictions. IV. Arbitrage mechanism. V. Celebrations of international contracts and the "battle of forms" problem. VI. Study of some specific issues: a) representation; b) insurance contract; c) maritime transport contract. VII. Set-Off in International Trade. VIII. International Bankruptcy.

Pre-requisite: None

#### LAWS7231 HISTORY OF LEGAL CULTURES

This course assesses the formation and development of law and emphasizes the history of European legal culture, specially the history of Continental Legal Systems Topics include European ancient law (Hebrew law, Greek law, Roman law, etc.), European medieval law

(Canonic law, Germanic law, Feudal law, Mercantile law, the revival of Roman law and the formation of common European law, etc.), Modern European law after the Renaissance and the legal evolution of Western Europe after the French Revolution, namely the sources of contemporary European law. The course also examines the ancient and contemporary legal philosophy of China, legal history of China and touches other legal system. Pre-requisite: None

#### LAWS7232 HEALTH LAW

This course intends to analyze current issues regarding health, science (medicine and genetics) and the human body, not only in light of Macanese law, but also having in consideration the experiences in comparative law. Topics to be discussed include civil and criminal medical liability; patient rights and responsibilities; reproductive techniques; genetics; new technologies in health care delivery and pharmaceutical law. The course offers a multidisciplinary approach intended to provide a deep and legally grounded knowledge on health law as an autonomous scientific domain.

Pre-requisite: None

#### LAWS7233 CONSTITUTIONAL LAW I

I. Fundamental rights conflicts. Conflicts and concurrence between rights as one of the main aspects of the fundamental rights system. Methodological obstacles. Examples. Basic notions. The Conflict of rights and the internal and external theories of fundamental rights limits. Basic postulates of the internal theory. II. Fundamental rights conflicts in the Media. Pre-requisite: None

#### LAWS7234 ADMINISTRATIVE LAW I

Research on the development of the relation between the Public Administration and other powers, in the light of public good and fundamental rights defense. Public Administration and the rule of law. Principles of Administrative Law and their new development. Administrative act, classification of administrative acts, determinative nature of administrative act and its enforcement. Administrative litigation in urban management. Pre-requisite: None

#### LAWS7235 PUBLIC INTERNATIONAL LAW I

Theories on international law; Sources of international law; Relations between international law and domestic law; Subjects of international law; Responsibilities of states. Pre-requisite: None

#### LAWS7236 CONSTITUTIONAL LAW II

Comparative constitutional law. Historical, philosophical and constitutional fundaments of the constitutional justice; juridical and political dimensions of constitutional justice; the actors of the constitutional justice: Courts and Judges; the control of the constitutionality of legal rules. Pre-requisite: None

#### LAWS7237 ADMINISTRATIVE LAW II

Portuguese Urban Law and Macanese Urban Law. Characterization of the main Urban plans, and principle aspects of Macao Urban plan. Study of the main legal instruments. Pre-requisite: None

#### LAWS7238 PUBLIC INTERNATIONAL LAW II

Law of treaties; Law of international organizations; Resolutions of international disputes; New development of international law; International human rights. Pre-requisite: None

#### LAWS7239 CHINESE CONSTITUTIONAL LAW

Present status, major issues and future of the research of the theories of constitutional law in China; development and prospect of constitutional law and the history of constitutional politics

in China; basic theories and principles of Chinese constitutional law; the political system in China – characteristics, content and roles of the people's congresses and improvement, principles and roles of the system of election, relationship between the political parties and the state; the structure of the state, national autonomous government and the system of special administrative regions in China; characteristics and content of the system of basic rights and responsibilities of Chinese citizens and theories of human rights; organization, functions, powers, principles of operation and relationship in state institutions of China, their reform and improvement; theories and practice of the implementation of China's constitutional law, the system of guarantees, construction of constitutional law, amendments and supervision; the Constitution and the Basic Law of the SARs.

Pre-requisite: None

#### LAWS7240 ECONOMIC LAW

Definition; objects and general principles of economic law in Macao and its relations with other disciplines of studies. Legal research on economical administration, organization and market; improvement in foreign related investment law; importation of specialized professionals and investment; comparisons of laws on the gambling industry and management; comparisons of rules on tourism and entertainment; research on legal issues in house construction and mortgage, financial loans, auditing and inspection, industrial and commercial trade, system of taxation, natural resources, requisition of assets and other specific legal topics.

#### LAWS7241 INTERNATIONAL CRIMINIAL LAW

This course provides students with a solid foundation about International Criminal Law and analyzes its historical development and current trends from a critical perspective.

The first part of the course surveys the history and sources of International Criminal Law. It explores the judgment of the International Military Tribunal at Nuremberg and the approach of the tribunal in relation to the crimes under its jurisdiction: war crimes, crimes against peace and crimes against humanity.

The second part of the course consists of an analysis of the work of the modern *ad hoc* international criminal tribunals and of the International Criminal Court.

Pre-requisite: None

#### LAWS7298 PROJECT REPORT

The Project Report serves the purpose of demonstrating the ability to identify, discuss and summarize any legal topic, ideally of present practical relevance, as well as to evidence basic writing skills and in-depth knowledge in the selected legal field. To successfully complete the Project Report, a Faculty member competent in the selected legal field tutors the progress and finally approves the report.

Pre-requisite: None

# MASTER OF LAW IN EUROPEAN UNION LAW, INTERNATIONAL LAW AND COMPARATIVE LAW (English Language)

#### LAWS7301 TREATY REFORMS IN THE EU

The European Union is based on the rule of law. Thus every action taken by the EU is founded on treaties that have been approved voluntarily and democratically by all EU member States. The course guides students towards a critical understanding of the founding treaties (Treaty of Paris, 1951, and Treaties of Rome, 1957), and the reforms in the Merger Treaty (1965), the budget treaties (1970, 1975), the Single European Act (1987), the Treaty of Maastricht (1992), the Treaty of Amsterdam (1997), the Treaty of Nice (2001), as well as the Constitutional Treaty (2004) and the Lisbon Treaty (2007).

#### LAWS7302 CONTEMPORARY ISSUES IN INTERNATIONAL LAW

Contemporary legal issues arising in distinct fields of international law will be critically examined. Relevant norms and principles in a select set of topics will be introduced before contemporary issues are addressed. Possible topics include traditional and modern sources and subjects, treaties, sovereignty, immunities and privileges, statehood and territorial disputes, asylum and extradition, state responsibility, collective security and unilateral use of force, armed conflict and criminal jurisdiction, terrorism and human rights, dispute resolution and role of general principles in lex specialis like WTO law and environmental law. The contemporary issues will be examined in the light of recent judicial and arbitral decisions, regional developments and emerging state practices.

Pre-requisite: None

#### LAWS7303 COMPARATIVE LEGAL SYSTEMS

This course includes aspects of both macro and micro-comparison, and introduction to the method of comparative law, based on its constituent elements and practical examples. It also yields an overview over the major contemporary legal systems, "legal traditions" or "legal families" throughout the world, including, for instance, the Roman-Germanic or Civil Law Systems, Common Law Systems and non-occidental Law Systems, with reference to the Far-East – Chinese and Japanese Law – as well as for the Religious Legal Systems – Islamic and Hindu Law. These will be presented with a special focus on their main features, essential historical elements and study of some of their most significant legal institutions and concepts. Pre-requisite: None

#### LLGC7000 RESEARCH METHODOLOGY AND LEGAL WRITING

This course is designed to assist students with their project report or academic thesis by introducing them to advanced legal research and writing skills. It is taught by law professors competent in the area in accordance with the researched topics. The course covers a wide range of topics of legal research and writing, such as jurisprudence, legal research methodologies, use of library resources, legal reasoning, preparation and writing of law journal articles, preparation and writing of an academic thesis, project report or academic articles, use of references, formality for legal writing, and critical legal thinking.

#### LAWS7305 INSTITUTIONAL LAW OF THE EUROPEAN UNION

The European Union, the European Communities and their legal system. The objectives. The institutions and bodies and their powers. The judicial system. The sources and scope of Community law. The interpretation and application of Community law, including the application of Community law by the Members States. The relationship between Community domestic law of the Members States.

Pre-requisite: None

#### LAWS7306 ECONOMIC LAW OF THE EUROPEAN UNION

The course aims to equip students with the specialist knowledge in the field of EU law related to the economy: fundamental freedoms, customs union, internal market, economic union, monetary integration, competition, trade restrictions, antitrust, state aid, public undertakings and services of general interest. The course also delves on the main vectors of European Union trade law: theoretical foundations, the rationale underpinning free trade; the need for Union regulation; the forms of regulation, focusing in particular on arguments concerning regulatory competition. It subsequently addresses the construction and evolution of EU's internal market, looking in particular at the four freedoms in light of the evolution of the European Court of Justice's case law.

Pre-requisite: None

#### LAWS7307 INTERNATIONAL ECONOMIC LAW

This course aims to critically examine contemporary legal issues in international economic

relations. Specific topics related to the international economic order including the actors, principles, legal sources and economic organizations will be explored. International trade law will be addressed in detail and norms governing international monetary, banking and financial relations will be introduced. GATT and WTO regimes governing trade in goods, services, TRIPS, competition policy and dispute settlement will be studied along with its emerging jurisprudence. International monetary law and role of IMF will be briefly examined to analyze specific challenges. The international financial architecture will be introduced towards the end mainly focusing on relevant institutions like the World Bank, sovereign debts, and international regulations on banking and financial markets.

Pre-requisite: None

#### LAWS7308 LAW OF INTERNATIONAL ORGANIZATIONS

The course aims to offer a deep understanding of the law related to international organisations. Since the substantive law differs from organisation to organization, the course first introduces some core concepts and principles which are common to international organisations, such as theory of international organisations, legal personality and the principle of functionality. The course will subsequently look into the specific legal systems of some representative global organisations, such as the UN and the WTO, and some selected regional organization, like the EU and ASEAN or co-operation alliances like the BRICS, G7/G8 and G20 to examine how the principles and theoretical concepts are applied in practice. Finally, the course will discuss interrelations between inter-governmental organisations and the role of non-governmental organisations.

Pre-requisite: None

#### LAWS7309 COMMON LAW

This course will provide a comprehensive introduction to substantive common law and equity as developed in England and subsequently adopted in other jurisdictions like USA, Australia and Hong Kong. Common law and equitable remedies in specific fields like laws of trusts, contracts and torts and unique procedural elements like the writs and jury systems will be studied. Students will be trained in the judicial process using case studies and techniques of identifying ratio and obiter in binding precedents. The contemporary features of common law will be studied in a comparative perspective with the intent of training students from civil law jurisdictions to be able to interact with major common law systems in the world. Pre-requisite: None

#### LAWS7310 COMPARATIVE CONTRACT LAW

This course will offer a comparative study of contract law of major legal systems and some specific jurisdictions. The issues studied in a comparative perspective includes general principles of contract, formation, vitiating factors, exemption clauses, performance, discharge, breach, remedies and unification measures. Key differences between the common and civil law legal systems in governing contracts will be discussed. Specific jurisdictions will be chosen and the characteristics of the contract law will be examined and compared. It will also study major international efforts in harmonization of contractual principles and how far Asian jurisdictions have been responsive. A specific focus will be made on contract laws of Macao and Hong Kong SARs and relevant cases.

Pre-requisite: None

#### LAWS7398 PROJECT REPORT

The Project Report serves the purpose of demonstrating the ability to identify, discuss and summarize any legal topic, ideally of present practical relevance, as well as to evidence basic writing skills and in-depth knowledge in the selected legal field. To successfully complete the Project Report, a Faculty member competent in the selected legal field tutors the progress and finally approves the report.

Pre-requisite: None

#### LAWS7322 EXTERNAL LAW AND POLICY OF THE EUROPEAN UNION

Introduction to the different policies of the European Union. General concept of common policies. Agricultural, commercial, industrial, social, transport, education and vocational training policy. The fiscal harmonization. Cultural policy. Policy for research and technological development. The economic and social co-operation. The development co-operation. The new areas: energy, civil protection and tourism. Historical development of the EU external policy before the Lisbon Treaty. The EU external policy, legal setting, institutional organisation and actions after the Lisbon Treaty.

Pre-requisite: None

#### LAWS7311 EU COMPETITION LAW

Basic concepts: market competition, economic activity, undertaking. Anti-competitive agreements: Article 101 TFEU, horizontal and vertical agreements, block exemptions. Abuse of dominant position: Article 102 TFEU, exclusionary and exploitative abuses. Merger control: EU Merger Regulation, substantive assessment, efficiency defense, merger remedies. Enforcement system: Regulation 1/2003, judicial control, public and private enforcement. Public undertakings and state aid measures.

Pre-requisite: None

#### LAWS7312 EU ENVIRONMENTAL LAW

This course is about the main issues related to EU Environmental law, covering the following topics: history and evolution of EU Environmental Law; Environmental Law in EU Treaties; EU Environmental law principles; and some of the most important areas of EU Environmental Law, such as environmental impact assessment; assessment of the effects of certain plans and programmes on the environment; integrated pollution prevention and control; EU emissions allowance trading system for greenhouse gas; Community eco-management and audit scheme (EMAS).

Pre-requisite: None

#### LAWS7313 EU NATURAL RESOURCES AND ENERGY LAW

The Treaty on the European Union (TEU) calls on the union to "help develop international measures to preserve and improve the quality of the environment and the sustainable management of global natural resources, in order to ensure sustainable development". This course thus presents the legal rules relating to the management of natural resources and the security of energy supply against the backdrop of a high degree of environmental protection from a European perspective. It not only covers various natural resources, such as land, air, water, oil and gas but also explores new policies to exploit alternative or renewable sources of energy. Pre-requisite: None

#### LAWS7314 FOREIGN INVESTMENT LAW

This course aims at equipping students with the requisite knowledge to deal intricate legal issues facing foreign investments. The concept as manifested in the form of portfolio and direct investment will be introduced along with relevant investment risks. The governing norms and principles in domestic laws (home and host state), bilateral treaties (BITs), multilateral (including WTO TRIMS) and regional instruments will be studied. The course will mainly focus on Investment arbitration including jurisdiction and applicable law issues in investment contracts and BITs, breach of treatment standards, actions constituting taking of foreign property, defenses and compensation. Investor-state investment disputes and institutional arbitration involving landmark cases will be examined specifically.

Pre-requisite: None

#### LAWS7315 INTERNATIONAL CRIMINAL AND HUMANITARIAN LAW

Core substantive and procedural rules of international criminal law and basic concepts, principles and rules of international humanitarian law (IHL) will be introduced. The Rome Statute of the International Criminal Court (ICC), on the definition of substantive crimes, jurisdiction and

the admissibility of cases, and principles of international criminal law will be studied. Students will get an overview of different actors in the ICC and its criminal procedure. Concerning IHL, the course will first discuss the history and aims of IHL, its sources, and the notion of armed conflict. Secondly, it will set out the cardinal principles of IHL, with special emphasis on the principle of distinction. Finally, it will discuss the relation between IHL and international human rights law and international criminal law.

Pre-requisite: None

#### LAWS7316 HUMAN RIGHTS AND REFUGEE LAW

This course aims to address the interaction between national, regional and international human rights protection and the protection of refugees. It will examine the framework on human rights protection, including the historical development of human rights, the sources and the different categories of human rights. Contemporary challenges facing international mechanism for protection of human rights will be examined. Human rights laws and institutions in selected jurisdictions, including Asia will be studied in a comparative perspective in order to examine national implementation of international norms. The jurisprudence in major landmark human rights cases and its implementation will be critically examined. Finally, the course identifies the legal issues and challenges concerning refugees and migration primarily across borders. Pre-requisite: None

#### LAWS7317 LEGAL CULTURE AND LEGAL PLURALISM

This course assesses the formation and development of law based on the history of European and Chinese legal cultures. Specific focus is made on continental legal systems. Topics include European ancient law (Hebrew law, Greek law, Roman law, etc.), European medieval law (Canonic law, Germanic law, Feudal law, Mercantile law, the revival of Roman law and the formation of common European law), modern European law after the Renaissance and the legal evolution of Western Europe after the French Revolution, namely the sources of contemporary European law. The course also examines the ancient and contemporary legal philosophy of China, legal history and culture in China. The course will also draw examples of unique legal cultures and legal pluralism from other jurisdictions like Japan and India.

#### LAWS7318 MARITIME AND SHIPPING LAW

The objective of this course is to foster a critical appraisal of private law issues arising in maritime transportation. Topics covered include carriage of goods by sea, maritime safety and liability and marine insurance. International legal instruments governing relevant issues and specific national legislation and cases will be comparatively examined. The issues covered includes international sales and incoterms, carriage contracts and bill of lading, cargo claims, liability of carriers, security and limitation of liability, charter parties, maritime safety and navigation, salvage, towage and general average, multimodal transportation and marine insurance. The role of admiralty courts and maritime arbitration mechanism and relevant enforcement issues will be briefly introduced.

Pre-requisite: None

#### LAWS7319 E-COMMERCE AND INFORMATION TECHNOLOGY LAW

Critical legal issues relating to information technology and its application in B2B and B2C business transactions will be addressed mainly in a trans-national context and in the light of the challenges arising in the borderless nature of the cyberspace. Issues covered includes jurisdiction and applicable law for online transactions, electronic contracts and agents, click-wrap agreements, intellectual property rights, electronic authentication and transactional security, virtual enterprises and domain names, online privacy and data protection, electronic payment systems and taxation, liability of online intermediaries, online consumer protection, cyber-crime and online dispute resolution. Due to the diversity and relative infancy of legal developments in the field, specific national laws and cases will be studied using comparative methods. Pre-requisite: None

#### LAWS7406 INTRODUCTION TO MACAU LAW

This course covers key topics and features of the legal system of the Macao SAR. The themes may vary but normally should include discussions of the Basic Law and the autonomy of the Macao SAR, the political system, the protection of fundamental rights, and international law issues relevant for Macao. The discussions are contextual and take comparative law into account.

Pre-requisite: None

#### LAWS7407 MACAU AND COMPARATIVE GAMING LAW

This course focuses especially on the commercial operation of casino games of chance (table games and slot machines) as regulated in the Macao SAR, the world's largest gaming jurisdiction. The course has an interdisciplinary nature and covers especially the history of gaming in Macao and various issues of administrative and tax law, contract law and criminal law. The course includes a detailed study of the regulation of gaming concessions and of gaming promoters. It also features a comparative element, by which the Macao system will be contrasted with the regulation of gaming in the two main jurisdictions in gaming other than Macao, which are Nevada and Singapore.

Pre-requisite: None

#### LAWS7408 ADVANCED ISSUES OF INTERNATIONAL TRADE LAW

This course builds on the course on WTO and Regional Trade Law and proposes the discussion of selected, more advanced issues of contemporary relevance in the international trading community. It will thus strongly rely on the discussion of case law, i.e. particularly ongoing disputes of global and regional relevance, and will be based on the assignment of pertinent reading materials. Active class participation in the form of raising questions or partake in group discussions as well as class presentations will be equally given an important role. Pre-requisite: None

#### LAWS7409 ASIAN BUSINESS LAW

This course undertakes a comparative approach to the regulation of business in Asia. It first tries to assess possible particularities in the legal and business culture in Asia and focuses inter alia on the areas of commercial law, corporate law and business transactions, securities, intellectual property, and labor law issues To this end, selected jurisdictions, such as those of the PRC, Japan and Korea but also others will be presented and discussed from a comparative and both public-private law perspective. The analysis includes the evaluation of national legal systems in the context of regional economic integration projects based on various bi-, tri- or plurilateral agreements.

Pre-requisite: None

#### LAWS7410 COMPANY LAW

Based on the regulation of companies in Macao, focusing on private companies and public companies, this course discusses major trends of in company law and corporate governance. All major issues of company law will be covered, including fundamental concepts (types of companies; limited liability; capital maintenance), the creation of companies, the capital, the shares, the organs of companies, the rights and obligations of shareholders, and the dissolution and liquidation of companies.

Pre-requisite: None

#### LAWS7411 LAW AND SOCIETY

Taking a multidisciplinary approach, this course deals with a wide set of contact points between law and society. These include first a retrospective look at the significance of various factors or causal elements fuelling the changes underlying the development of societies, such as the invention of new technologies amidst an evolving relationship between politics and economics. It then asks how these numerous changes will influence the processes underlying legal thinking and reasoning as well as the adoption, application, and enforcement of laws in the future. To this end, the discussion will also present new theoretical approaches in law, such as the "law and economics" movement or a political economic, as well as novel concepts, such as "global governance" or "global administrative law", to try to identify new trends in the field of legal science. Pre-requisite: None

#### LAWS7404 INTELLECTUAL PROPERTY LAW IN THE CREATIVE ECONOMY

This course discusses the principal role and main characteristics of intellectual property rights in the context of the regulation of international trade in an emerging global creative economy. Taking into account the rise of a knowledge-based economy, which was accompanied by a rise in creativity, culture and technology, it covers the history and present status quo of the main intellectual property rights, such as copyright, trademarks, patents, geographical indications, and designs. The key international treaties, such as the Berne and Paris Conventions and notably the TRIPS Agreement adopted under the aegis of the World Trade Organization (WTO) will also be analyzed.

Pre-requisite: None

#### LAWS7412 MONEY LAUNDERING AND ANTI-CORRUPTION LAW

This course discusses international trends and legal initiatives for the prevention and repression of corruption, money laundering and the financing of terrorism through the financial system. The discussion covers the international treaties relevant in the field, detailed substantive criminal law issues and the preventive measures required from financial institutions. Pre-requisite: None

#### LAWS7413 PRIVATE INTERNATIONAL LAW

This course focuses on Private International Law-provisions that are applicable in cross-border cases. These provisions may be set out in international treaty law, regional laws and domestic Private International Law. The first part deals with questions of jurisdiction, recognition and enforcement of civil and commercial matters, the second with the conflict rules that answer the question which will be the applicable law. The students will be accustomed with i.a. international conventions of which Macao is a contracting party, other regulations on Private International Law, and examples of domestic rules on Private International Law. Basic knowledge of private law (especially contracts & torts) and procedural law (jurisdiction, recognition and enforcement) are desirable.

Pre-requisite: None

#### LAWS7414 CONSUMER PROTECTION LAW

This course enquires into the role of consumer protection law in the legal systems of contemporary societies. The inquiry includes a presentation of the laws and organizations at both the national and international level that are entrusted with the protection of the rights of consumers in their commercial transactions. Further issues discussed include the legal concept and definition of the consumer, contractual issues trying to ensure the protection of the weaker party through special contractual clauses, and the relationship and contact points with other legal areas, such as competition law, intellectual property law (e.g. trademarks), and product safety law.

Pre-requisite: None

#### LAWS7415 COMMERCIAL CONTRACTS

This is a specialized contract law course covering various legal mechanisms to distribute goods and services, including the ICC Incoterms, the contract of carriage of goods by sea and the various payment mechanisms in international trade. The regulation of international trade agreements by the UN Convention on the International Sale of Goods will be addressed, along with the contracts used for the marketing of goods. The course will cover also various financial instruments and agreements involving banks, namely the term loan, the negative pledge, syndicated lending.

Pre-requisite: None

#### LAWS7320 MOOTING

The mooting course is aimed at developing drafting and advocacy skills for students. The course will train the students in adversarial process to enable them to examine legal disputes, conduct legal research, and develop drafting, argumentative and rebuttal skills. The course is open to all students but the enrolment is subjected to a selection process. Selected students will be required to prepare and participate in mooting competitions like the Jessup International Law Moot Competition or other competitions. Students will analyze the moot problem, conduct legal research and draft written memorials according to the rules of the competition. The students will be trained for oral rounds and partake in regular practice moots.

#### LAWS7321 SEMINAR SERIES

This course will consist of a minimum number of 10 seminars offered by the Faculty of Law throughout the academic year featuring notably eminent visiting professors, practitioners or distinguished experts from a great variety of legal and professional backgrounds. Moreover, their active participation is encouraged and will be included in the final evaluation. Pre-requisite: None

# MASTER OF LAW IN INTERNATIONAL BUSINESS LAW (English Language)

#### LAWS7401 TRANSNATIONAL LAW

The course offers a close look at the history of the lex mercatoria, its current status as well as the formation of various subcategories, such as a lex petrolea (oil law), a lex maritima (maritime law), lex sportiva (sports law), lex electronica, lex digitalis or a lex informatica (law governing information and communications technologies (ICT). It will also discuss the related problems of economic sanctions and the practice of mixed public-private tribunals. Pre-requisite: None

#### LAWS7402 WTO AND REGIONAL TRADE LAW

This course addresses the regulation of international trade law in the wider context of general public international law. It focuses in particular on the multilateral trade agreements established under the World Trade Organization (WTO) as the successor of the 1947 General Agreement on Tariffs and Trade (GATT). Against the backdrop of the dynamics underlying economic integration at the global level, the course also includes a closer look at the increasing practice of Member states all around the world to negotiate regional trade agreements (RTAs), such as the North American Free Trade Agreement (NAFTA), the European Union (EU), the Asia Pacific Economic Cooperation (APEC), the Association of Southeast Asian Nations (ASEAN) or the Mainland and Macao Closer Economic Partnership Arrangement (CEPA).

#### LAWS7403 DISPUTE RESOLUTION

This course deals with the characteristics of alternative dispute resolution (ADR) on the one hand and with arbitration on the other. The specific pros and cons of each instrument to settle disputes will be discussed. More specifically, different aspects of International Commercial Arbitration (ICA) will be highlighted, such as: The characteristics of ICA in practice, the arbitration agreement and the applicable Law, arbitrators and arbitration proceedings, and finally the effects and limits of arbitral awards. The students will be accustomed i.a. with the Brussels I-Regulation, the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards (1958), the European Convention on Commercial Arbitration (1961) and other sources. Pre-requisite: None

#### LAWS7404 INTELLECTUAL PROPERTY LAW IN THE CREATIVE ECONOMY

This course discusses the principal role and main characteristics of intellectual property rights in the context of the regulation of international trade in an emerging global creative economy. Taking into account the rise of a knowledge-based economy, which was accompanied by a rise in creativity, culture and technology, it covers the history and present status quo of the main intellectual property rights, such as copyright, trademarks, patents, geographical indications, and designs. The key international treaties, such as the Berne and Paris Conventions and notably the TRIPS Agreement adopted under the aegis of the World Trade Organization (WTO) will also be analyzed.

Pre-requisite: None

#### LLGC7000 RESEARCH METHODOLOGY AND LEGAL WRITING

This course is designed to assist students with their project report or academic thesis by introducing them to advanced legal research and writing skills. It is taught by law professors competent in the area in accordance with the researched topics. The course covers a wide range of topics of legal research and writing, such as jurisprudence, legal research methodologies, use of library resources, legal reasoning, preparation and writing of law journal articles, preparation and writing of an academic thesis, project report or academic articles, use of references, formality for legal writing, and critical legal thinking.

Pre-requisite: None

#### LAWS7498 PROJECT REPORT

The Project Report serves the purpose of demonstrating the ability to identify, discuss and summarize any legal topic, ideally of present practical relevance, as well as to evidence basic writing skills and in-depth knowledge in the selected legal field. To successfully complete the Project Report, a Faculty member competent in the selected legal field tutors the progress and finally approves the report.

Pre-requisite: None

#### LAWS7311 EU COMPETITION LAW

Basic concepts: market competition, economic activity, undertaking. Anti-competitive agreements: Article 101 TFEU, horizontal and vertical agreements, block exemptions. Abuse of dominant position: Article 102 TFEU, exclusionary and exploitative abuses. Merger control: EU Merger Regulation, substantive assessment, efficiency defense, merger remedies. Enforcement system: Regulation 1/2003, judicial control, public and private enforcement. Public undertakings and state aid measures.

Pre-requisite: None

#### LAWS7312 EU ENVIRONMENTAL LAW

This course is about the main issues related to EU Environmental law, covering the following topics: history and evolution of EU Environmental Law; Environmental Law in EU Treaties; EU Environmental law principles; and some of the most important areas of EU Environmental Law, such as environmental impact assessment; assessment of the effects of certain plans and programmes on the environment; integrated pollution prevention and control; EU emissions allowance trading system for greenhouse gas; Community eco-management and audit scheme (EMAS).

Pre-requisite: None

#### LAWS7313 EU NATURAL RESOURCES AND ENERGY LAW

The Treaty on the European Union (TEU) calls on the union to "help develop international measures to preserve and improve the quality of the environment and the sustainable management of global natural resources, in order to ensure sustainable development". This course thus presents the legal rules relating to the management of natural resources and the security of energy supply against the backdrop of a high degree of environmental protection from a European perspective. It not only covers various natural resources, such as land, air, water,

oil and gas but also explores new policies to exploit alternative or renewable sources of energy. Pre-requisite: None

#### LAWS7301 TREATY REFORMS IN THE EU

The European Union is based on the rule of law. Thus every action taken by the EU is founded on treaties that have been approved voluntarily and democratically by all EU member States. The course guides students towards a critical understanding of the founding treaties (Treaty of Paris, 1951, and Treaties of Rome, 1957), and the reforms in the Merger Treaty (1965), the budget treaties (1970, 1975), the Single European Act (1987), the Treaty of Maastricht (1992), the Treaty of Amsterdam (1997), the Treaty of Nice (2001), as well as the Constitutional Treaty (2004) and the Lisbon Treaty (2007).

Pre-requisite: None

#### LAWS7314 FOREIGN INVESTMENT LAW

This course aims at equipping students with the requisite knowledge to deal intricate legal issues facing foreign investments. The concept as manifested in the form of portfolio and direct investment will be introduced along with relevant investment risks. The governing norms and principles in domestic laws (home and host state), bilateral treaties (BITs), multilateral (including WTO TRIMS) and regional instruments will be studied. The course will mainly focus on Investment arbitration including jurisdiction and applicable law issues in investment contracts and BITs, breach of treatment standards, actions constituting taking of foreign property, defenses and compensation. Investor-state investment disputes and institutional arbitration involving landmark cases will be examined specifically.

Pre-requisite: None

#### LAWS7315 INTERNATIONAL CRIMINAL AND HUMANITARIAN LAW

Core substantive and procedural rules of international criminal law and basic concepts, principles and rules of international humanitarian law (IHL) will be introduced. The Rome Statute of the International Criminal Court (ICC), on the definition of substantive crimes, jurisdiction and the admissibility of cases, and principles of international criminal law will be studied. Students will get an overview of different actors in the ICC and its criminal procedure. Concerning IHL, the course will first discuss the history and aims of IHL, its sources, and the notion of armed conflict. Secondly, it will set out the cardinal principles of IHL, with special emphasis on the principle of distinction. Finally, it will discuss the relation between IHL and international human rights law and international criminal law.

Pre-requisite: None

#### LAWS7316 HUMAN RIGHTS AND REFUGEE LAW

This course aims to address the interaction between national, regional and international human rights protection and the protection of refugees. It will examine the framework on human rights protection, including the historical development of human rights, the sources and the different categories of human rights. Contemporary challenges facing international mechanism for protection of human rights will be examined. Human rights laws and institutions in selected jurisdictions, including Asia will be studied in a comparative perspective in order to examine national implementation of international norms. The jurisprudence in major landmark human rights cases and its implementation will be critically examined. Finally, the course identifies the legal issues and challenges concerning refugees and migration primarily across borders. Pre-requisite: None

#### LAWS7308 LAW OF INTERNATIONAL ORGANIZATIONS

The course aims to offer a deep understanding of the law related to international organisations. Since the substantive law differs from organisation to organization, the course first introduces some core concepts and principles which are common to international organisations, such as theory of international organisations, legal personality and the principle of functionality. The

course will subsequently look into the specific legal systems of some representative global organisations, such as the UN and the WTO, and some selected regional organization, like the EU and ASEAN or co-operation alliances like the BRICS, G7/G8 and G20 to examine how the principles and theoretical concepts are applied in practice. Finally, the course will discuss interrelations between inter-governmental organisations and the role of non-governmental organisations.

Pre-requisite: None

#### LAWS7317 LEGAL CULTURE AND LEGAL PLURALISM

This course assesses the formation and development of law based on the history of European and Chinese legal cultures. Specific focus is made on continental legal systems. Topics include European ancient law (Hebrew law, Greek law, Roman law, etc.), European medieval law (Canonic law, Germanic law, Feudal law, Mercantile law, the revival of Roman law and the formation of common European law), modern European law after the Renaissance and the legal evolution of Western Europe after the French Revolution, namely the sources of contemporary European law. The course also examines the ancient and contemporary legal philosophy of China, legal history and culture in China. The course will also draw examples of unique legal cultures and legal pluralism from other jurisdictions like Japan and India. Pre-requisite: None

#### LAWS7309 COMMON LAW

This course will provide a comprehensive introduction to substantive common law and equity as developed in England and subsequently adopted in other jurisdictions like USA, Australia and Hong Kong. Common law and equitable remedies in specific fields like laws of trusts, contracts and torts and unique procedural elements like the writs and jury systems will be studied. Students will be trained in the judicial process using case studies and techniques of identifying ratio and obiter in binding precedents. The contemporary features of common law will be studied in a comparative perspective with the intent of training students from civil law jurisdictions to be able to interact with major common law systems in the world.

#### LAWS7318 MARITIME AND SHIPPING LAW

The objective of this course is to foster a critical appraisal of private law issues arising in maritime transportation. Topics covered include carriage of goods by sea, maritime safety and liability and marine insurance. International legal instruments governing relevant issues and specific national legislation and cases will be comparatively examined. The issues covered includes international sales and incoterms, carriage contracts and bill of lading, cargo claims, liability of carriers, security and limitation of liability, charter parties, maritime safety and navigation, salvage, towage and general average, multimodal transportation and marine insurance. The role of admiralty courts and maritime arbitration mechanism and relevant enforcement issues will be briefly introduced.

Pre-requisite: None

#### LAWS7319 E-COMMERCE AND INFORMATION TECHNOLOGY LAW

Critical legal issues relating to information technology and its application in B2B and B2C business transactions will be addressed mainly in a trans-national context and in the light of the challenges arising in the borderless nature of the cyberspace. Issues covered includes jurisdiction and applicable law for online transactions, electronic contracts and agents, click-wrap agreements, intellectual property rights, electronic authentication and transactional security, virtual enterprises and domain names, online privacy and data protection, electronic payment systems and taxation, liability of online intermediaries, online consumer protection, cyber-crime and online dispute resolution. Due to the diversity and relative infancy of legal developments in the field, specific national laws and cases will be studied using comparative methods. Pre-requisite: None

#### LAWS7406 INTRODUCTION TO MACAU LAW

This course covers key topics and features of the legal system of the Macao SAR. The themes may vary but normally should include discussions of the Basic Law and the autonomy of the Macao SAR, the political system, the protection of fundamental rights, and international law issues relevant for Macao. The discussions are contextual and take comparative law into account.

Pre-requisite: None

#### LAWS7407 MACAU AND COMPARATIVE GAMING LAW

This course focuses especially on the commercial operation of casino games of chance (table games and slot machines) as regulated in the Macao SAR, the world's largest gaming jurisdiction. The course has an interdisciplinary nature and covers especially the history of gaming in Macao and various issues of administrative and tax law, contract law and criminal law. The course includes a detailed study of the regulation of gaming concessions and of gaming promoters. It also features a comparative element, by which the Macao system will be contrasted with the regulation of gaming in the two main jurisdictions in gaming other than Macao, which are Nevada and Singapore.

Pre-requisite: None

#### LAWS7408 ADVANCED ISSUES OF INTERNATIONAL TRADE LAW

This course builds on the course on WTO and Regional Trade Law and proposes the discussion of selected, more advanced issues of contemporary relevance in the international trading community. It will thus strongly rely on the discussion of case law, i.e. particularly ongoing disputes of global and regional relevance, and will be based on the assignment of pertinent reading materials. Active class participation in the form of raising questions or partake in group discussions as well as class presentations will be equally given an important role. Pre-requisite: None

#### LAWS7409 ASIAN BUSINESS LAW

This course undertakes a comparative approach to the regulation of business in Asia. It first tries to assess possible particularities in the legal and business culture in Asia and focuses inter alia on the areas of commercial law, corporate law and business transactions, securities, intellectual property, and labor law issues To this end, selected jurisdictions, such as those of the PRC, Japan and Korea but also others will be presented and discussed from a comparative and both public-private law perspective. The analysis includes the evaluation of national legal systems in the context of regional economic integration projects based on various bi-, tri- or plurilateral agreements.

Pre-requisite: None

#### LAWS7410 COMPANY LAW

Based on the regulation of companies in Macao, focusing on private companies and public companies, this course discusses major trends of in company law and corporate governance. All major issues of company law will be covered, including fundamental concepts (types of companies; limited liability; capital maintenance), the creation of companies, the capital, the shares, the organs of companies, the rights and obligations of shareholders, and the dissolution and liquidation of companies.

Pre-requisite: None

#### LAWS7411 LAW AND SOCIETY

Taking a multidisciplinary approach, this course deals with a wide set of contact points between law and society. These include first a retrospective look at the significance of various factors or causal elements fuelling the changes underlying the development of societies, such as the invention of new technologies amidst an evolving relationship between politics and economics. It then asks how these numerous changes will influence the processes underlying legal thinking and reasoning as well as the adoption, application, and enforcement of laws in the future. To this end, the discussion will also present new theoretical approaches in law, such as the "law and

economics" movement or a political economic, as well as novel concepts, such as "global governance" or "global administrative law", to try to identify new trends in the field of legal science. Pre-requisite: None

#### LAWS7412 MONEY LAUNDERING AND ANTI-CORRUPTION LAW

This course discusses international trends and legal initiatives for the prevention and repression of corruption, money laundering and the financing of terrorism through the financial system. The discussion covers the international treaties relevant in the field, detailed substantive criminal law issues and the preventive measures required from financial institutions. Pre-requisite: None

#### LAWS7413 PRIVATE INTERNATIONAL LAW

This course focuses on Private International Law-provisions that are applicable in cross-border cases. These provisions may be set out in international treaty law, regional laws and domestic Private International Law. The first part deals with questions of jurisdiction, recognition and enforcement of civil and commercial matters, the second with the conflict rules that answer the question which will be the applicable law. The students will be accustomed with i.a. international conventions of which Macao is a contracting party, other regulations on Private International Law, and examples of domestic rules on Private International Law. Basic knowledge of private law (especially contracts & torts) and procedural law (jurisdiction, recognition and enforcement) are desirable.

Pre-requisite: None

#### LAWS7414 CONSUMER PROTECTION LAW

This course enquires into the role of consumer protection law in the legal systems of contemporary societies. The inquiry includes a presentation of the laws and organizations at both the national and international level that are entrusted with the protection of the rights of consumers in their commercial transactions. Further issues discussed include the legal concept and definition of the consumer, contractual issues trying to ensure the protection of the weaker party through special contractual clauses, and the relationship and contact points with other legal areas, such as competition law, intellectual property law (e.g. trademarks), and product safety law.

Pre-requisite: None

#### LAWS7415 COMMERCIAL CONTRACTS

This is a specialized contract law course covering various legal mechanisms to distribute goods and services, including the ICC Incoterms, the contract of carriage of goods by sea and the various payment mechanisms in international trade. The regulation of international trade agreements by the UN Convention on the International Sale of Goods will be addressed, along with the contracts used for the marketing of goods. The course will cover also various financial instruments and agreements involving banks, namely the term loan, the negative pledge, syndicated lending, securitisation and derivatives.

Pre-requisite: None

#### LAWS7320 MOOTING

The mooting course is aimed at developing drafting and advocacy skills for students. The course will train the students in adversarial process to enable them to examine legal disputes, conduct legal research, and develop drafting, argumentative and rebuttal skills. The course is open to all students but the enrolment is subjected to a selection process. Selected students will be required to prepare and participate in mooting competitions like the Jessup International Law Moot Competition or other competitions. Students will analyze the moot problem, conduct legal research and draft written memorials according to the rules of the competition. The students will be trained for oral rounds and partake in regular practice moots.

Pre-requisite: None

#### LAWS7321 SEMINAR SERIES

This course will consist of a minimum number of 10 seminars offered by the Faculty of Law throughout the academic year featuring notably eminent visiting professors, practitioners or distinguished experts from a great variety of legal and professional backgrounds. Moreover, their active participation is encouraged and will be included in the final evaluation. Pre-requisite: None

### MASTER OF LAW IN MACAU LAW AND PRACTICE

#### LAWS7510 DRAFTING OF BILINGUAL LAWS AND LEGAL TRANSLATION

This subject consists of three parts:

1) Discussion on bilingualism in law: staring from the historical development of legal bilingualism in Macao, examine briefly other systems of legal bilingualism and discuss main issues of legal bilingualism.

2) Translation and bilingual drafting: examine major issues and solutions.

3) Various practical issues in legal translation and bilingual law drafting.

Pre-requisite: None

#### LAWS7561 PORTUGUESE CONVERSATION FOR LEGAL PRACTICE

This subject emphasizes on correct use of grammar and expressions in spoken and written Portuguese in legal practices. Students will practice to communicate with the administrative and judicial institutions in different situations as set by the teaching staff so that they can get practical experiences.

Pre-requisite: None

#### LAWS7562 ADVANCED STUDY OF PUBLIC LAW (IN PORTUGUESE)

This subject focuses on the learning of terminology of public law in Portuguese language and provides an overview of the fundamental concepts and methodological questions of public law. Topics of Public Law I mainly include Constitutional Law, Administrative Law and Criminal Law. The subject also includes analyses of court decisions concerning the above mentioned branches of law.

Pre-requisite: None

#### LAWS7563 ADVANCED STUDY OF PRIVATE LAW (IN PORTUGUESE)

This subject focuses on the learning of legal language of private law in Portuguese language and provides an overview of the fundamental concepts and methodological questions of private law. Topics of Private Law mainly include Civil Law, Commercial Law and Labor Law. The subject also includes analyses of Court decisions concerning the above mentioned branches of law. Pre-requisite: None

#### LAWS7564 ADVANCED STUDY OF PUBLIC ADMINISTRATION AND CIVIL SERVICES

This subject mainly focuses on three parts:

1) Introduction to the administrative organization: general theory of administrative organization, models of administrative organization, and the administrative organization of the Macao Special Administrative Region (SAR).

2) Introduction to the public office: general theory on public office, legal relations of public office, admission to public office, types of employment in public office and disciplinary system of public office.

3) Legal practice of public administration and public office: major law and administrative rules and procedures.

Pre-requisite: None

#### LAWS7565 BILINGUAL LEGAL WRITING (IN CHINESE AND PORTUGUESE)

This is a applicable course concentrating on the legal-technical written text of a wide range of proper textual along with glossaries specialized texts involving in both legal languages: power of attorneys, contracts, notifications and procedural articles, initial petition, contestation, cleansing dispatch and sentence.

Pre-requisite: None

# LAWS7566 BILINGUAL PRACTICAL AFFAIR OF LAWYER (IN CHINESE AND PORTUGUESE)

This course is mainly based on the lawyer performing area, including the proper tasks in working field, the character of the Association of Lawyer, the Statute of Lawyer and the respective Ethics Code and Disciplinary Code.

Alongside the administration of justice. General Introduction. The institutions that perform the jurisdictional function. Classification of Courts. The judicial hierarchy. Principles that rule the administration of justice.

Pre-requisite: None

#### LAWS7593 MASTER THESIS

The academic thesis serves the purpose of demonstrating the ability to research, analyze and critically discuss any legal topic of present practical or academic importance. Students need to clearly set out the researched legal issue and the legal position they defend, identify their research questions and develop a research methodology that is capable to answer the legal questions and support the defended position. Students will not only have to provide an in-depth analysis of the legal issue, but critically engage with the matter and introduce original insights. Students are expected to demonstrate coherent and argumentative writing skills, in conveying their solid scientific findings, analysis and criticisms, all supported in a comprehensive bibliography and extensive references in the academic thesis. To successfully complete the academic thesis, a faculty member competent in the selected legal field supervises the progress and approves the thesis for public defence.

Pre-requisite: None

#### LAWS7603 LEGAL TRANSLATION

Historical evolution of the existence of one bilingual juridical system in Macao. Brief reference to the other bilingual juridical system. Approaches to the most important statutes relating to legal bilingualism. Juridical translation in Macao – experience and perspectives. Practical approach of juridical translation and bilingual production. Pre-requisite: None

#### LAWS7604 NON-LITIGATION DISPUTE RESOLUTION (IN PORTUGUESE)

This course is mainly focuses on the extrajudicial processes such as arbitration, collaborative law, and mediation used to resolve conflict and potential conflict between and among individuals, business entities, governmental agencies, and (in the public international law context) states. It generally depends on agreement by the parties to use the Non-litigation dispute resolution, either before or after a dispute has arisen. It has experienced steadily increasing acceptance and utilization because of a perception of greater flexibility, costs below those of traditional litigation, and speedy resolution of disputes, among other perceived advantages. Pre-requisite: None

# Postgraduate Diploma in Law Programme

# INTRODUCTION TO MACAU LAW PROGRAMME

#### LAWS6001 PORTUGUESE LANGUAGE

Functional contents: those demanded by several situations of communication in different thematic areas such as Identification, Public Services, Social Relationships, the Weather, areas where the student will have, for example, to identify himself (or ask for identification), introduce himself (or introduce someone), invite, excuse, inform (or get informed), approve, disapprove, ask permission or give permission, express attitude, feelings... The grammatical contents will depend on the studied linguistic achievements. The use of the most frequent verbal sentences such as to be, to stay and to have. The occurrence of verbal sentences with prepositions (to live in, to like to, to go to...). The expression of opinions in situations that the use of sentences with the indicative is necessary. The expression in the future time. The pronouns and the numerals necessary to the communication. Direct and indirect speech Understanding/systematization of some different data in Portuguese/Chinese. All the items shall be accomplished together with activities, namely those that will give the student the opportunity to distinguish the phonetical traces of Portuguese language.

Pre-requisite: None

#### LAWS6002 LEGAL LANGUAGE

Legal language: Basic legal concepts. Legal logic. Judicial syllogism. Critique of legal language. Analysis of court decision. Fundamental legal documents legal procedure. Legal translations. Legislations. Legislative process and formalities.

Pre-requisite: None

### LAWS6003 HISTORY OF MACAU

This course intends to familiarize students with the political, economic, and social history of Macao so that they can better understand what is happening today. We will examine the political and economic transformations of Macao over the past 450 years, the clash or cooperation of civilizations, religious life of people both Chinese and Portuguese, literature and art of and about Macao, and social issues and problems in Macao. By the end of the class, students should have a very good idea of Macao's past, present, and future Pre-requisite: None

#### LAWS6004 LEGAL HISTORY OF MACAU

The course mainly addresses the historical evolution of political system of Macao. Part I: The political System of the Period of Internal Autonomy of Portuguese Residents (1557-1843). Part II: The political system of the period of overseas's province including Timor and Solor (1844-1895). Part III: The political system of Macao as a single oversea's province (1896-1975): The Period of Granting Autonomy of Colony (1896-1930), the 1995' Statute of Macao Province and 1963 and 1972' Political and Administrative Statute of Macao Province Part IV: The political system before and after the transition of power (1976-2005). Pre-requisite: None

#### LAWS6005 GENERAL THEORY OF CIVIL LAW

Introduction. The general theory of the juridical relations: its meaning and limitations.

1. The civil juridical relation (the statics and the dynamics of the juridical relation): Notion of juridical relation: functional notion ("concept of interest") and structural notion ("concept of precept"). Study of the juridical relation as a structural precept, the statics: core of the juridical relation: a) the rights in a broad meaning. Types: The rights in a proper meaning and the rights to establish, a change or terminate a legal relationship. Close concept: Legal faculties (primary and secondary) and legally protected expectations. Classes and types of rights. b) the legal duty and the submission. The external elements: parties, object, fact and warranty. Species, classes and types of juridical relations. Combinations of juridical relations (the patrimony theory). The Dynamics: main happenings in the life of a juridical relation: establishment and acquisition (primary and secondary), change and determination. Accidental happenings.

2. Persons. I - natural persons personality, subjectivity and legal capacity. Beginning of legal personality. Termination of legal personality. The protection of the personality. Legal capacity: Limitation on capacity (general and accidental) and the close concepts (illegitimacy). II - legal persons: Notion, elements, kinds, capacity, liability and termination.

3. The things.

4. The fact. Fact, act, and "negócio júridico". Elements of the "negócio júridico". Types of "negócio júridico". The declaration of will. The interception of will. The interpretation. The perfection. The divergences and the vices of the will. The object. The representation of will, The accessory clauses. Integration, reduction and conversion of the "negócio júridico". Invalidities. Pre-requisite: None

#### LAWS6006 CONSTITUTIONAL LAW

Part I General Characterization of Constitutional Law. Chapter I - The Constitution in the premodern political and juridical scene. Chapter II - The Constitution in the modern political and juridical scene. Chapter III - The Constitution as fundamental juridical statute of the State -Political Community. Chapter IV - The Constituent Power. Chapter V - The Constitution as source of law. Chapter VI - Liberalism and democracy.

Part II - The Basic Law of Macao SAR. Chapter I - One country and two systems. Chapter II. Relationship between the Central authorities and Macao SAR. Chapter III. Fundamental rights and duties of the residents. Chapter IV. Political structure. Chapter V. Economy system Chapter VI. External affairs. Chapter VII. The interpretation and amendment of the Basic Law. Chapter VIII. The protection of the constitution and the control acts of power.

Pre-requisite: None

#### LAWS6007 CRIMINAL LAW

Part I - General considerations. Chap. I. Nature of Criminal Law. 1. Scope, function and limits of Criminal Law. 2. The aim of the penalties. Penalties and security measures 3. Evolution of Criminal Law. Chap. II - The criminal law and its application 4. Sources of Criminal Law 5. The application of Criminal Law 6. Validity of Criminal Law.

Part II - General Theory of Criminal Infraction. Introduction: the constitutive elements of crime 7. Classification of the crimes 8. The general theory of crime 9. Type of offenses. Chap. I - The Types of criminal offenses 10. The elements of the "type" 11. The objective attribution of the result to the behave 12. The criminal omissive behaviors. Chap. II - Type of justifications. 13. General principles 14. The singular justifying types. Chap. III - The type of guilty 15. The problem of guilt in Criminal Law 16. The malice type. The problem of the mistake 17. The negligence type 18. Obstacles to guilty. Non imputability, non exigibility. The non responsible lack of knowledge of the offense. Chap. IV - Special configurations of the crime 19. Attempt and frustration. "Iter criminis". The resistance 20. Comparticipation. Perpetration and accomplicity. Chap. V – Cumulation of offenses. Legal accumulation. Real accumulation. Cumulative crime.

#### LAWS6008 PUBLIC INTERNATIONAL LAW

1. Conception and nature of Public International Law.

2. Sources of Public International Law: Treaties and customs.

3. The State: Elements of the State, the Recognition of State, Succession of states, Rights and Duties of the State.

4. International Organizations: definition and types. The UN.

5. The individuals in Public International Law: nationality and juridical statute of the foreigners.

6. Diplomatic and Consular relations Law.

7. The pacific resolution of the international conflicts: political resolution and juridical resolution of the international conflicts.

8. Problems of Public International Law about Macao. 8.1. The Sino-Portuguese Joint Declaration,

8.2. The capacity of Macao's Special Administrative Region in matters related with external

affairs, according to the Basic Law of Macao SAR. requisite: None

#### LAWS6009 ADMINISTRATIVE LAW I

Chap. I - Public administration 1. Public Administration. Concept and different meanings. 2. Historical evolution. 3. Administrative systems: comparison between the continental-European system and the British system.

Chap. II - The administration and the Law 1. The principle of legality of Administration. Primacy of law and reservation for the Parliament (Legislative Power) the regulation of the principal matters (historical and modern meanings). 2. "Binding" (to the content of acts fixed by law) and "Discretionary" (cases that the legislator gives Administration the power to fix the content of it's own acts). 3. The sources of Administrative Law: in special, the administrative Regulations.

Chap. III - The Administrative Activity 1. The dispositive facts. Typology (in special, torts). 2. Administrative act. Concept and meaning. Typology. 3. Instrumental acts. 4. The administrative procedure. 5. Effectiveness and legal strength of the administrative act: the possibility of execution by Administration of it own acts. 6. The structure of administrative act: the subject, the object and the statution. 7. The defects of the administrative act. Types of invalidity.

Chap. IV - The administrative justice. 1. Definition and scope of the administrative justice. 2. The problem of the administrative justice models. 3. The system of administrative justice in Macao. 4. Material and functional limits of the administrative justice. 5. The organs of the administrative justice. 6. The means to access to the administrative courts. 7. The processual requirements. 8. The tramitation of the administrative judicial processes. 9. The general principles of the administrative judicial process. 10. The judicial decisions and its effects.

Pre-requisite: None

#### LAWS6010 PUBLIC ADMINISTRATION

I. Organizations of public administration: concept of public administration, complex of public administration, introduction to organizations of public administration, the public administration organization of Macao SAR, the legal system of public functionaries of Macao.

II. The legal relations of the legal system of public functionaries general introduction, subjects of legal relations, fact of legal relation, objects of legal relations, alternation of legal relation and termination of legal relations.

Pre-requisite: None

#### LAWS6011/LAWS6012 LEGAL LANGUAGE I / LEGAL LANGUAGE II

Legal language: Basic legal concepts. Legal logic. Judicial syllogism. Critique of legal language. Analysis of court decision. Fundamental legal documents legal procedure. Legal translations. Legislations. Legislative process and formalities. Pre-requisite: None

#### LAWS6013 PUBLIC ECONOMIC LAW

The meaning of Public Economy - Financial Activity of State: Expenses, Revenues and Budget. Economic Activity of State: Characterization of Public Economic activity and the Enterprise activity of State - Public Revenues - Public Expenses - Public Budget - Financial Policy problems. Pre-requisite: None

#### LAWS6014 CRIMINAL PROCEDURE LAW

Part I. Legal consequences of the crime. 1. The legal consequences of the crime and the criminal penalty. 2. The reaction to crime of the criminal law in force in Macao in the context of the criminal policy models. 3. Preliminary penalties, a) Primary penalties and secondary penalties. b) The substitution penalties in the system in force in Macao. 4. The imprisonment penalty and the fine. 5. The general theories on the determination of the penalty. 6. Steps on the determination of the penalty. a) Mitigation circumstances and aggravity circumstances. b) The criterium of the article 84 of the criminal code. c) Judicial determination of the penalty.

Part II - Criminal Procedure. 1 . Meaning and the aim of the criminal procedure law. 2. Place of the criminal procedure law in the legal system. 3. The application of the criminal procedure law.

4. General principles of the criminal procedure. 5. Injunctions. 6. Evidence in the criminal procedure. 7. The forms of the criminal procedure. 8. The inquiry. 9. The instruction. 10. The trial. 11. The appeals in the criminal procedure.

Pre-requisite: None

#### LAWS6015 OBLIGATION LAW

I. Introduction. The Obligation. The Rendering. Complex Obligational Relationship. The role of Obligation. Obligations and rights in rem. Systematic principles of Contracts Law. the principle of private autonomy; the principle of good faith, the principle of non unjust enrichment.

II. Sources of obligations. Contracts. Unilateral acts. "Negotiorium Gestio". Unjust enrichment. Civil liability. Contractual responsibility. Extracontractual responsibility: torts, risk activities liability and responsibility for lawful acts.

III. Kind of obligations. About the lien: natural and civil obligations. About the parties: conjuntive obligations and joint and several obligations. About the object.

IV. Transmission of Obligations. Credit and Debits transmission. Credits assignment. Subrogation. Single transmission of debts. Assignment of contractual position.

V. General Security of Obligations. Means for the maintenance of Patrimonial Security. Nullity declaration. Creditor subrogation over the debtor. "Pauliana" Opposition. Attachment.

VI. Special Security of Obligations. Personal and Real securities. Bonds. Guaranty.

VII. Fulfilment and Unfulfilment of Obligations. 7.1. Fulfilment. 7.2. Unfulfilment. Impossibility of fulfilment and default not concerning to the debtor. Unfulfilment and default attributable to the debtor. 7.3. Defective fulfilment. 7.4. Contractual set of creditor rights. 7.5. Coercive means for realization of rendering. 7.6. Property assignment. 7.7. Creditor default.

VIII. Causes of extinguishment of Obligations besides fulfilment.

IX. Contracts. Typical and No typical contracts. Mixed contracts and contracts in coallition Enumeration and concise characterisation of typical contracts rulled by Civil Code. Game and Bet.

Pre-requisite: None

#### LAWS6016 PROPERTY LAW

Introduction. I - The real property rights in general: Definition - structural and functional perspective. Constitutive principles of "ius in rem" -1. Internal principles. External principles. Characteristics of real property rights. The great manners to order the ways of dominance. Types of "ius in rem". II - Possession (provisional order of dominance) Definition of possession. The greatest problems of possession. Possession systems. The system of Macao. Possession with cause and formal possession. Possession and mere detention. Rights that can be possessed. Things that can be possessed. Capacity for possess. Characteristics of possession. Acquisition of possession. Effects of possession a) The protection of the possession (the means for defend the possession). b) The adverse possession (usucapio). III - In special, real property rights (ius in rem) (definitive order of dominance). Real property rights of use - Property. Joint ownership. "horizontal" ownership - The usufruct - The use - Superficial right - Real servitudes. Pre-requisite: None

#### LAWS6017 CIVIL PROCEDURE LAW I

I. Introduction, Procedure and Processual Law. Jurisdiction and jurisdictional function. General frame of the action in civil jurisdiction. Civil Procedure Law.

II. The action. The right to a legal action. Legal classification of the actions: according to their goal, according to their form. Interlocutory injunctions.

III. Civil Procedure Law. Concept. Features. Importance. Interpretation and integration. Application in time. Application in space.

IV. Sources of the Portuguese Civil Procedure Law and close Disciplines. Historical evolution.

V. Theory of the Procedural Relation. The instance as a procedural relation. The structure of procedural relation. 1. The subjects. 1.1 The parties. Procedural requisites concerning the parties. Judiciary personality. Judiciary capacity. Legitimization. Compulsive representation by an attorney at law. Special mention to Macao. The procedural interest. 1.2. The court. The judicial organization. Jurisdiction. 2. The object. The claim and the cause of action.

VI. The procedural act. Concept. Form. Time. Place. Parties. Goal. Pathology.

VII. Dynamics of the procedural Relation. The bringing of a suit. Development of the instance. Modifications. Suspension and interruption. Conclusion. Incidents.

VII I. Formalities of the Ordinary Declaratory Process. Phases. 1. Articulated pleading. Declaration. "In limine" Order. Service of process. The Answer: Defensive-answer. Counterclaim-answer. The Replication. The Rejoinder. Supervening articulated pleadings. 2. Healing and Abridgement. Preparatory hearing. Curative decision. Specification and Questionnaire. 3. The instruction. The evidences in general. Material probative law. Formal probative law. The burden of proof. Fundamental principles. Means of proof. 4. Trial. Final hearing. 5. Final decision. "Res judicata".

IX. Formalities of the Summary Declaratory Process

X. Judicial Organization of Macao. Comparative perspective.

Pre-requisite: None

#### LAWS6018 ADMINISTRATIVE LAW II

Administrative Judiciary. I - The Principle of Separation of Powers. II - Delimitation of the concept of administrative judiciary or the administrative contentious proceeding. III - Administrative juridical relations that produce external effects as the object of the administrative contentious proceeding. IV - The established administrative judiciary system. V - The organization of administrative judiciary system - The models (in Macao and in Portugal). VI - The means for judicial protection of citizens before Public Administration. VII - Conditions for suing. VII I - Judicial process-regarding principles. IX - The contentious remedy for voidance of administrative acts (proceeding, decision and effects of decision). X - The suspension of the effects of the acts. XI - The judicial procedure for recognition of rights or legitimate interests. Pre-requisite: None

Pre-requisite. None

#### LAWS6019 FAMILY AND SUCCESSION LAW

I. Introduction. Legal conception of Family and Succession and the succession phenomenon. Family and Succession Law. Sources and constitutional principles. Characteristics of Family and Succession Law and characteristics of family and succession rights.

II. Family relations. 2.1 . Blood relations. Filiation. Filiation set. Maternity and Paternity set. 2.2. Affinity. 2.3. Adoption. 2.4. The marriage. Matrimonial systems. 2.5. Union in fact.

III. The matrimonial relationship. 3.1. Constitution: the marriage as an act. 3.1.1. Civil marriage. 3.1.2. Catholic marriage. 3.2. Effects of marriage: the marriage as a "status". 3.2. 1. Personal effects. 3.2.2. Patrimonial effects. Marriage property systems. The administration of marriage property. Illegitimate acts. Liability for debts of the spouses. 3.2.3 Termination of the relationship. Distribution of community property. 3.3. Alterations in matrimonial status. Judicial separation of property and judicial separation of spouses and property. 3.4. Marriage termination. Causes of dissolution of Civil and Catholic marriage. The death. The divorce.

IV. The succession. The death as a presupposition of the succession. Introduction to the different kind of succession. Heir and Legatee. Opening of Succession. Descent Calling. Descent Designation. Content of descent calling. Object of descent calling. Presuppositions of descent calling. Forms of descent calling. Indirect calling: right of representation, straight substitution, right of accretion. Vacant succession. Descent Acquisition. Inheritance acceptance. Inheritance rejection. Inheritance petition. Inheritance disposal. Inheritance charges. Inheritance distribution. V. Kinds of Succession. 5.1 . Legal succession. 5.2. Legitimate succession. 5.3. Testate succession. 5.4. Contractual succession.

Pre-requisite: None

#### LAWS6020 COMMERCIAL LAW

Introduction to commercial law, Merchants: commercial capacity, obligations, liability of married couple assets for commercial debts. The firm, Competion law; Unfair competition law. Commercial paper. Kinds of Negotiable Instruments. The legal regimen of the Bill of Exchange. The draw. The accept. The endorsement. The aval. Liability of the subscribers. Pre-requisite: None

#### LAWS6021 PRIVATE INTERNATIONAL LAW

I - 1. On the dogmatic object of Private International Law structure (types of) private international relations. 2. The debate on method: comparison between the American methodological perspective on PIL and the classical European approach. 3. General interests or regulation values. 4. General theory of the conflict rule and determination of its functional limits 4.0. Structure and function of the conflict rule in PIL, 4.1. Classification 4.2. Renvoi (remission/transmission). 4.3. The principle of "vested rights", 5. The eviction of foreign law: the undetermined general clause of public policy ("ordre public"). 6. The "fraus legis" in Private International Law, Recognition of foreign sentences.

II - 1. The specific relevance of personal law in Private international Law. 2. The historical evolution of Private International Law and the progressive autonomy of the problems on the determination of personal law. 3. General interests of PIL and its projection on the conflict of laws concerning personal matters: the protection of the principle of unity in this area. 4. The relevance of the developing comparative analysis on the matter. 5. Marriage in PIL: the distinct importance of the contractual dimension and of the institutional one. 6. Divorce and separation by law in PIL. 7. Legitimacy, legitimization and adoption and determination of the structure of family relations by those means constituted. 8. Succession law in PIL.

#### LAWS6022 NOTARY AND REGISTRAL LAW

I. Concept: 1. The structure and function of registry and notary agencies of Macao SAR. 2. The similar organs and functional difference. 3. The common perspectives of public administration with private interest: Prevention of conflict as an indispensable contribution in administration of justice.

II. The statute law of registry and notary : 1. Organic law. 2. Law codes. 3. Separate legislation. III. Law of civil registry.1. Concept and scope. 2. Theory and practice.3. Principle of information. IV. Law of Registry of House. 1. Concept and scale 2. Theory and practice. 3. Principle of information 4. Commercial registry and registry of automobiles, ships and airplanes.

V. Notary Law. 1. Concept and scope. 2. Theory and practice. 3. Principle of information. Pre-requisite: None

#### LAWS6023 CIVIL PROCEDURE LAW II

Executary action, I. General Theory of the executary action. Concept and goals, The legal classification. II. Procedural requisites of the executary action. 1. Specific requisites. Formal and substantial requisites. The executary document. Legal nature. Historical evolution. Classification Consequences of the lack of executary document or of its non-executarioness. Certainty and exigibility of the debt: The liquidated debt. 2. General requisites of the executary action. International and internal jurisdiction. Formal legitimization. Compulsive representation by and attorney at the Law. III. Forms of the executive process. Legal form of the different species and forms of execution. IV. The phases of the executive process. 1. Ordinary executive process for the payment of a right amount. Phases: Articulates. Initially pleading. "in limine" decision. Service of process. Opposition. Attachment: definition, object, cases of withdrawing from execution and forced sale. Opposition to the attachment. Finding. Concurrence of creditor claims. Reclamation and verification of claims. Proceeding. Payment. Forms of payment. Termination of the execution. Voidance and renovation of the executary action. 2. Summary executive process for the payment of a right amount. 3. Common executive process for delivery of determinated thing. Ordinary and summary processes. 4. Common executive process for rendering a certain fact positive or negative. Ordinary and summary processes. Pre-requisite: None

#### LAWS6024 THE JUDICIAL AND LEGAL PROFESSION

Part I. 1 . Administration of justice: Generality. 2. Organs exercising jurisdictional function. 3. Classification of courts. 4. Hierarchy of courts. 5. Principle regulating administration of justice 6. The relevant statute laws. 6.1 . The Basic Law of Macao SAR. 6.2. The Basic Law of Judicial Organization.6.3. Civil Procedural Code .

Part II. - Litigation Practice.1. The judicial protection in Macao SAR. 2. Legal profession. 3.

Judicial mandate. 4. The organs and entities with specific function of this area. 5. The relevant statute laws. 5.1 . The Basic Law of Macao SAR. 5.2. The Basic Law of Judicial Organization. 5.3. The statute of lawyers and the relevant moral and disciplinary regulations. Pre-requisite: None

#### LAWS6025 LEGAL LANGUAGE III

Legal language: Basic legal concepts. Legal logic. Judicial syllogism. Critique of legal language. Analysis of court decision. Fundamental legal documents legal procedure. Legal translations. Legislations. Legislative process and formalities. Pre-requisite: None

BACHELOR OF LAW (IN CHINESE LANGUAGE) - DAYTIME & BACHELOR OF LAW (IN CHINESE AND PORTUGUESE LANGUAGES)

#### LAWS1000/LAWS1001 INTRODUCTION TO LAW

Title I. The concept of Law. Chapter I. The Law as part of the whole social order. 1. The Law and other normative orders. 2. The religion. 3. The ethic. 4. The social behavior.

Title II. The aims or values of the Law. Chapter I. Justice and security.

Title III. The structure of the Law. Chapter I. The rule of Law.

Title IV. Sources of Law. Chapter I. voluntary sources of Law and non-voluntary sources of Law. Title V. Interpretation of the Law. Chapter I. Types of interpretation. 1. Elements of interpretation. 2. Results of the interpretation. Chapter II. Integration of the gaps in the Law. 1. Analogy. 2. Creation of a ad hoc rule.

Pre-requisite: None

#### LAWS1002 LEGAL HISTORY

Title I. Chapter I. Legal thoughts in traditional Chinese society. 1. Divine Law 2. Patriarchal law 3. Confucianism. 4. Legalism. Chapter II. Legal and political thoughts in Modern China. Chapter III. 1. Legal History of Macao. 1.1 Introduction. 1.2 Specificity and sources of law of overseas Portuguese territories. 1.3 Law and justice. 1.3.1. Portuguese law and local laws, scope of application. 1.3.2 Indigenous law and the mixed relations. 1.3.3 Legal pluralism and mixed jurisdiction in Macao. 1.3.4. Judicial organization of Macao.

Title II. Chapter I. Introduction. 1. Social history of law. Chapter II. The formation of the Common Law. 1. The Roman Law. Sources: (Corpus Iuris Civilis). General Characteristics of the Praetor's Law. The evolution of Roman law until the imperial constitutions. vulgarrecht. 2. Legal pluralism. The role of legal thought in the formation and evolution of the common law. The glossators, commentators, mos gallicus iura docendi, usus modernus pandectarum and naturalists. Chapter III. Philosophy of Law. 1. Legal positivism, legal, historical, sociological and conceptual. 2. Pure theory of law and the right alternative use.

Pre-requisite: None

#### LAWS1003/LAWS1004 CONSTITUTIONAL LAW

Title I. General notions of Constitutionalism. Chapter I. Constitution as legal statute of politics. 1. The autonomy of public sphere. 2. State as a political form of modernity. 3. The crisis of State: regionalism and globalization. Chapter II. From Constitutionality to Inter-constitutionality. 1. The hierarchical and normative scheme of the constitution of the supervising state. 2. The binding inter-constitutionality of the supervised State. 3. Democracy and rule of law. Chapter III. Comparative Constitutional Law. 1. The Portuguese constitutional experience. 2. The Chinese constitutional experience. 3 The evolution of Macao autonomic status. Pre-requisite: None

#### LAWS1005/LAWS1006 MACAO BASIC LAW

Title I. The Basic Law of the SARM. Chapter I. Characterizing the SARM. 1. SARM as a political region. 2. Scope of autonomy of SARM. 3. SARM's political system. Chapter II. Purposes of Basic Law. 1. Theories on the purposes of Basic Law. 2. Art. 31 of the CPRC and its double task. 3. Luso-Chinese joint-declaration. Chapter III. Legal nature of the Basic Law. 1. Ideas on the legal nature of the Basic Law. 2. Basic Law as an ordinary legal norm. 3. Basic Law as statutory legal norm. 4. Basic Law as a reinforced legal norm. 5. Basic Law as a material constitutional legal norm. Chapter IV. Guaranty of the Basic Law. 1. Interpretation of the Basic law. 2. Guaranty of the reinforced value of the Basic Law. 3. Limits to revision of the Basic Law. Pre-requisite: LAWS1003 and LAWS1004

#### LAWS1007/LAWS1008 PUBLIC INTERNATIONAL LAW

1.Concept and nature of Public International Law. 2. Relationship between International and Domestic Law. 3. Sources of Public International Law: treaties and customary norms. 4. International Legal Personality. 5. The State: elements of the State, the recognition of State, succession of states, rights and duties of the State. 6. International Organizations: definition and types. The United Nations. 7. Diplomatic and Consular relations Law. 8. The pacific resolution of the international conflicts. 9. Individuals in Public International Law. 10. Application of Public International Law to Macao.

Pre-requisite: None

#### LAWS1015 ENHANCEMENT LEARNING ACTIVITIES

Apart from regular legal courses, students are encouraged to participate in other activities, such as attending seminars, participating in competitions, sharing and discussing legal problems with one another.

Pre-requisite: None

#### LAWS1016 PUBLIC ECONOMICS

The meaning of Public Economy - Financial Activity of State: Expenses, Revenues and Budget. Economic Activity of State: Characterization of Public Economic activity and the Enterprise activity of State - Public Revenues - Public Expenses - Public Budget - Financial Policy problems. Pre-requisite: LAWS2006 and LAWS2007

#### LAWS1017 TAX LAW

Introduction.

I. Tax Law. Historical background. Theory of taxation. Taxes and other contributions. Administrative taxation procedure. Classification of taxes. Definition of Taxes. Tax law and other fields of law. Constitutional Law. Administrative Law. Commercial law. Private Law. Criminal Law. International Law.

II. Tax Jurisdiction. Sources of tax law. General principles of law. International and interregional tax law agreements. Customary law. Jurisprudence. Doctrine. Interpretation of tax laws. Integration of tax laws. Application of tax laws in time and space. Double taxation. Tax avoidance and tax evasion. International exchange of tax information.

III. Legal relation. Nature. Parties. Tax obligation. Tax duties and warranties. Execution procedure.

IV. Taxation in Macao. Evolution. Taxation on income. Taxation of property. Taxation of services. Stamp duty. Special Gaming Tax. Other taxes.

Pre-requisite: LAWS2006 and LAWS2007

#### LAWS1018 COMPARATIVE LEGAL SYSTEMS

Title I. Introduction. 1. The concept of comparative law and its neighbouring disciplines. 2. The history of comparative law. 3. The function and aims of comparative law. 4. The method of comparative law. 5. Legal formants. 6. Comparative law as a science. 7. The grouping of the legal systems into families.

Title II. Legal traditions of the world. 1. Civil Law: a) History. b) Structure. c) Sources. d) The French and German experiences of Codification. e) The diffusion of the respective patterns. 2. Common Law. 2.1. The English Law: a) History. b) Structure. c) Sources. 2.2. The American Law: a) History. b) Structure. c) Sources. 3. Far East Law. 3.1. Chinese Law. 3.2. Japanese Law. 4. Religious Law. 4.1. Islamic law. 4.2. Hindu Law. 5. African law.

Title III. Introduction to European Union Law.

Pre-requisite: LAWS2002 and LAWS2003, LAWS4002 and LAWS4003

#### LAWS1019 ENVIRONMENTAL LAW

This course covers the environmental values and policies, history of environmental law, the principles and framework of environmental regulations, the use of risk assessment techniques in environmental law, the regulatory tools of environmental law, and the enforcement and dispute settlement mechanisms and international responsibilities. Special topics like water pollution, air pollution, cross-border movement of hazardous wastes and other local, regional and global environmental problems.

Pre-requisite: LAWS2006 and LAWS2007

#### LAWS1020 REGISTRY AND NOTARY LAW

I. Concept: 1. the structure and function of registry and notary agencies of Macao SAR. 2. The similar organs and functional difference. 3. The common perspectives of public administration with private interest: Prevention of conflict as an indispensable contribution in administration of justice.

II. The statute law of registry and notary: 1. Organic law. 2. Law codes. 3. Separate legislation.
 III. Law of civil registry.1. Concept and scope. 2. Theory and practice.3. Principle of information.
 IV. Law of Registry of House. 1. Concept and scale 2. Theory and practice. 3. Principle of information.
 Commercial registry and registry of automobiles, ships and airplanes.

V. Notary Law. 1. Concept and scope. 2. Theory and practice. 3. Principle of information.

Pre-requisite: LAWS3002 and LAWS3003, LAWS3014 and LAWS3015

#### LAWS1021 FORENSIC MEDICINE

Forensic Medicine (concept, organization). Corporal offenses. Forensic sexology. Medical reports and certificates. Sudden natural death. Identification. Violent death. Injury and death from physical agents. Wounding. Asphyxia. Immersion and drowning. Sexual offenses. Abortion and Pregnancy. Infant deaths. Poisoning and drugs. Alcohol abuse. Forensic Psychiatry. Labor Forensic Medicine. Medical ethic, responsibility and negligence. Transplantation of organs and tissues practice of observations (autopsy, medico-legal examinations). Pre-requisite: None

#### LAWS1023 JURIDICIAL PRACTICE

Part I. 1. Administration of justice: Generality. 2. Organs exercising jurisdictional function. 3. Classification of courts. 4. Hierarchy of courts. 5. Principle regulating administration of justice 6. The relevant statute laws. 6.1. The Basic Law of Macao SAR. 6.2. The Basic Law of Judicial Organization.6.3. Civil Procedural Code.

Part II. - Litigation Practice.1. The judicial protection in Macao SAR. 2. Legal profession. 3. Judicial mandate. 4. The organs and entities with specific function of this area. 5. The relevant statute laws. 5.1. The Basic Law of Macao SAR. 5.2. The Basic Law of Judicial Organization. 5.3. The statute of lawyers and the relevant moral and disciplinary regulations. Pre-requisite: LAWS3018 and LAWS3019

#### LAWS1024 GENERAL THEORY OF CHINESE LAW

Part I. - 1. The characteristics of legal system of ancient China. 2. PRC Constitution Political and Economical fundamental principles settled by the Constitution, The State Organs of PRC, Rights and Duties of Chinese citizens. 3. PRC Criminal Law: range of application of criminal law, Conception and constitution of crime, Penalties, Measure of Penalties, the Special Provisions of Criminal Law. 4. Criminal Procedure in PRC: jurisdiction, evidences, mandatory injunctions. The Accusation, 1st and 2nd stages procedures, Execution. 5. PRC Administrative: Administrative institutions, administrative act, the Law of civil servants. Hierarchy Claims and Administrative Procedure.

Part II.- 1. Civil Law of PRC: general principles of Civil Law, the parties of the civil juridical relationship, civil juridical acts, the right of property, contracts, civil liability. 2. The marriage and successions law: marriage regimens, divorce regimens and procedures, blood relations and affinity, inheritance, legal succession, testate succession. 3. Company Law general regimen and types of companies, limited companies, partnership associations and business corporations. 4. PRC Foreign Economy Law: Joint venture enterprises, foreign enterprises, the law of joint administration of companies, PRC use of land law, Tax law related to foreign companies. Pre-requisite: LAWS1000 and LAWS1001, LAWS1005 and LAWS1006

#### LAWS1025 GENERAL THEORY OF PORTUGUESE LAW

I - Juridical Systems.

II - Portuguese juridical system. 2.1. Evolution and Characterization. 2.2. Constitutional Law and Administrative Law 2.3. Criminal Law and Procedure 2.4. Evolution of Civil Law and Civil Procedural law. 2.5. Commercial Law 2.6. Economic Law. 2.7. The Private International Law, the nationality. 2.8. European Law. 2.9. The law and the environment, urban construction law, the consumer, the telecommunications, the computing and biotechnic, and other new challenges. 2.10. The foreigners in Portuguese Law. 2.11. The Statute of the former Portuguese colonies in Africa (PALOPs) and the Statute of its citizens. 2.12. The Statute of the Portuguese citizens born in Macao and Macao residents. 2.11. Tendencies of the evolution of Portuguese Law.

III - 3.1. The Portuguese Law and the Law of Macao. 3.2. The autonomization of the Legal System of Macao and the principle of the maintenance basically unchanged of the existing juridical order of Macao. 3.3. The experience of transition in Macao.

IV - Observing the evolution of the Portuguese Legal System and other systems with a common matrix.

Pre-requisite: None

#### LAWS1026 PORTUGUESE LEGAL LANGUAGE

Legal language: Basic legal concepts. Legal logic. Judicial syllogism. Critique of legal language. Analysis of court decision. Fundamental legal documents legal procedure. Legal translations. Legislations. Legislative process and formalities.

Pre-requisite: LAWS3012 and LAWS3013, LAWS3014 and LAWS3015, LAWS3016 and LAWS3017, LAWS3018 and LAWS3019

#### LAWS1027 INTRODUCTION TO ALTERNATIVE DISPUTE RESOLUTION

This course will provide in-depth introduction to the alternative dispute resolution, including arbitration and mediation, and its linkage and connection with court adjudication. It will cover the law and practice of ADR in both civil law and common law jurisdictions, with a focus on its application in Macao.

Pre-requisite: LAWS2000 and LAWS2001

#### LAWS1028 LEGAL HISTORY OF MACAO

The course mainly addresses the historical evolution of political system of Macao. Part I: The political system of the Period of Internal Autonomy of Portuguese Residents (1557-1843). Part II: The political system of the period of overseas province including Timor and Solor (1844-1895). Part III: The political system of Macao as a single overseas province (1896-1975): The Period of Granting Autonomy of Colony (1896-1930), the 1995' Statute of Macao Province and 1963 and 1972 Political and Administrative Statue of Macao Province. Part IV: The political system before and after the transition of power (1976-2005).

Pre-requisite: LAWS1002, LAWS1005 and LAWS1006

#### LAWS1030 LEGAL PHILOSOPHY

Many philosophical issues arise in connection with how we solve legal questions. This course

introduces students to these issues and encourages critical thinking about them. Several questions are explored. 1)What is law and legal system? What are the types of law? 2) What is obligation or right? 3) What is the relationship between law, morality, authority, and politics? 4) How to interpret law? 5) What is, and how to realize, the rule of law? 6) Is there an obligation to obey the law? How can law give us reasons? 7)Is there an essential difference between legal reasoning and reasoning about politics, policies, or justice? 8) What is justice? 9) What is the role of judges? 10) What justifies criminalizing various acts and administering punishment?

Throughout the course, special attention will be paid to the answers given to the above questions by major figures in the field of philosophy and law, such as Confucius, Mencius, Han Fei, Plato, Aristotle, Aquinas, Hobbes, Rousseau, Hume, Bentham, Austin, Hart, Dworkin, etc. on the one hand, and to the connections between philosophy and legal practice, especially statute and case law.

Pre-requisite: None

#### LAWS2000/LAWS2001 GENERAL THEORY OF CIVIL LAW I

Title I. Introduction. 1. General concepts of civil law. 2. Preliminaries.

Title II. General theory of the civil juridical order. Chapter I. Sources of civil law. Chapter II. Fundamental principles of civil law.

Title III – General theory of the civil juridical relationship. Chapter I. General theory of the individuals of the juridical relationship. 1. General concepts. 2. Natural persons. 3. Legal persons. Chapter II. General theory of the object of the juridical relationship. 1. General concepts. 2. Things and patrimony.

Pre-requisite: LAWS1000 and LAWS1001

#### LAWS2002/LAWS2003 GENERAL THEORY OF CIVIL LAW II

Title I. General theory of the civil juridical relationship (cont.). Chapter I. General theory of the juridical fact. 1. About juridical facts in general: concepts and classifications; acquisition, modification and extinction of juridical relationships; juridical transaction and simple juridical act. 2. Transactional declaration: general concepts; interpretation and integration of juridical transactions; divergence between the intention and the declaration; defects of the intention; representation in juridical transactions. 3. Transactional object. 4. Accidental elements of juridical transactions. 5. Ineffectiveness and invalidity of juridical transactions: general concepts; invalidities; reduction and conversion of juridical transactions.

Pre-requisite: LAWS1005 and LAWS1006, LAWS2000 and LAWS2001

#### LAWS2004/LAWS2005 ADMINISTRATIVE LAW I

I.Public administration 1. Public Administration. Concept and different meanings. 2. Historical evolution. 3. Public Administration and the other State functions 4. Administrative systems: comparison between the continental-European system and the British system.

II. Administrative organization 1. The structure of the public administration 2. Types of interorganic relations: hierarchy, superintendence and supervision; delegation of powers 3. The Administrative organization of the SARM.

III. The administration and the Law 1. Public Administration and private law 2. Public administration and administrative law: the principle of legality of Administration. 3. Activity bound by the law and discretionary activity: the administrative discretionary activity. 4. Sources of administrative law: in special, the administrative Regulations.

Pre-requisite: LAWS1000 and LAWS1001, LAWS1005 and LAWS1006

#### LAWS2006/LAWS2007 ADMINISTRATIVE LAW II

I. The Administrative Activity. 1. General notions: legal facts in administrative law; in special the administrative illicit 2. Administrative activity.

II. The regulatory power. 1. Notion, function and grounds for the administrative regulations 2. The administrative regulations and the law: admissibility of the independent regulations. 3. The regulatory procedure.

III. Administrative act 1. Notion and meaning 2. Typology 3. Instrumental acts. 4. The administrative procedure. 5. Effectiveness and legal strength of the administrative act: the

possibility of execution by Administration of it own acts. 6. The structure of the administrative act: the subject, the object and the declaration. 7. The defects of the administrative act. Types of invalidity.

IV. The administrative contract 1. General notions: the public administration, consensus and authority. 2. Legal regime: formation, content and principles relating to the "life" of the administrative contracts. Invalidity of administrative contracts.

Pre-requisite: LAWS2004 and LAWS2005

#### LAWS2012 ECONOMICS

1. Offer and demand. 2. Consumers and Producers decisions. 3. The structure of the Market. 4. The National Income Accounting and the determination of the national income theory. 5. Financial and Monetary Policies. 6. Inflation and Unemployment. 7. Economic System and Development of Regional Economy.

Pre-requisite: LAWS1000 and LAWS1001

#### LAWS3000/LAWS3001 OBLIGATION LAW I

Chapter I. Introduction. 2. Obligation law and the importance of its study. 2. Reference to Comparative Law. 3. Guiding principles of Civil Law and Obligation Law. 4. General notions. Obligation stricto sensu. Performance of the obligation. The problem of non-autonomous obligations. Complex "obligational" relation. Function of the obligation and the interests of the creditor. 5. Credit rights and property rights. The external effect of obligations. 6. Guiding Principles of Obligation Law. Principle of individual autonomy and contractual freedom. Principle of good faith. Principle of the unjust enrichment.

Chapter II. Sources of obligations. 1. Contracts. Contractual relations. 2.1. Promissory contract. 2.2. Preference pact. 2.3. Exception of non-performance. Termination of the contract. 3. Unilateral transactions. 4. Management of alien affairs. 5. Unjust enrichment. 6. Civil Liability. 6.1. Contractual and non contractual liability. 6.2. Liability for unlawful actions. Requirements and regime of the obligation on compensation. The function of civil liability. 6.3. Objective Liability for damages caused by animals. Liability for damages caused by terrestrial circulation vehicles. Liability for damages caused by electrical energy or gas installations. 6.4. Liability for legal actions. 6.5. Mandatory civil liability insurance. 6.6. Mandatory automobile civil liability insurance. 6.7. Limitations to the liability and the right to compensation.

Pre-requisite: LAWS1000 and LAWS1001, LAWS1005 and LAWS1006

#### LAWS3002/LAWS3003 OBLIGATION LAW II

Chapter I. Modalities of obligations. 1. Obligations in relation to their binding: the natural and civil obligations. 2. Obligations in relation to the individuals: conjoint and jointly liable obligations. 3. Obligations in relation to the object. Pecuniary, interest and compensation obligations.

Chapter II Transfer of obligations. 1. Transfer of credit. Sub-rogation. 2. Individual transfer of debts. 3. Cession of the contractual position.

Chapter III General security of obligations. 1. Scope. 2. Protection of patrimonial guarantees. Void contracts. Sub-rogation of the creditor to the debtor. *Actio pauliana*. Seizure of assets.

Chapter IV. Special security of obligations. 1. Personal and real securities. 2. Bail. 3. Real securities. 4. Bond.

Chapter V. Performance and non performance of obligations. 1. Performance. Performance and principle of good faith. Timeliness of obligations. Who can perform and to whom can the obligation be performed. Place and deadline of the performance. Allocation and evidence of performance. 2. Non performance. Impossibility and delay not imputable to the debtor. Impossibility and delay imputable to the debtor. 3. Defective performance. 4. Contractual regulation of the rights of the creditor. Penalty clause. 5. Forced execution of the credit. Action to enforce the performance, specific performance, performance by equivalent. 6. Cession of assets to the creditors. 7. Delay of the creditor.

Chapter VI. Causes of extinction of obligations besides the performance.

Chapter VII. Special contracts. 1. Contracts regulated and not regulated in the law. 2. Mixed contracts and contracts related. 3. Contracts regulated in the Civil Code. 4. Gaming and betting.

General and special features of gaming and betting. Pre-requisite: LAWS2000 and LAWS2001, LAWS3000 and LAWS3001

#### LAWS3004/LAWS3005 LABOUR LAW

Title I. Labour Law: concept, object and importance. Chapter I. Historical evolution of Labour Law. Chapter II. Sources of Labuor Law.

Title II. The labour contract. Chapter I. Concept, elements and legal characteristics of the labour contract.

Title III. The formation of the labour contract. Chapter I. Parts of the labour contract. 1. Employee. 2. Employer. 3. Rights and duties. Chapter II. Types of employment contracts. 1. Infinitive duration period. 2. Fixed term and non-fixed term. Chapter III. Probationary period. Chapter IV. Employment of minors.

Title IV. Working time. Chapter I. Normal working hours. 1. Exemption for the working time schedule. 2. Overtime work. 3. Night work. 4. Shift work. Chapter II. Periods of rest. 1. Weekly rest. 2. Holidays. 3. Annual leave. 4. Absences. 5. Maternity leave.

Title V. Salary. Chapter I. Types of salary. 1. Basic remuneration. 2. Variable remuneration. 3. Calculation of the retribution. 4. Compensation and deductions on salary.

Title VI. Termination of the labour relation. Chapter I. Forms of termination. 1. Revocation. 2. Resolution. 3. Rescission. 4. Expiry.

Title VII. Labour relations with non-residents workers. Title VIII. Social Security.

Pre-requisite: LAWS1000 and LAWS1001, LAWS1005 and LAWS1006

#### LAWS3006/LAWS3007 COMMERCIAL LAW I

Title I. The exercise of commercial entrepreneurs in general. Chapter I. 1. Introduction to Commercial Law. 2. The commercial law as the law "around" the business. Chapter II. Commercial entreprise and Commercial entrepreneurs. 1. Commercial entrepreneurs and acts of commerce. Chapter III. Commercial entrepreneurs. 1. Commercial capacity, Impediments and incompatibilities. 2. Legitimacy. 3. Obligations of commercial entrepreneurs. 3.1. Firm. 3.2. Commercial bookkeeping. 3.3. Commercial register. 3.4. Render accounts. Chapter IV. Representation in the performance of an enterprise. 1. Managers. 2. Assistants of an entrepreneur. Chapter V. Liability for the exercise of an commercial enterprise. 1. Liability for debts contracted in the exercise of an enterprise. 2. Liability for defective products. Chapter VI. A commercial enterprise as an object of business. 1. The right over the enterprise and the rights on the assets of the enterprise. 2.2. Lease of commercial enterprise. 3. Usufruct of commercial enterprise. 4. Pledge of commercial enterprise. Chapter VII. Trade distinctive signs. 1. Firm (remission). 2. Name and emblem. 3. Trademark. Chapter VIII. Competition legal discipline. 1. Competition in general. 2. Unfair competition.

Title II. Negotiable instruments. Chapter I. Negotiable instrument in general. Chapter II. Bill of exchange. 1. Typical notes of the obligation incorporated in a negotiable instrument. 2. Requisites of the bill of exchange. 2.1. Essential requisites. 2.2. Non essential requisites. 3. Legal institutes of the Bill of Exchange. 3.1. Drawing. 3.2. Endorsement. 3.3. Acceptance. 3.4. "Aval". 3.5. Types of maturity. 3.6. Recourse.

Pre-requisite: LAWS2002 and LAWS2003

#### LAWS3008/LAWS3009 COMMERCIAL LAW II

Title I. Commercial companies in general. Chapter I. Notion of commercial company and related figures. Chapter II. Brief historical reference. Chapter III. Types of commercial companies.

Title II. Constitution and functioning of commercial companies. Chapter I. Constitution of commercial companies. Chapter II. Legal personality and capacity of commercial companies. Chapter III. On the shares. Chapter IV. Capital and legal capital, profits and losses. Chapter V. Company organs. 1. Administration. 2. General Meeting. 2.1. Company resolutions. 2.2. Ineffectiveness of company resolutions. 2.2.1. Resolutions ineffective. 2.2.2. Void resolutions. 2.2.3. Voidable resolutions. 2.2.4. Nonexistent resolutions? 3. Supervisory Board and single supervisor. 4. The company secretary. 5. The liability of members of company organs.

Title III. Amendment of the articles of association. Chapter I. Amendments to the articles of

association. 1. Generalities. 2. Increase or reduction of the company capital. 3. Modification of the company object. Chapter II. Mergers and divisions of companies. Chapter III. Transformation of companies.

Title IV. Extinction of commercial companies. Chapter I. Winding up of commercial companies. Chapter II. Liquidation of commercial companies Pre-requisite: LAWS3006 and LAWS3007

LAWS3010/LAWS3011 CRIMINAL LAW I

Title I. General Considerations. Chap. I. Criminal Law in a formal perspective. 1. Concept. Chap. II. The whole Criminal Law Science. Chap. III. Criminal Law main principles. Chap. IV. The role of the Criminal Law in the legal system – the question of the material concept of crime. 1. The criminal legal property. Chap. V. The aim of the penalties and the security measures. Chap. VI. Criminal Law limits. 1. Comparison to the other Law fields. Chap. VII. The principle of the legality – role, reasons and consequences. 1. Criminal Law interpretation and integration. 2. Criminal Law validity – application of the Criminal Law depending on time and space factors.

Title II. The General Theory of the Criminal Infraction. Chap. I. Introduction. 1. Constitutive elements of the crime. 2. Classification of the crimes. Chap. II. The so-called 'incriminatory type'. 1. The illicit type in an objective perspective and the attribution of the result to the behave. 2. The illicit type in a subjective perspective. 3. The intention and its elements. 4. The problem of the mistake. 5. The negligence.

Pre-requisite: LAWS1000 and LAWS1001, LAWS1005 and LAWS1006

#### LAWS3012/LAWS3013 CRIMINAL LAW II

Title I. Continuation of the General Theory of the Criminal Infraction. Chap. I. The so-called 'justifying type'. 1. The causes of exclusion of the illicit. Chap. II. The so-called 'type of fault'. 1. Definition of the criminal fault. 2. Intentional and negligent fault. 3. Non-imputability due to the age or to a mental health disorder. 4. The causes of exclusion of the fault. Chap. III. Punishment. Chap. IV. Omission – general notions. Chap. V. Attempt. Chap. VI. Participation in the crime - perpetration and complicity.

Title II. Legal consequences of the crime. Chap. I. Penalties. 1. Preliminary remarks. 2. Imprisonment – or the penalty that restricts the freedom . 3. Fine – or the penalty that restricts the property. 4. Alternative penalties. 5. Accessory penalties. Chap. II. Determination of the penalty. 1. The system of determination of the penalty. 2. The concrete penalty measure. 3. Special cases of determination of the penalty. Brief approach.

Pre-requisite: LAWS3010 and LAWS3011

#### LAWS3014/LAWS3015 PROPERTY LAW

Introduction (evolution of the systems of real property rights). I – Notion of real property right. II. Characteristics of the real property rights. III. The real property rights. Community property. Joint ownership. Horizontal ownership. IV. Limited real property rights. The usufruct. The use and habitation rights. Timesharing right. Superficial right. Emphyteusis constituted before the new Civil Code of Macao. Real property rights resulting from concession of government land in Macao: granted dominium utile; ownership of buildings on leased land. Abstract on real property rights for acquisition and for real security. V. Possession. Definition. Possession and mere detention. Rights that can be possessed. Things that can be possessed. Capacity for possess. Characteristics of possession; Legal actions to defend the possession. Usucapio (the adverse possession).

Pre-requisite: LAWS2002 and LAWS2003

#### LAWS3016/LAWS3017 ADMINISTRATIVE LAW III

I.Introduction. 1. Administrative justice. 2. Separation of powers. 3. Main historical models of administrative justice. 4. Subjective and objective models.

II. Evolution of the judicial review in Macao. 1. Jurisdictional competence within the judicial review in Macao. The administrative Court. Appeal Courts. Judicial organization in Macao.

III. Mechanisms of Judicial review. 1. Judicial review. 1.1 Concept and nature. 1.2 General

principles. 1.3 Administrative acts that can be judicially reviewed. 1.4 Procedural requirements 1.5 Standing of the parties 1.6 Proceeding. 2. Special judicial remedies 2.1 Judicial review of norms 2.2 Electoral litigation 2.3 Administrative infractions 3. Administrative Actions 3.1 Judicial action on administrative contracts 3.2 Judicial action on torts liability 3.3 Injunction. Judicial action to compel the practice of an administrative act 3.4 Judicial action for the protection of rights and lawful interests. 4. Interim Measures. 4.1 Suspension of the effects of an administrative decision. 4.2 Provisory injunction. 4.3 Production of endangered evidence. 4.4 Other interim measures.

IV. Judicial Decisions 1. Legal effects of the judicial decisions

V. Judicial appeals 1. Right to appeal 2. Legal regime.

VI. Execution of judicial decisions. 1. Execution for the delivery of an asset or performance in kind. 2. Execution for payment of an amount 3. Guarantees against illegitimate non execution.

VII. Arbitration 1. Ambit. 2. Appeal of arbitration. 3. Arbitration centers.

Pre-requisite: LAWS2006 and LAWS2007

#### LAWS3018/LAWS3019 CIVIL PROCEDURAL LAW I

I.Introduction. Procedure and Procedural Law. Jurisdiction and jurisdictional function. General frame of the action in civil jurisdiction.

II. The action. The right to a legal action. Legal classification of the actions: according to their goal, according to their form. Interlocutory injunctions.

III. Civil Procedure Law. Concept. Features. Importance. Interpretation and integration of its norms. Application in time. Application in space.

IV. Sources of the Portuguese Civil Procedure Law and close Disciplines. Historical evolution. Special mention of Macao.

V. Theory of the Procedural Relationship. The instance as a procedural relationship. The structure of procedural relationship. The parties. Procedural requisites concerning the parties. Judiciary personality. Judiciary capacity. Legitimization. Compulsive representation by an attorney at law. The procedural interest. The court. The judicial organization. Jurisdiction and competence. The object of the procedural relation. The claim and the cause of action.

VI. The process forms. Common process and special processes. Ordinary and summary common process. Special process of small claims.

Pre-requisite: LAWS2000 and LAWS2001, LAWS3000 and LAWS3001, LAWS4000 and LAWS4001

#### LAWS4000/LAWS4001 FAMILY LAW

Chapter I. Introduction. 1. Legal notion of family. 2. Constitutional principles. 3. Sources of Family Law. 4. Features of family law and of family rights.

Chapter II Family relations. 1. Relatives. Affiliation relationship. Establishment of mother-child relationship. Establishment of father-child relationship. Assisted procreation. Medical assisted procreation. Effects of the affiliation. Parental responsibility. 2. In-laws. 3. Adoption. Constitution and effects. 4. Marriage. Concept, Matrimonial regimes, features of the marriage as an act and as a status.

Chapter III. Marriage. 1. Constitution of the matrimonial relation: marriage as an act. Civil marriage. Requirements. Consent. Capacity. Formalities. Invalid marriage. Putative marriage. 2. Effects of marriage: marriage as a status. 2.1. Personal effects. 2.2. Patrimonial effects. General principles and suppletive regime of the matrimonial goods. 3. Modification of the matrimonial relations. Judicial separation of goods. Judicial separation of persons and goods. 4. Termination of the matrimonial relation. 4.1. Death and presumed death. 4.2. Divorce. Divorce by mutual consent. Process. Nature. Litigious divorce. Causes of litigious divorce.

Chapter IV De facto union. Notion of legally relevant de facto union.

Pre-requisite: LAWS1000 and LAWS1001, LAWS1005 and LAWS1006

#### LAWS4002/LAWS4003 PATRIMONIAL FAMILY LAW AND SUCCESSION LAW

Title I. Patrimonial Family Law. Chapter I Introduction. Patrimonial effects of relatives, in-laws and adoption. Chapter II Patrimonial effects of marriage. 1. Regime of the matrimonial goods. Nuptial agreements. Description of the legal regimes of goods. Separation. General community

of property. Community of acquired property. Participation in acquired property. Administration of the goods of the couple. Matrimonial illegitimacies. Liability for the debts of the spouse. 2. Termination of the patrimonial relations. Chapter III Alimony.

Title II. Succession Law. Chapter I Introduction. Legal notion of succession. Constitutional principles and sources. Succession systems. Features of the succession law and of the succession rights. Chapter II Succession in general. 1. Death as a prerequisite to succession. 2. Several types of succession by death. 3. Heir and legatee. 4. Opening of succession. 5. Succession "calling", succession "appointment", content and object of the succession "calling". Prerequisites of succession "calling". Prevalence of the succession "appointment". Existence of the "called" person. Succession capacity, indignity and disinheritance. Modes of "calling". Indirect "calling". Right to representation. Direct substitution. Right of accretion. 6. Vacant succession. 7. Succession acquisition. Acceptance and refusal of the inheritance. 8. Request of the inheritance. 9. Transfer of the inheritance. 10. Administration of the inheritance. 11. Charges for the inheritance and its liquidation. 12 Partition of the inheritance. Chapter III Successions in special. 1. Legal succession. 2. Legal mandatory succession. 3. Testate succession. 4. Contractual succession. Partition in life.

Pre-requisite: LAWS4000 and LAWS4001

#### LAWS4004/LAWS4005 COMMERCIAL LAW III

Title I. Commercial contracts in general. Chapter I. Introduction. Chapter II. General theory of Commercial contracts. 1. Physiognomy of the modern commercial contract: the problem of standard contractual clauses. 2. Special legal regime of commercial obligations. 3. Prescription of commercial obligations. 4. Classification of commercial contracts.

Title II. Study of some Commercial contracts in particular. Chapter I. Contract of sale. Chapter II. Contract for sale or return. Chapter III. Supply contract. Chapter IV. Commission contract and forwarding contract. Chapter V. Distribution contracts. 1. Agency contact. 2. Commercial concession contract. 3. Franchising. 4. Brokerage contact. Chapter VI. Advertising contracts. 1. Contract Advertising. 2. Advertising diffusion contract. 3. Advertising creation contract. 4. Advertising sponsorship contract. Chapter VII. Carriage contract. Chapter VIII. Deposit in general warehouses. Chapter IX. Lodging contract. Chapter X. Current account contract. Chapter XI. Securities lending contract (reporte). Chapter XII. Banking contracts. 1. Bank deposit. 2. Rental of safe deposit boxes 3. Opening credit. 4. Bank advance. 5. Current Bank account. 6. Bank discount. 7. Factoring contract. 8. Leasing. Chapter XIII. Guarantee contracts. 1. Commercial pledge. 2. Fiduciary transfer guarantee. 3. Floating charge. 4. Independent guarantee. Chapter XIV. Insurance contract.

Pre-requisite: LAWS3008 and LAWS3009

#### LAWS4006/LAWS4007 PRIVATE INTERNATIONAL LAW

Title I. 1. Introduction. 2. Method. 3. General principles and regulation values. 4. Function of the conflict rule. 5. Structure of the conflict rule. 6. Classification 7. Renvoi (remission/transmission). 8. Vested rights. 9. General clause of public policy ("ordre public"). 10. The "fraus legis".

Title II. 1. Personal law. 2. Natural persons. 3. Juridical persons. 4. Law on foreignors. 5. Legal business. 6. Obligations. 7. Real property rights. 8. Family. 9. Succession.

Pre-requisite: LAWS2002 and LAWS2003, LAWS4002 and LAWS4003

#### LAWS4008/LAWS4009 CRIMINAL PROCEDURAL LAW

I.General Notions. 1. Function and meaning of the criminal law procedure. 2. Criminal law procedure within the legal system. 3. The juristic and constitutional compliance of the criminal procedure and its structure. 4. The application of the criminal procedure law.

II. General Principles of Criminal Procedure Law. 1. Principles relating to the initial stage of the procedure. 2. Principles relating to the continuation of the procedure. 3. Principles relating to evidence. 4. Principles relating to the form of the procedure.

III. The Agents of the Criminal Procedure. 1. Court. 2. Public prosecutor and criminal police bodies. 3. The defendant and the defendant's lawyer. 4. The victim and injured party.

IV. Procedural measures 1. Means to obtain evidence. 2. Safeguard and Police measures. 3. Coercive Measures 4. Measures of patrimonial guarantee.

V. Stages of the Criminal Procedure. 1. The forms of criminal procedure and their respective procedure. 2. Appeals.

Pre-requisite: LAWS3012 and LAWS3013

# LAWS4010 POLITICAL SCIENCE

Chapter I - Object, method, scope and objectives of political science. Chapter II - Review of politics over centuries. Chapter III - The forms and systems of modern governments. Chapter IV - Systems of some particular governments. Chapter V - Forms and system of Macao government. Pre-requisite: LAWS1000 and LAWS1001, LAWS1005 and LAWS1006

# LAWS4011/LAWS4012 CIVIL PROCEDURAL LAW II

Title I. Theory of pleadings. One. Concept of pleading. 2nd. Form. 3rd. Time. 4th. Place. 5th. Subjects. 6th. Purposes. 7th. Pathology of pleadings.

Title II. Dynamics of procedural relationship. One. Start the instance and its development. 2nd. Modifications of the instance. 3rd. Suspension and termination of proceedings. 4th. No need to adjudicate. 5th. The incidents of the proceedings.

Title III. Formalism of ordinary declarative process and its phases. Chapter I. Articulated. One. Initial petition. 2nd. Order injunction. 3rd. Quote. 4th. Challenge: challenge for defense and for defense exception. 5th. Counterclaim. 6th. Reply and rejoinder. 7th. Articulated supervening. Chapter II. Sanitation and preparation process. One. Pre-Order exonerating. 2nd. Selection of the facts. 3rd. Curative act. Chapter III. Instruction process. One. The evidence in general. 2nd. Right evidential material and formal evidentiary law. 3rd. The burden of proof and rules. 4th. Principles that govern the production of evidence in court. 5th. Evidence. Chapter IV. Discussion and judgment. One. The final hearing. 2nd. The final sentence. 3rd. Effects of sentence. 3.1. The res judicata and its species. 3.2. Subjective and objective limits of res judicata. 3.3. Other effects of final judgment.

Title IV. Formalism of common abstract declarative process. One. Differences regime regarding how common ordinary. 2nd. Deadlines.

Title V. Process particular concerning small claims. One. Competence. 2nd. Specialties of conduct.

Pre-requisite: LAWS2002 and LAWS2003, LAWS3002 and LAWS3003, LAWS4002 and LAWS4003, LAWS3018 and LAWS3019

# LAWS4013/LAWS4014 CIVIL PROCEDURAL LAW III

Title I. General theory of executive action. One. Concept and objectives. 2nd. Rate cool.

Title II. Inadmissibility of executive action. One. Specific assumptions. 1.1. Assumption formal and substantive requirements. 1.2. The enforceable legal nature and historical evolution. 1.3. Rating enforceable. 1.4. Consequences of lack of enforcement or its unenforceability. 1.5. Sure, liquidity and enforceability of the obligation. 2nd. General inadmissibility of executive action. 2.1. The jurisdiction of the court.2.2. The formal legitimacy. 2.3. The mandatory legal representation. Title III. Forms of executive process. One. Common process and special processes. 2nd. Legal Regime of different species and forms of execution.

Title IV. Process executive for payment of a certain amount and its phases. Chapter I. Ordinary form. One. Articulated. 1.1. Initial application. 1.2. Order injunction. 1.3. Quote of the run. 1.4. The attached opposition's run. 2nd. The attachment. 2.1. Definition and purpose. 2.2. Opposition to attachment. 3rd. Contest creditors. 3.1. Complaint and checking credits. 3.2. Processing. 4th. Payment and its modalities. 5th. Right of redemption. 6th. Term of the executive process. 7th. Renewal of execution extinct. Chapter II. Summary form of the implementation process for the payment of a certain amount.

Title V. Implementation process to deliver right thing. One. Forms common and ordinary common summary. 2nd. Conduct.

Title VI. Implementation process to provide that. One. The fact that positive and negative. 2nd. Forms common and ordinary common summary.

Pre-requisite: LAWS4011 and LAWS4012

### LAWS4016 RESEARCH AND INTERNSHIP

This course can help students to understand the basic elements of learning and applying to the law: standardization; sociality; logicality; definability; finality; sense of justice. This course introduces students to the basic skills of public speaking and debate. It examines the functions, elements, types and roles of public speaking. Through lectures and practices, students learn essential skills in writing, speaking and debating that engage a public audience. In addition to the coursework, students have to choose to look for a relevant workplace to perform 100 hours of internship or to attend 10 court trials and prepare a report for any 5 out of the 10 court trials attended to fulfill the internship requirement.

Pre-requisite: None

#### LAWS4034/LAWS4035 LEGAL CONSEQUENCES OF CRIME

Legal consequences of the crime. 1. The legal consequences of the crime and the criminal penalty. 2. The reaction to crime of the criminal law in force in Macao in the context of the criminal policy models. 3. Preliminary penalties, a) Primary penalties and secondary penalties. b) The substitution penalties in the system in force in Macao. 4. The imprisonment penalty and the fine. 5. The general theories on the determination of the penalty. 6. Steps on the determination of the penalty. a) Mitigation circumstances and aggravity circumstances. b) The criterium of the article 84 of the criminal code. c) Judicial determination of the penalty.

Pre-requisite: LAWS3012 and LAWS3013

#### PORT1002 ORAL COMPREHENSION AND PRODUCTION SKILLS I

A course designed for the development of appropriate and accurate pronunciation of the Portuguese sounds, involving their training and practice. Students will actively work on the recognition and production of oral texts through simulation of different communication contexts and other role play activities.

Pre-requisite: None

#### PORT1003 WRITTEN COMPREHENSION AND PRODUCTION SKILLS I

Practical introduction to Portuguese concerning elements of all language skills and selection of cultural topics. The course will give particular interest to the use and comprehension of basic Portuguese structures and lexicon in context.

Pre-requisite: None

#### PORT1004 ORAL COMPREHENSION AND PRODUCTION SKILLS II

This course will reinforce and further develop the students skills in the recognition and production of the sounds of Portuguese learned during the first semester. Students will produce short dialogues on everyday topics, draft different communication situations and perform it in the class. It is expected that students may be able to discuss actuality themes, that they are familiar with, developing their vocabulary and a more accurate pronunciation. Pre-requisite: PORT1002

#### PORT1005 WRITTEN COMPREHENSION AND PRODUCTION SKILLS II

A practical more advanced course involving the comprehension and use of basic structures and lexicon of Portuguese. Students work with exercises and activities involving the use of structures and lexicon in context.

Pre-requisite: PORT1003

#### PORT2006 ORAL COMPREHENSION AND PRODUCTION SKILLS III

The course is designed to develop an intermediate language level training and practice in accurate pronunciation and production of oral texts. From students it is expected a good fluency and knowledge of vocabulary increasing their capacity of self-correction of production and pronunciation. The course will also involve the study and comprehension of short videos of contemporary life and culture in Portuguese-speaking countries. Pre-requisite: PORT1004

#### PORT2007 WRITTEN COMPREHENSION AND PRODUCTION SKILLS III

An introduction to the structuring and writing of different types of texts (letters – private or business – memoranda and basic essays). Students are expected to use Regular and Irregular verbs and learn the Subjunctive mode. They will work with exercises and activities involving the use of structures in context and write different types of texts for presentation and discussion. Pre-requisite: PORT1005

## PORT2012 ORAL COMPREHENSION AND PRODUCTION SKILLS IV

Continuation of content and themes of *Oral Comprehension and Production Skills III*. Development of fluency, pronunciation and comprehension of oral texts. Students are expected to have fluency and communicative competence through the study of video (discussion of films, news items and interviews), simulation of situations and improvisation of dialogues. Pre-requisite: PORT2006

### PORT2013 WRITTEN COMPREHENSION AND PRODUCTION SKILLS IV

A detailed revision of the use of structures learned by students during the previous three semesters and the reinforcement of new structures. Students are expected to write essays on different topics, to practice summary and abstract writing. Pre-requisite: PORT2007

### PORT3019 ADVANCED COMPREHENSION AND PRODUCTION SKILLS I

Language Laboratory practice in comprehension of real-life audio and video texts in different varieties of Portuguese, focusing on areas of current affairs, diplomacy, legal language, and business. Transcription and oral and written report of audio and video texts. Advanced production through simulation activities.

Pre-requisite: PORT3011

#### PORT3020 ADVANCED COMPREHENSION AND PRODUCTION SKILLS II

Language Laboratory practice in comprehension of real-life audio and video texts in different varieties of Portuguese, focusing on areas of current affairs, diplomacy, legal language, and business in the context of the Portuguese-speaking world. Transcription and oral and written summary report. Advanced production through simulation activities. Pre-requisite: PORT3019

# **BACHELOR OF LAW (IN CHINESE LANGUAGE) – EVENING**

## LAWS1000/LAWS1001 INTRODUCTION TO LAW

Title I. The concept of Law. Chapter I. The Law as part of the whole social order. 1. The Law and other normative orders. 2. The religion. 3. The ethic. 4. The social behavior.

Title II. The aims or values of the Law. Chapter I. Justice and security.

Title III. The structure of the Law. Chapter I. The rule of Law.

Title IV. Sources of Law. Chapter I. voluntary sources of Law and non-voluntary sources of Law. Title V. Interpretation of the Law. Chapter I. Types of interpretation. 1. Elements of interpretation. 2. Results of the interpretation. Chapter II. Integration of the gaps in the Law. 1. Analogy. 2. Creation of a ad hoc rule.

Pre-requisite: None

## LAWS1002 LEGAL HISTORY

Title I. Chapter I. Legal thoughts in traditional Chinese society. 1. Divine Law 2. Patriarchal law 3. Confucianism. 4. Legalism. Chapter II. Legal and political thoughts in Modern China. Chapter III. 1. Legal History of Macao. 1.1 Introduction. 1.2 Specificity and sources of law of overseas Portuguese territories. 1.3 Law and justice. 1.3.1. Portuguese law and local laws, scope of

application. 1.3.2 Indigenous law and the mixed relations. 1.3.3 Legal pluralism and mixed jurisdiction in Macao. 1.3.4. Judicial organization of Macao.

Title II. Chapter I. Introduction. 1. Social history of law. Chapter II. The formation of the Common Law. 1. The Roman Law. Sources: (Corpus Iuris Civilis). General Characteristics of the Praetor's Law. The evolution of Roman law until the imperial constitutions. vulgarrecht. 2. Legal pluralism. The role of legal thought in the formation and evolution of the common law. The glossators, commentators, mos gallicus iura docendi, usus modernus pandectarum and naturalists. Chapter III. Philosophy of Law. 1. Legal positivism, legal, historical, sociological and conceptual. 2. Pure theory of law and the right alternative use.

Pre-requisite: None

#### LAWS1003/LAWS1004 CONSTITUTIONAL LAW

Title I. General notions of Constitutionalism. Chapter I. Constitution as legal statute of politics. 1. The autonomy of public sphere. 2. State as a political form of modernity. 3. The crisis of State: regionalism and globalization. Chapter II. From Constitutionality to Inter-constitutionality. 1. The hierarchical and normative scheme of the constitution of the supervising state. 2. The binding inter-constitutionality of the supervised State. 3. Democracy and rule of law. Chapter III. Comparative Constitutional Law. 1. The Portuguese constitutional experience. 2. The Chinese constitutional experience. 3 The evolution of Macao autonomic status. Pre-requisite: None

#### LAWS1005/LAWS1006 MACAO BASIC LAW

Title I. The Basic Law of the SARM. Chapter I. Characterizing the SARM. 1. SARM as a political region. 2. Scope of autonomy of SARM. 3. SARM's political system. Chapter II. Purposes of Basic Law. 1. Theories on the purposes of Basic Law. 2. Art. 31 of the CPRC and its double task. 3. Luso-Chinese joint-declaration. Chapter III. Legal nature of the Basic Law. 1. Ideas on the legal nature of the Basic Law. 2. Basic Law as an ordinary legal norm. 3. Basic Law as statutory legal norm. 4. Basic Law as a reinforced legal norm. 5. Basic Law as a material constitutional legal norm. Chapter IV. Guaranty of the Basic Law. 1. Interpretation of the Basic law. 2. Guaranty of the reinforced value of the Basic Law. 3. Limits to revision of the Basic Law. Pre-requisite: LAWS1003 and LAWS1004

#### LAWS1007/LAWS1008 PUBLIC INTERNATIONAL LAW

1.Concept and nature of Public International Law. 2. Relationship between International and Domestic Law. 3. Sources of Public International Law: treaties and customary norms. 4. International Legal Personality. 5. The State: elements of the State, the recognition of State, succession of states, rights and duties of the State. 6. International Organizations: definition and types. The United Nations. 7. Diplomatic and Consular relations Law. 8. The pacific resolution of the international conflicts. 9. Individuals in Public International Law. 10. Application of Public International Law to Macao.

Pre-requisite: None

#### LAWS1015 ENHANCEMENT LEARNING ACTIVITIES

Apart from regular legal courses, students are encouraged to participate in other activities, such as attending seminars, participating in competitions, sharing and discussing legal problems with one another.

Pre-requisite: None

#### LAWS1016 PUBLIC ECONOMICS

The meaning of Public Economy - Financial Activity of State: Expenses, Revenues and Budget. Economic Activity of State: Characterization of Public Economic activity and the Enterprise activity of State - Public Revenues - Public Expenses - Public Budget - Financial Policy problems. Pre-requisite: LAWS2006 and LAWS2007

## LAWS1017 TAX LAW

Introduction.

I. Tax Law. Historical background. Theory of taxation. Taxes and other contributions. Administrative taxation procedure. Classification of taxes. Definition of Taxes. Tax law and other fields of law. Constitutional Law. Administrative Law. Commercial law. Private Law. Criminal Law. International Law.

II. Tax Jurisdiction. Sources of tax law. General principles of law. International and interregional tax law agreements. Customary law. Jurisprudence. Doctrine. Interpretation of tax laws. Integration of tax laws. Application of tax laws in time and space. Double taxation. Tax avoidance and tax evasion. International exchange of tax information.

III. Legal relation. Nature. Parties. Tax obligation. Tax duties and warranties. Execution procedure.

IV. Taxation in Macao. Evolution. Taxation on income. Taxation of property. Taxation of services. Stamp duty. Special Gaming Tax. Other taxes.

Pre-requisite: LAWS2006 and LAWS2007

#### LAWS1018 COMPARATIVE LEGAL SYSTEMS

Title I. Introduction. 1. The concept of comparative law and its neighbouring disciplines. 2. The history of comparative law. 3. The function and aims of comparative law. 4. The method of comparative law. 5. Legal formants. 6. Comparative law as a science. 7. The grouping of the legal systems into families.

Title II. Legal traditions of the world. 1. Civil Law: a) History. b) Structure. c) Sources. d) The French and German experiences of Codification. e) The diffusion of the respective patterns. 2. Common Law. 2.1. The English Law: a) History. b) Structure. c) Sources. 2.2. The American Law: a) History. b) Structure. c) Sources. 3. Far East Law. 3.1. Chinese Law. 3.2. Japanese Law. 4. Religious Law. 4.1. Islamic law. 4.2. Hindu Law. 5. African law.

Title III. Introduction to European Union Law.

Pre-requisite: LAWS2002 and LAWS2003, LAWS4002 and LAWS4003

#### LAWS1019 ENVIRONMENTAL LAW

This course covers the environmental values and policies, history of environmental law, the principles and framework of environmental regulations, the use of risk assessment techniques in environmental law, the regulatory tools of environmental law, and the enforcement and dispute settlement mechanisms and international responsibilities. Special topics like water pollution, air pollution, cross-border movement of hazardous wastes and other local, regional and global environmental problems.

Pre-requisite: LAWS2006 and LAWS2007

#### LAWS1020 REGISTRY AND NOTARY LAW

I. Concept: 1. the structure and function of registry and notary agencies of Macao SAR. 2. The similar organs and functional difference. 3. The common perspectives of public administration with private interest: Prevention of conflict as an indispensable contribution in administration of justice.

II. The statute law of registry and notary: 1. Organic law. 2. Law codes. 3. Separate legislation.
 III. Law of civil registry.1. Concept and scope. 2. Theory and practice.3. Principle of information.
 IV. Law of Registry of House. 1. Concept and scale 2. Theory and practice. 3. Principle of information.
 Commercial registry and registry of automobiles, ships and airplanes.

V. Notary Law. 1. Concept and scope. 2. Theory and practice. 3. Principle of information. Pre-requisite: LAWS3002 and LAWS3003, LAWS3014 and LAWS3015

#### LAWS1021 FORENSIC MEDICINE

Forensic Medicine (concept, organization). Corporal offenses. Forensic sexology. Medical reports and certificates. Sudden natural death. Identification. Violent death. Injury and death from physical agents. Wounding. Asphyxia. Immersion and drowning. Sexual offenses. Abortion and

Pregnancy. Infant deaths. Poisoning and drugs. Alcohol abuse. Forensic Psychiatry. Labor Forensic Medicine. Medical ethic, responsibility and negligence. Transplantation of organs and tissues practice of observations (autopsy, medico-legal examinations). Pre-requisite: None

#### LAWS1023 JURIDICIAL PRACTICE

Part I. 1. Administration of justice: Generality. 2. Organs exercising jurisdictional function. 3. Classification of courts. 4. Hierarchy of courts. 5. Principle regulating administration of justice 6. The relevant statute laws. 6.1. The Basic Law of Macao SAR. 6.2. The Basic Law of Judicial Organization.6.3. Civil Procedural Code.

Part II. - Litigation Practice.1. The judicial protection in Macao SAR. 2. Legal profession. 3. Judicial mandate. 4. The organs and entities with specific function of this area. 5. The relevant statute laws. 5.1. The Basic Law of Macao SAR. 5.2. The Basic Law of Judicial Organization. 5.3. The statute of lawyers and the relevant moral and disciplinary regulations.

Pre-requisite: LAWS3018 and LAWS3019, LAWS4000 and LAWS4001

#### LAWS1024 GENERAL THEORY OF CHINESE LAW

Part I. - 1. The characteristics of legal system of ancient China. 2. PRC Constitution Political and Economical fundamental principles settled by the Constitution, The State Organs of PRC, Rights and Duties of Chinese citizens. 3. PRC Criminal Law: range of application of criminal law, Conception and constitution of crime, Penalties, Measure of Penalties, the Special Provisions of Criminal Law. 4. Criminal Procedure in PRC: jurisdiction, evidences, mandatory injunctions. The Accusation, 1st and 2nd stages procedures, Execution. 5. PRC Administrative: Administrative institutions, administrative act, the Law of civil servants. Hierarchy Claims and Administrative Procedure.

Part II.- 1. Civil Law of PRC: general principles of Civil Law, the parties of the civil juridical relationship, civil juridical acts, the right of property, contracts, civil liability. 2. The marriage and successions law: marriage regimens, divorce regimens and procedures, blood relations and affinity, inheritance, legal succession, testate succession. 3. Company Law general regimen and types of companies, limited companies, partnership associations and business corporations. 4. PRC Foreign Economy Law: Joint venture enterprises, foreign enterprises, the law of joint administration of companies, PRC use of land law, Tax law related to foreign companies. Pre-reguisite: LAWS1000 and LAWS1001, LAWS1005 and LAWS1006

#### LAWS1025 GENERAL THEORY OF PORTUGUESE LAW

I - Juridical Systems.

II - Portuguese juridical system. 2.1. Evolution and Characterization. 2.2. Constitutional Law and Administrative Law 2.3. Criminal Law and Procedure 2.4. Evolution of Civil Law and Civil Procedural law. 2.5. Commercial Law 2.6. Economic Law. 2.7. The Private International Law, the nationality. 2.8. European Law. 2.9. The law and the environment, urban construction law, the consumer, the telecommunications, the computing and biotechnic, and other new challenges. 2.10. The foreigners in Portuguese Law. 2.11. The Statute of the former Portuguese colonies in Africa (PALOPs) and the Statute of its citizens. 2.12. The Statute of the Portuguese citizens born in Macao and Macao residents. 2.11. Tendencies of the evolution of Portuguese Law.

III - 3.1. The Portuguese Law and the Law of Macao. 3.2. The autonomization of the Legal System of Macao and the principle of the maintenance basically unchanged of the existing juridical order of Macao. 3.3. The experience of transition in Macao.

IV - Observing the evolution of the Portuguese Legal System and other systems with a common matrix.

Pre-requisite: None

#### LAWS1026 PORTUGUESE LEGAL LANGUAGE

Legal language: Basic legal concepts. Legal logic. Judicial syllogism. Critique of legal language. Analysis of court decision. Fundamental legal documents legal procedure. Legal translations. Legislations. Legislative process and formalities. Pre-requisite: LAWS3012 and LAWS3013, LAWS3014 and LAWS3015, LAWS3016 and LAWS3017, LAWS3018 and LAWS3019, LAWS4000 and LAWS4001

## LAWS1027 INTRODUCTION TO ALTERNATIVE DISPUTE RESOLUTION

This course will provide in-depth introduction to the alternative dispute resolution, including arbitration and mediation, and its linkage and connection with court adjudication. It will cover the law and practice of ADR in both civil law and common law jurisdictions, with a focus on its application in Macao.

Pre-requisite: LAWS2000 and LAWS2001

## LAWS1028 LEGAL HISTORY OF MACAO

The course mainly addresses the historical evolution of political system of Macao. Part I: The political system of the Period of Internal Autonomy of Portuguese Residents (1557-1843). Part II: The political system of the period of overseas province including Timor and Solor (1844-1895). Part III: The political system of Macao as a single overseas province (1896-1975): The Period of Granting Autonomy of Colony (1896-1930), the 1995' Statute of Macao Province and 1963 and 1972 Political and Administrative Statue of Macao Province. Part IV: The political system before and after the transition of power (1976-2005).

Pre-requisite: LAWS1002, LAWS1005 and LAWS1006

### LAWS1030 LEGAL PHILOSOPHY

Many philosophical issues arise in connection with how we solve legal questions. This course introduces students to these issues and encourages critical thinking about them. Several questions are explored. 1)What is law and legal system? What are the types of law? 2) What is obligation or right? 3) What is the relationship between law, morality, authority, and politics? 4) How to interpret law? 5) What is, and how to realize, the rule of law? 6) Is there an obligation to obey the law? How can law give us reasons? 7)Is there an essential difference between legal reasoning and reasoning about politics, policies, or justice? 8) What is justice? 9) What is the role of judges? 10) What justifies criminalizing various acts and administering punishment?

Throughout the course, special attention will be paid to the answers given to the above questions by major figures in the field of philosophy and law, such as Confucius, Mencius, Han Fei, Plato, Aristotle, Aquinas, Hobbes, Rousseau, Hume, Bentham, Austin, Hart, Dworkin, etc. on the one hand, and to the connections between philosophy and legal practice, especially statute and case law.

Pre-requisite: None

## LAWS2000/LAWS2001 GENERAL THEORY OF CIVIL LAW I

Title I. Introduction. 1. General concepts of civil law. 2. Preliminaries.

Title II. General theory of the civil juridical order. Chapter I. Sources of civil law. Chapter II. Fundamental principles of civil law.

Title III – General theory of the civil juridical relationship. Chapter I. General theory of the individuals of the juridical relationship. 1. General concepts. 2. Natural persons. 3. Legal persons. Chapter II. General theory of the object of the juridical relationship. 1. General concepts. 2. Things and patrimony.

Pre-requisite: LAWS1000 and LAWS1001

## LAWS2002/LAWS2003 GENERAL THEORY OF CIVIL LAW II

Title I. General theory of the civil juridical relationship (cont.). Chapter I. General theory of the juridical fact. 1. About juridical facts in general: concepts and classifications; acquisition, modification and extinction of juridical relationships; juridical transaction and simple juridical act. 2. Transactional declaration: general concepts; interpretation and integration of juridical transactions; divergence between the intention and the declaration; defects of the intention; representation in juridical transactions. 3. Transactional object. 4. Accidental elements of juridical transactions. 5. Ineffectiveness and invalidity of juridical transactions: general concepts; invalidities; reduction and conversion of juridical transactions.

Pre-requisite: LAWS1005 and LAWS1006, LAWS2000 and LAWS2001

#### LAWS2004/LAWS2005 ADMINISTRATIVE LAW I

I.Public administration 1. Public Administration. Concept and different meanings. 2. Historical evolution. 3. Public Administration and the other State functions 4. Administrative systems: comparison between the continental-European system and the British system.

II. Administrative organization 1. The structure of the public administration 2. Types of interorganic relations: hierarchy, superintendence and supervision; delegation of powers 3. The Administrative organization of the SARM.

III. The administration and the Law 1. Public Administration and private law 2. Public administration and administrative law: the principle of legality of Administration. 3. Activity bound by the law and discretionary activity: the administrative discretionary activity. 4. Sources of administrative law: in special, the administrative Regulations.

Pre-requisite: LAWS1000 and LAWS1001, LAWS1005 and LAWS1006

#### LAWS2006/LAWS2007 ADMINISTRATIVE LAW II

I. The Administrative Activity. 1. General notions: legal facts in administrative law; in special the administrative illicit 2. Administrative activity.

II. The regulatory power. 1. Notion, function and grounds for the administrative regulations 2. The administrative regulations and the law: admissibility of the independent regulations. 3. The regulatory procedure.

III. Administrative act 1. Notion and meaning 2. Typology 3. Instrumental acts. 4. The administrative procedure. 5. Effectiveness and legal strength of the administrative act: the possibility of execution by Administration of it own acts. 6. The structure of the administrative act: the subject, the object and the declaration. 7. The defects of the administrative act. Types of invalidity.

IV. The administrative contract 1. General notions: the public administration, consensus and authority. 2. Legal regime: formation, content and principles relating to the "life" of the administrative contracts. Invalidity of administrative contracts.

Pre-requisite: LAWS2004 and LAWS2005

## LAWS2012 ECONOMICS

1. Offer and demand. 2. Consumers and Producers decisions. 3. The structure of the Market. 4. The National Income Accounting and the determination of the national income theory. 5. Financial and Monetary Policies. 6. Inflation and Unemployment. 7. Economic System and Development of Regional Economy.

Pre-requisite: LAWS1000 and LAWS1001

#### LAWS3000/LAWS3001 **OBLIGATION LAW I**

Chapter I. Introduction. 2. Obligation law and the importance of its study. 2. Reference to Comparative Law. 3. Guiding principles of Civil Law and Obligation Law. 4. General notions. Obligation stricto sensu. Performance of the obligation. The problem of non-autonomous obligations. Complex "obligational" relation. Function of the obligation and the interests of the creditor. 5. Credit rights and property rights. The external effect of obligations. 6. Guiding Principles of Obligation Law. Principle of individual autonomy and contractual freedom. Principle of good faith. Principle of the unjust enrichment.

Chapter II. Sources of obligations. 1. Contracts. Contractual relations. 2.1. Promissory contract. 2.2. Preference pact. 2.3. Exception of non-performance. Termination of the contract. 3. Unilateral transactions. 4. Management of alien affairs. 5. Unjust enrichment. 6. Civil Liability. 6.1. Contractual and non contractual liability. 6.2. Liability for unlawful actions. Requirements and regime of the obligation on compensation. The function of civil liability. 6.3. Objective Liability. Liability of the committer. Liability of public legal persons by acts of private management. Liability for damages caused by animals. Liability for damages caused by terrestrial circulation vehicles. Liability for damages caused by electrical energy or gas installations. 6.4. Liability for legal actions. 6.5. Mandatory civil liability insurance. 6.6. Mandatory automobile civil liability insurance. 6.7. Limitations to the liability and the right to compensation.

Pre-requisite: LAWS1000 and LAWS1001, LAWS1005 and LAWS1006

#### LAWS3002/LAWS3003 OBLIGATION LAW II

Chapter I. Modalities of obligations. 1. Obligations in relation to their binding: the natural and civil obligations. 2. Obligations in relation to the individuals: conjoint and jointly liable obligations. 3. Obligations in relation to the object. Pecuniary, interest and compensation obligations.

Chapter II Transfer of obligations. 1. Transfer of credit. Sub-rogation. 2. Individual transfer of debts. 3. Cession of the contractual position.

Chapter III General security of obligations. 1. Scope. 2. Protection of patrimonial guarantees. Void contracts. Sub-rogation of the creditor to the debtor. *Actio pauliana*. Seizure of assets.

Chapter IV. Special security of obligations. 1. Personal and real securities. 2. Bail. 3. Real securities. 4. Bond.

Chapter V. Performance and non performance of obligations. 1. Performance. Performance and principle of good faith. Timeliness of obligations. Who can perform and to whom can the obligation be performed. Place and deadline of the performance. Allocation and evidence of performance. 2. Non performance. Impossibility and delay not imputable to the debtor. Impossibility and delay imputable to the debtor. 3. Defective performance. 4. Contractual regulation of the rights of the creditor. Penalty clause. 5. Forced execution of the credit. Action to enforce the performance, specific performance, performance by equivalent. 6. Cession of assets to the creditors. 7. Delay of the creditor.

Chapter VI. Causes of extinction of obligations besides the performance.

Chapter VII. Special contracts. 1. Contracts regulated and not regulated in the law. 2. Mixed contracts and contracts related. 3. Contracts regulated in the Civil Code. 4. Gaming and betting. General and special features of gaming and betting.

Pre-requisite: LAWS2000 and LAWS2001, LAWS3000 and LAWS3001

#### LAWS3004/LAWS3005 LABOUR LAW

Title I. Labour Law: concept, object and importance. Chapter I. Historical evolution of Labour Law. Chapter II. Sources of Labuor Law.

Title II. The labour contract. Chapter I. Concept, elements and legal characteristics of the labour contract.

Title III. The formation of the labour contract. Chapter I. Parts of the labour contract. 1. Employee. 2. Employer. 3. Rights and duties. Chapter II. Types of employment contracts. 1. Infinitive duration period. 2. Fixed term and non-fixed term. Chapter III. Probationary period. Chapter IV. Employment of minors.

Title IV. Working time. Chapter I. Normal working hours. 1. Exemption for the working time schedule. 2. Overtime work. 3. Night work. 4. Shift work. Chapter II. Periods of rest. 1. Weekly rest. 2. Holidays. 3. Annual leave. 4. Absences. 5. Maternity leave.

Title V. Salary. Chapter I. Types of salary. 1. Basic remuneration. 2. Variable remuneration. 3. Calculation of the retribution. 4. Compensation and deductions on salary.

Title VI. Termination of the labour relation. Chapter I. Forms of termination. 1. Revocation. 2. Resolution. 3. Rescission. 4. Expiry.

Title VII. Labour relations with non-residents workers. Title VIII. Social Security.

Pre-requisite: LAWS1000 and LAWS1001, LAWS1005 and LAWS1006

#### LAWS3006/LAWS3007 COMMERCIAL LAW I

Title I. The exercise of commercial entrepreneurs in general. Chapter I. 1. Introduction to Commercial Law. 2. The commercial law as the law "around" the business. Chapter II. Commercial entreprise and Commercial entrepreneurs. 1. Commercial entrepreneurs and acts of commerce. Chapter III. Commercial entrepreneurs. 1. Commercial capacity, Impediments and incompatibilities. 2. Legitimacy. 3. Obligations of commercial entrepreneurs. 3.1. Firm. 3.2. Commercial bookkeeping. 3.3. Commercial register. 3.4. Render accounts. Chapter IV. Representation in the performance of an enterprise. 1. Managers. 2. Assistants of an entrepreneur. Chapter V. Liability for the exercise of an commercial enterprise. 1. Liability for debts contracted in the exercise of an enterprise. 2. Liability for defective products. Chapter VI. A commercial enterprise as an object of business. 1. The right over the enterprise and the rights on the assets of the enterprise. 2. The commercial enterprise as object of contracts. 2.1. The transfer of the commercial enterprise. 3. Usufruct of

commercial enterprise. 4. Pledge of commercial enterprise. Chapter VII. Trade distinctive signs. 1. Firm (remission). 2. Name and emblem. 3. Trademark. Chapter VIII. Competition legal discipline. 1. Competition in general. 2. Unfair competition.

Title II. Negotiable instruments. Chapter I. Negotiable instrument in general. Chapter II. Bill of exchange. 1. Typical notes of the obligation incorporated in a negotiable instrument. 2. Requisites of the bill of exchange. 2.1. Essential requisites. 2.2. Non essential requisites. 3. Legal institutes of the Bill of Exchange. 3.1. Drawing. 3.2. Endorsement. 3.3. Acceptance. 3.4. "Aval". 3.5. Types of maturity. 3.6. Recourse.

Pre-requisite: LAWS2002 and LAWS2003

#### LAWS3008/LAWS3009 COMMERCIAL LAW II

Title I. Commercial companies in general. Chapter I. Notion of commercial company and related figures. Chapter II. Brief historical reference. Chapter III. Types of commercial companies.

Title II. Constitution and functioning of commercial companies. Chapter I. Constitution of commercial companies. Chapter II. Legal personality and capacity of commercial companies. Chapter III. On the shares. Chapter IV. Capital and legal capital, profits and losses. Chapter V. Company organs. 1. Administration. 2. General Meeting. 2.1. Company resolutions. 2.2. Ineffectiveness of company resolutions. 2.2.1. Resolutions ineffective. 2.2.2. Void resolutions. 2.2.3. Voidable resolutions. 2.2.4. Nonexistent resolutions? 3. Supervisory Board and single supervisor. 4. The company secretary. 5. The liability of members of company organs.

Title III. Amendment of the articles of association. Chapter I. Amendments to the articles of association. 1. Generalities. 2. Increase or reduction of the company capital. 3. Modification of the company object. Chapter II. Mergers and divisions of companies. Chapter III. Transformation of companies.

Title IV. Extinction of commercial companies. Chapter I. Winding up of commercial companies. Chapter II. Liquidation of commercial companies Pro requirite: LAWS2006 and LAWS2007

Pre-requisite: LAWS3006 and LAWS3007

#### LAWS3010/LAWS3011 CRIMINAL LAW I

Title I. General Considerations. Chap. I. Criminal Law in a formal perspective. 1. Concept. Chap. II. The whole Criminal Law Science. Chap. III. Criminal Law main principles. Chap. IV. The role of the Criminal Law in the legal system – the question of the material concept of crime. 1. The criminal legal property. Chap. V. The aim of the penalties and the security measures. Chap. VI. Criminal Law limits. 1. Comparison to the other Law fields. Chap. VII. The principle of the legality – role, reasons and consequences. 1. Criminal Law interpretation and integration. 2. Criminal Law validity – application of the Criminal Law depending on time and space factors.

Title II. The General Theory of the Criminal Infraction. Chap. I. Introduction. 1. Constitutive elements of the crime. 2. Classification of the crimes. Chap. II. The so-called 'incriminatory type'. 1. The illicit type in an objective perspective and the attribution of the result to the behave. 2. The illicit type in a subjective perspective. 3. The intention and its elements. 4. The problem of the mistake. 5. The negligence.

Pre-requisite: LAWS1000 and LAWS1001, LAWS1005 and LAWS1006

#### LAWS3012/LAWS3013 CRIMINAL LAW II

Title I. Continuation of the General Theory of the Criminal Infraction. Chap. I. The so-called 'justifying type'. 1. The causes of exclusion of the illicit. Chap. II. The so-called 'type of fault'. 1. Definition of the criminal fault. 2. Intentional and negligent fault. 3. Non-imputability due to the age or to a mental health disorder. 4. The causes of exclusion of the fault. Chap. III. Punishment. Chap. IV. Omission – general notions. Chap. V. Attempt. Chap. VI. Participation in the crime - perpetration and complicity.

Title II. Legal consequences of the crime. Chap. I. Penalties. 1. Preliminary remarks. 2. Imprisonment – or the penalty that restricts the freedom . 3. Fine – or the penalty that restricts the property. 4. Alternative penalties. 5. Accessory penalties. Chap. II. Determination of the penalty. 1. The system of determination of the penalty. 2. The concrete penalty measure. 3. Special cases of determination of the penalty. Brief approach.

Pre-requisite: LAWS3010 and LAWS3011

#### LAWS3014/LAWS3015 PROPERTY LAW

Introduction (evolution of the systems of real property rights). I – Notion of real property right. II. Characteristics of the real property rights. III. The real property rights. Community property. Joint ownership. Horizontal ownership. IV. Limited real property rights. The usufruct. The use and habitation rights. Timesharing right. Superficial right. Emphyteusis constituted before the new Civil Code of Macao. Real property rights resulting from concession of government land in Macao: granted dominium utile; ownership of buildings on leased land. Abstract on real property rights for acquisition and for real security. V. Possession. Definition. Possession and mere detention. Rights that can be possessed. Things that can be possessed. Capacity for possess. Characteristics of possession; Legal actions to defend the possession. Usucapio (the adverse possession).

Pre-requisite: LAWS2002 and LAWS2003

#### LAWS3016/LAWS3017 ADMINISTRATIVE LAW III

I.Introduction. 1. Administrative justice. 2. Separation of powers. 3. Main historical models of administrative justice. 4. Subjective and objective models.

II. Evolution of the judicial review in Macao. 1. Jurisdictional competence within the judicial review in Macao. The administrative Court. Appeal Courts. Judicial organization in Macao.

III. Mechanisms of Judicial review. 1. Judicial review. 1.1 Concept and nature. 1.2 General principles. 1.3 Administrative acts that can be judicially reviewed. 1.4 Procedural requirements 1.5 Standing of the parties 1.6 Proceeding. 2. Special judicial remedies 2.1 Judicial review of norms 2.2 Electoral litigation 2.3 Administrative infractions 3. Administrative Actions 3.1 Judicial action on administrative contracts 3.2 Judicial action on torts liability 3.3 Injunction. Judicial action to compel the practice of an administrative act 3.4 Judicial action for the protection of rights and lawful interests. 4. Interim Measures. 4.1 Suspension of the effects of an administrative decision. 4.2 Provisory injunction. 4.3 Production of endangered evidence. 4.4 Other interim measures.

IV. Judicial Decisions 1. Legal effects of the judicial decisions

V. Judicial appeals 1. Right to appeal 2. Legal regime.

VI. Execution of judicial decisions. 1. Execution for the delivery of an asset or performance in kind. 2. Execution for payment of an amount 3. Guarantees against illegitimate non execution.

VII. Arbitration 1. Ambit. 2. Appeal of arbitration. 3. Arbitration centers.

Pre-requisite: LAWS2006 and LAWS2007

### LAWS3018/LAWS3019 CIVIL PROCEDURAL LAW I

I.Introduction. Procedure and Procedural Law. Jurisdiction and jurisdictional function. General frame of the action in civil jurisdiction.

II. The action. The right to a legal action. Legal classification of the actions: according to their goal, according to their form. Interlocutory injunctions.

III. Civil Procedure Law. Concept. Features. Importance. Interpretation and integration of its norms. Application in time. Application in space.

IV. Sources of the Portuguese Civil Procedure Law and close Disciplines. Historical evolution. Special mention of Macao.

V. Theory of the Procedural Relationship. The instance as a procedural relationship. The structure of procedural relationship. The parties. Procedural requisites concerning the parties. Judiciary personality. Judiciary capacity. Legitimization. Compulsive representation by an attorney at law. The procedural interest. The court. The judicial organization. Jurisdiction and competence. The object of the procedural relation. The claim and the cause of action.

VI. The process forms. Common process and special processes. Ordinary and summary common process. Special process of small claims.

Pre-requisite: LAWS2000 and LAWS2001, LAWS3000 and LAWS3001

#### LAWS4000/LAWS4001 FAMILY LAW

Chapter I. Introduction. 1. Legal notion of family. 2. Constitutional principles. 3. Sources of Family Law. 4. Features of family law and of family rights.

Chapter II Family relations. 1. Relatives. Affiliation relationship. Establishment of mother-child relationship. Establishment of father-child relationship. Assisted procreation. Medical assisted procreation. Effects of the affiliation. Parental responsibility. 2. In-laws. 3. Adoption. Constitution and effects. 4. Marriage. Concept, Matrimonial regimes, features of the marriage as an act and as a status.

Chapter III. Marriage. 1. Constitution of the matrimonial relation: marriage as an act. Civil marriage. Requirements. Consent. Capacity. Formalities. Invalid marriage. Putative marriage. 2. Effects of marriage: marriage as a status. 2.1. Personal effects. 2.2. Patrimonial effects. General principles and suppletive regime of the matrimonial goods. 3. Modification of the matrimonial relations. Judicial separation of goods. Judicial separation of persons and goods. 4. Termination of the matrimonial relation. 4.1. Death and presumed death. 4.2. Divorce. Divorce by mutual consent. Process. Nature. Litigious divorce. Causes of litigious divorce.

Chapter IV De facto union. Notion of legally relevant de facto union.

Pre-requisite: LAWS1000 and LAWS1001, LAWS1005 and LAWS1006

#### LAWS4002/LAWS4003 PATRIMONIAL FAMILY LAW AND SUCCESSION LAW

Title I. Patrimonial Family Law. Chapter I Introduction. Patrimonial effects of relatives, in-laws and adoption. Chapter II Patrimonial effects of marriage. 1. Regime of the matrimonial goods. Nuptial agreements. Description of the legal regimes of goods. Separation. General community of property. Community of acquired property. Participation in acquired property. Administration of the goods of the couple. Matrimonial illegitimacies. Liability for the debts of the spouse. 2. Termination of the patrimonial relations. Chapter III Alimony.

Title II. Succession Law. Chapter I Introduction. Legal notion of succession. Constitutional principles and sources. Succession systems. Features of the succession law and of the succession rights. Chapter II Succession in general. 1. Death as a prerequisite to succession. 2. Several types of succession by death. 3. Heir and legatee. 4. Opening of succession. 5. Succession "calling", succession "appointment", content and object of the succession "calling". Prerequisites of succession "calling". Prevalence of the succession "appointment". Existence of the "called" person. Succession capacity, indignity and disinheritance. Modes of "calling". Indirect "calling". Right to representation. Direct substitution. Right of accretion. 6. Vacant succession. 7. Succession acquisition. Acceptance and refusal of the inheritance. 8. Request of the inheritance. 9. Transfer of the inheritance. 10. Administration of the inheritance. 11. Charges for the inheritance and its liquidation. 12 Partition of the inheritance. Chapter III Successions in special. 1. Legal succession. 2. Legal mandatory succession. 3. Testate succession. 4. Contractual succession. Partition in life.

Pre-requisite: LAWS4000 and LAWS4001

#### LAWS4004/LAWS4005 COMMERCIAL LAW III

Title I. Commercial contracts in general. Chapter I. Introduction. Chapter II. General theory of Commercial contracts. 1. Physiognomy of the modern commercial contract: the problem of standard contractual clauses. 2. Special legal regime of commercial obligations. 3. Prescription of commercial obligations. 4. Classification of commercial contracts.

Title II. Study of some Commercial contracts in particular. Chapter I. Contract of sale. Chapter II. Contract for sale or return. Chapter III. Supply contract. Chapter IV. Commission contract and forwarding contract. Chapter V. Distribution contracts. 1. Agency contact. 2. Commercial concession contract. 3. Franchising. 4. Brokerage contact. Chapter VI. Advertising contracts. 1. Contract Advertising. 2. Advertising diffusion contract. 3. Advertising creation contract. 4. Advertising sponsorship contract. Chapter VII. Carriage contract. Chapter VIII. Deposit in general warehouses. Chapter IX. Lodging contract. Chapter XI. Securities lending contract (reporte). Chapter XII. Banking contracts. 1. Bank deposit. 2. Rental of safe deposit boxes 3. Opening credit. 4. Bank advance. 5. Current Bank account. 6. Bank discount. 7. Factoring contract. 8. Leasing. Chapter XIII. Guarantee contracts. 1. Commercial pledge. 2. Fiduciary transfer guarantee. 3. Floating charge. 4. Independent guarantee. Chapter XIV. Insurance contract. Pre-requisite: LAWS3008 and LAWS3009

#### LAWS4006/LAWS4007 PRIVATE INTERNATIONAL LAW

Title I. 1. Introduction. 2. Method. 3. General principles and regulation values. 4. Function of the conflict rule. 5. Structure of the conflict rule. 6. Classification 7. Renvoi (remission/transmission). 8. Vested rights. 9. General clause of public policy ("ordre public"). 10. The "fraus legis".

Title II. 1. Personal law. 2. Natural persons. 3. Juridical persons. 4. Law on foreignors. 5. Legal business. 6. Obligations. 7. Real property rights. 8. Family. 9. Succession.

Pre-requisite: LAWS2002 and LAWS2003, LAWS4002 and LAWS4003

#### LAWS4008/LAWS4009 CRIMINAL PROCEDURAL LAW

I.General Notions. 1. Function and meaning of the criminal law procedure. 2. Criminal law procedure within the legal system. 3. The juristic and constitutional compliance of the criminal procedure and its structure. 4. The application of the criminal procedure law.

II. General Principles of Criminal Procedure Law. 1. Principles relating to the initial stage of the procedure. 2. Principles relating to the continuation of the procedure. 3. Principles relating to evidence. 4. Principles relating to the form of the procedure.

III. The Agents of the Criminal Procedure. 1. Court. 2. Public prosecutor and criminal police bodies. 3. The defendant and the defendant's lawyer. 4. The victim and injured party.

IV. Procedural measures 1. Means to obtain evidence. 2. Safeguard and Police measures. 3. Coercive Measures 4. Measures of patrimonial guarantee.

V. Stages of the Criminal Procedure. 1. The forms of criminal procedure and their respective procedure. 2. Appeals.

Pre-requisite: LAWS3012 and LAWS3013

#### LAWS4010 POLITICAL SCIENCE

Chapter I - Object, method, scope and objectives of political science. Chapter II - Review of politics over centuries. Chapter III - The forms and systems of modern governments. Chapter IV - Systems of some particular governments. Chapter V - Forms and system of Macao government. Pre-requisite: LAWS1000 and LAWS1001, LAWS1005 and LAWS1006

#### LAWS4011/LAWS4012 CIVIL PROCEDURAL LAW II

Title I. Theory of pleadings. One. Concept of pleading. 2nd. Form. 3rd. Time. 4th. Place. 5th. Subjects. 6th. Purposes. 7th. Pathology of pleadings.

Title II. Dynamics of procedural relationship. One. Start the instance and its development. 2nd. Modifications of the instance. 3rd. Suspension and termination of proceedings. 4th. No need to adjudicate. 5th. The incidents of the proceedings.

Title III. Formalism of ordinary declarative process and its phases. Chapter I. Articulated. One. Initial petition. 2nd. Order injunction. 3rd. Quote. 4th. Challenge: challenge for defense and for defense exception. 5th. Counterclaim. 6th. Reply and rejoinder. 7th. Articulated supervening. Chapter II. Sanitation and preparation process. One. Pre-Order exonerating. 2nd. Selection of the facts. 3rd. Curative act. Chapter III. Instruction process. One. The evidence in general. 2nd. Right evidential material and formal evidentiary law. 3rd. The burden of proof and rules. 4th. Principles that govern the production of evidence in court. 5th. Evidence. Chapter IV. Discussion and judgment. One. The final hearing. 2nd. The final sentence. 3rd. Effects of sentence. 3.1. The res judicata and its species. 3.2. Subjective and objective limits of res judicata. 3.3. Other effects of final judgment.

Title IV. Formalism of common abstract declarative process. One. Differences regime regarding how common ordinary. 2nd. Deadlines.

Title V. Process particular concerning small claims. One. Competence. 2nd. Specialties of conduct.

Pre-requisite: LAWS2002 and LAWS2003, LAWS3002 and LAWS3003, LAWS3018 and LAWS3019

### LAWS4013/LAWS4014 CIVIL PROCEDURAL LAW III

Title I. General theory of executive action. One. Concept and objectives. 2nd. Rate cool. Title II. Inadmissibility of executive action. One. Specific assumptions. 1.1. Assumption formal and substantive requirements. 1.2. The enforceable legal nature and historical evolution. 1.3. Rating enforceable. 1.4. Consequences of lack of enforcement or its unenforceability. 1.5. Sure, liquidity and enforceability of the obligation. 2nd. General inadmissibility of executive action. 2.1. The jurisdiction of the court.2.2. The formal legitimacy. 2.3. The mandatory legal representation. Title III. Forms of executive process. One. Common process and special processes. 2nd. Legal Regime of different species and forms of execution.

Title IV. Process executive for payment of a certain amount and its phases. Chapter I. Ordinary form. One. Articulated. 1.1. Initial application. 1.2. Order injunction. 1.3. Quote of the run. 1.4. The attached opposition's run. 2nd. The attachment. 2.1. Definition and purpose. 2.2. Opposition to attachment. 3rd. Contest creditors. 3.1. Complaint and checking credits. 3.2. Processing. 4th. Payment and its modalities. 5th. Right of redemption. 6th. Term of the executive process. 7th. Renewal of execution extinct. Chapter II. Summary form of the implementation process for the payment of a certain amount.

Title V. Implementation process to deliver right thing. One. Forms common and ordinary common summary. 2nd. Conduct.

Title VI. Implementation process to provide that. One. The fact that positive and negative. 2nd. Forms common and ordinary common summary.

Pre-requisite: LAWS4002 and LAWS4003, LAWS4011 and LAWS4012

#### LAWS4016 RESEARCH AND INTERNSHIP

This course can help students to understand the basic elements of learning and applying to the law: standardization; sociality; logicality; definability; finality; sense of justice. This course introduces students to the basic skills of public speaking and debate. It examines the functions. elements, types and roles of public speaking. Through lectures and practices, students learn essential skills in writing, speaking and debating that engage a public audience. In addition to the coursework, students have to choose to look for a relevant workplace to perform 100 hours of internship or to attend 10 court trials and prepare a report for any 5 out of the 10 court trials attended to fulfill the internship requirement.

Pre-requisite: None

#### LAWS4034/LAWS4035 LEGAL CONSEQUENCES OF CRIME

Legal consequences of the crime. 1. The legal consequences of the crime and the criminal penalty. 2. The reaction to crime of the criminal law in force in Macao in the context of the criminal policy models. 3. Preliminary penalties, a) Primary penalties and secondary penalties, b) The substitution penalties in the system in force in Macao. 4. The imprisonment penalty and the fine. 5. The general theories on the determination of the penalty. 6. Steps on the determination of the penalty. a) Mitigation circumstances and aggravity circumstances. b) The criterium of the article 84 of the criminal code. c) Judicial determination of the penalty.

Pre-requisite: LAWS3012 and LAWS3013

#### PORT1002 ORAL COMPREHENSION AND PRODUCTION SKILLS I

A course designed for the development of appropriate and accurate pronunciation of the Portuguese sounds, involving their training and practice. Students will actively work on the recognition and production of oral texts through simulation of different communication contexts and other role play activities.

Pre-requisite: None

#### PORT1003 WRITTEN COMPREHENSION AND PRODUCTION SKILLS I

Practical introduction to Portuguese concerning elements of all language skills and selection of cultural topics. The course will give particular interest to the use and comprehension of basic Portuguese structures and lexicon in context.

Pre-requisite: None

#### PORT1004 ORAL COMPREHENSION AND PRODUCTION SKILLS II

This course will reinforce and further develop the students skills in the recognition and production of the sounds of Portuguese learned during the first semester. Students will produce short dialogues on everyday topics, draft different communication situations and perform it in the class.

It is expected that students may be able to discuss actuality themes, that they are familiar with, developing their vocabulary and a more accurate pronunciation. Pre-requisite: PORT1002

#### PORT1005 WRITTEN COMPREHENSION AND PRODUCTION SKILLS II

A practical more advanced course involving the comprehension and use of basic structures and lexicon of Portuguese. Students work with exercises and activities involving the use of structures and lexicon in context.

Pre-requisite: PORT1003

#### PORT2006 ORAL COMPREHENSION AND PRODUCTION SKILLS III

The course is designed to develop an intermediate language level training and practice in accurate pronunciation and production of oral texts. From students it is expected a good fluency and knowledge of vocabulary increasing their capacity of self-correction of production and pronunciation. The course will also involve the study and comprehension of short videos of contemporary life and culture in Portuguese-speaking countries. Pre-requisite: PORT1004

### PORT2007 WRITTEN COMPREHENSION AND PRODUCTION SKILLS III

An introduction to the structuring and writing of different types of texts (letters – private or business – memoranda and basic essays). Students are expected to use Regular and Irregular verbs and learn the Subjunctive mode. They will work with exercises and activities involving the use of structures in context and write different types of texts for presentation and discussion. Pre-requisite: PORT1005

#### PORT2012 ORAL COMPREHENSION AND PRODUCTION SKILLS IV

Continuation of content and themes of *Oral Comprehension and Production Skills III*. Development of fluency, pronunciation and comprehension of oral texts. Students are expected to have fluency and communicative competence through the study of video (discussion of films, news items and interviews), simulation of situations and improvisation of dialogues. Pre-requisite: PORT2006

## PORT2013 WRITTEN COMPREHENSION AND PRODUCTION SKILLS IV

A detailed revision of the use of structures learned by students during the previous three semesters and the reinforcement of new structures. Students are expected to write essays on different topics, to practice summary and abstract writing. Pre-requisite: PORT2007

## **BACHELOR OF LAW (IN PORTUGUESE LANGUAGE )**

#### LAWS1000/LAWS1001 INTRODUCTION TO LAW

Title I. The concept of Law. Chapter I. The Law as part of the whole social order. 1. The Law and other normative orders. 2. The religion. 3. The ethic. 4. The social behavior.

Title II. The aims or values of the Law. Chapter I. Justice and security.

Title III. The structure of the Law. Chapter I. The rule of Law.

Title IV. Sources of Law. Chapter I. voluntary sources of Law and non-voluntary sources of Law. Title V. Interpretation of the Law. Chapter I. Types of interpretation. 1. Elements of interpretation.

2. Results of the interpretation. Chapter II. Integration of the gaps in the Law. 1. Analogy. 2. Creation of a ad hoc rule.

Pre-requisite: None

#### LAWS1002 LEGAL HISTORY

Title I. Chapter I. Legal thoughts in traditional Chinese society. 1. Divine Law 2. Patriarchal law 3. Confucianism. 4. Legalism. Chapter II. Legal and political thoughts in Modern China. Chapter III. 1. Legal History of Macao. 1.1 Introduction. 1.2 Specificity and sources of law of overseas Portuguese territories. 1.3 Law and justice. 1.3.1. Portuguese law and local laws, scope of application. 1.3.2 Indigenous law and the mixed relations. 1.3.3 Legal pluralism and mixed jurisdiction in Macao. 1.3.4. Judicial organization of Macao.

Title II, Chapter I, Introduction, 1, Social history of law, Chapter II, The formation of the Common Law. 1. The Roman Law. Sources: (Corpus Iuris Civilis). General Characteristics of the Praetor's Law. The evolution of Roman law until the imperial constitutions. vulgarrecht. 2. Legal pluralism. The role of legal thought in the formation and evolution of the common law. The glossators. commentators, mos gallicus iura docendi, usus modernus pandectarum and naturalists. Chapter III. Philosophy of Law. 1. Legal positivism, legal, historical, sociological and conceptual. 2. Pure theory of law and the right alternative use.

Pre-requisite: None

#### LAWS1003/LAWS1004 CONSTITUTIONAL LAW

Title I. General notions of Constitutionalism. Chapter I. Constitution as legal statute of politics. 1. The autonomy of public sphere, 2. State as a political form of modernity, 3. The crisis of State: regionalism and globalization. Chapter II. From Constitutionality to Inter-constitutionality. 1. The hierarchical and normative scheme of the constitution of the supervising state. 2. The binding inter-constitutionality of the supervised State. 3. Dem'ocracy and rule of law. Chapter III. Comparative Constitutional Law. 1. The Portuguese constitutional experience. 2. The Chinese constitutional experience. 3 The evolution of Macao autonomic status. Pre-requisite: None

#### LAWS1005/LAWS1006 MACAO BASIC LAW

Title I. The Basic Law of the SARM. Chapter I. Characterizing the SARM. 1. SARM as a political region. 2. Scope of autonomy of SARM. 3. SARM's political system. Chapter II. Purposes of Basic Law. 1. Theories on the purposes of Basic Law. 2. Art. 31 of the CPRC and its double task. 3. Luso-Chinese joint-declaration. Chapter III. Legal nature of the Basic Law. 1. Ideas on the legal nature of the Basic Law. 2. Basic Law as an ordinary legal norm. 3. Basic Law as statutory legal norm, 4. Basic Law as a reinforced legal norm, 5. Basic Law as a material constitutional legal norm. Chapter IV. Guaranty of the Basic Law. 1. Interpretation of the Basic law. 2. Guaranty of the reinforced value of the Basic Law. 3. Limits to revision of the Basic Law. Pre-requisite: None

#### LAWS1007/LAWS1008 PUBLIC INTERNATIONAL LAW

1.Concept and nature of Public International Law. 2. Relationship between International and Domestic Law. 3. Sources of Public International Law: treaties and customary norms. 4. International Legal Personality. 5. The State: elements of the State, the recognition of State, succession of states, rights and duties of the State. 6. International Organizations: definition and types. The United Nations. 7. Diplomatic and Consular relations Law. 8. The pacific resolution of the international conflicts. 9. Individuals in Public International Law. 10. Application of Public International I aw to Macao

Pre-requisite: None

#### LAWS1009 ECONOMICS I

Title I Introduction. 1. Economics: scope, concepts and method. 2. The organization of economic activities. 3. Brief history of economics and the economic systems.

Title II. Microeconomics. 4. Demand: The behavior of consumers. 5. Supply: The behavior of firms, 6. The behavior of markets and prices, 7. Markets for production factors and income distribution. 8. Specialization and international trade. Pre-requisite: None

#### LAWS1010 ECONOMICS II

Title I. Macroeconomics. 1. Economic flows and National Accounting. 2. Economic cycles, aggregate demandand the multiplier model. 3. Government: policies, taxation and expenditure. 4. Unemployment, inflation and the stabilisation and growth policies. 5. Money, the banking system and the financial markets. 6. Open economies, growth and economic integration.

Title II. Current topics. 7. International trade: issues and trends. 8. Economics and the environment 9 Economics the law and the social institutions

Pre-requisite: None

#### LAWS1011/LAWS1012/LAWS2008/LAWS2009/LAWS3020/LAWS3021 CHINESE LANGUAGE (I TO VI)

The main objective of these courses is to provide the basic skills on Putonghua, both spoken and written. Chinese Culture shall also be part of the programme. Pre-requisite: None

#### LAWS1013/LAWS1014 TRANSLATION TECHNIQUES CHINESE/PORTUGUESE I AND II

These subjects require the knowledge of both languages, Chinese and Portuguese. The main objective is to provide the students with the basic techniques used in any translation. Students shall then practice such methods by translating, texts and oral speeches and dialogues, from Chinese into Portuguese and vice-versa.

Pre-requisite: None

#### LAWS1015 ENHANCEMENT LEARNING ACTIVITIES

Apart from regular legal courses, students are encouraged to participate in other activities, such as attending seminars, participating in competitions, sharing and discussing legal problems with one another

Pre-requisite: None

#### LAWS1017 TAX LAW

Introduction. I. Tax Law. Historical background. Theory of taxation. Taxes and other contributions. Administrative taxation procedure. Classification of taxes. Definition of Taxes. Tax law and other fields of law. Constitutional Law. Administrative Law. Commercial law. Private Law. Criminal Law, International Law, II, Tax Jurisdiction, Sources of tax law, General principles of law. International and interregional tax law agreements. Customary law. Jurisprudence. Doctrine. Interpretation of tax laws. Integration of tax laws. Application of tax laws in time and space. Double taxation. Tax avoidance and tax evasion. International exchange of tax information. III. Legal relation. Nature. Parties. Tax obligation. Tax duties and warranties. Execution procedure. IV. Taxation in Macao. Evolution. Taxation on income. Taxation of property. Taxation of services. Stamp duty. Special Gaming Tax. Other taxes.

Pre-requisite: None

#### LAWS1021 FORENSIC MEDICINE

1 Legal Medicine represents four broad areas of medical practice, encapsulating the fields of Civil Legal Medicine, Criminal or Forensic Legal Medicine, Medical Ethics, and Medical Practice areas affected by statute law. The course includes: 1. Legal Medicine context. The compared law in medical issues in Macao, Portugal and other countries. Medical reports and certificates. 2. Forensic Medical Sciences (concept, organization, law). 3. Corporal offenses. 4. Forensic sexology. 5. Sudden natural death. Violent death. Homicide, Suicide, parasuicide, and deliberate self-harm. 6. Injury and death from physical agents. 7. Wounding. 8. Asphyxia. Immersion and Drowning. 9. Death investigation and causes of death. Autopsy, medico-legal examinations. 10. Sexual offenses. 11. Abortion and Pregnancy. Infant deaths. 12. Toxicology. Poisoning and drugs. Alcohol abuse. Drug addiction. 13. Forensic Psychiatry and Mental Health. 14. Odontology, Anthropology. Man-made and natural Mass disasters. Corpses Identification. 15. Labor, Occupational Health and Safety Law. 16. Medical ethics, responsibility and negligence. Transplantation of organs and tissues practice of observations. 17. Euthanasia. 18. Assisted reproductive technologies and ethical concerns. 19. Debate on Public Health Protection and

Prevention. International Health Regulation and law enforcement in epidemics. 20. Genetics and DNA. Use of DNA in Paternity and Criminal identification. 21. Basic research on medico-legal areas performed by students.

Pre-requisite: None

### LAWS2000/LAWS2001 GENERAL THEORY OF CIVIL LAW I

Title I. Introduction. 1. General concepts of civil law. 2. Preliminaries.

Title II. General theory of the civil juridical order. Chapter I. Sources of civil law. Chapter II. Fundamental principles of civil law.

Title III – General theory of the civil juridical relationship. Chapter I. General theory of the individuals of the juridical relationship. 1. General concepts. 2. Natural persons. 3. Legal persons. Chapter II. General theory of the object of the juridical relationship. 1. General concepts. 2. Things and patrimony.

Pre-requisite: None

#### LAWS2002/LAWS2003 GENERAL THEORY OF CIVIL LAW II

Title I. General theory of the civil juridical relationship (cont.). Chapter I. General theory of the juridical fact. 1. About juridical facts in general: concepts and classifications; acquisition, modification and extinction of juridical relationships; juridical transaction and simple juridical act. 2. Transactional declaration: general concepts; interpretation and integration of juridical transactions; divergence between the intention and the declaration; defects of the intention; representation in juridical transactions. 3. Transactional object. 4. Accidental elements of juridical transactions: 5. Ineffectiveness and invalidity of juridical transactions: general concepts; invalidities; reduction and conversion of juridical transactions.

Pre-requisite: None

#### LAWS2004/LAWS2005 ADMINISTRATIVE LAW I

I.Public administration 1. Public Administration. Concept and different meanings. 2. Historical evolution. 3. Public Administration and the other State functions 4. Administrative systems: comparison between the continental-European system and the British system.

II. Administrative organization 1. The structure of the public administration 2. Types of interorganic relations: hierarchy, superintendence and supervision; delegation of powers 3. The Administrative organization of the SARM.

III. The administration and the Law 1. Public Administration and private law 2. Public administration and administrative law: the principle of legality of Administration. 3. Activity bound by the law and discretionary activity: the administrative discretionary activity. 4. Sources of administrative law: in special, the administrative Regulations.

Pre-requisite: May be considered within FLL Pedagogic Regulations

#### LAWS2006/LAWS2007 ADMINISTRATIVE LAW II

I. The Administrative Activity. 1. General notions: legal facts in administrative law; in special the administrative illicit 2. Administrative activity.

II. The regulatory power. 1. Notion, function and grounds for the administrative regulations 2. The administrative regulations and the law: admissibility of the independent regulations. 3. The regulatory procedure.

III. Administrative act 1. Notion and meaning 2. Typology 3. Instrumental acts. 4. The administrative procedure. 5. Effectiveness and legal strength of the administrative act: the possibility of execution by Administration of it own acts. 6. The structure of the administrative act: the subject, the object and the declaration. 7. The defects of the administrative act. Types of invalidity.

IV. The administrative contract 1. General notions: the public administration, consensus and authority. 2. Legal regime: formation, content and principles relating to the "life" of the administrative contracts. Invalidity of administrative contracts.

Pre-requisite: None

#### LAWS2010/LAWS2011 LEGAL TRANSLATION CHINESE/PORTUGUESE I AND II

These subjects require the knowledge not only of both languages, Chinese and Portuguese, but also of the legal issues being translated, as well as of basic translation techniques. The main objective is to provide students with the basic methods used in legal translation. Students shall then practice such methods by translating, legal texts as well as legal speeches and dialogues, from Chinese into Portuguese and vice-versa.

Pre-requisite: None

#### LAWS2013 PUBLIC ECONOMICS

The meaning of Public Economics - Financial Activity of State: Expenses, Revenues and Budget. Economic Activity of State: Characterization of Public Economic activity and the Enterprise activity of State - Public Revenues - Public Expenses - Public Budget – Financial Policy problems. Pre-requisite: None

#### LAWS3000/LAWS3001 OBLIGATION LAW I

Chapter I. Introduction. 2. Obligation law and the importance of its study. 2. Reference to Comparative Law. 3. Guiding principles of Civil Law and Obligation Law. 4. General notions. Obligation stricto sensu. Performance of the obligation. The problem of non-autonomous obligations. Complex "obligational" relation. Function of the obligation and the interests of the creditor. 5. Credit rights and property rights. The external effect of obligations. 6. Guiding Principles of Obligation Law. Principle of individual autonomy and contractual freedom. Principle of good faith. Principle of the unjust enrichment.

Chapter II. Sources of obligations. 1. Contracts. Contractual relations. 2.1. Promissory contract. 2.2. Preference pact. 2.3. Exception of non-performance. Termination of the contract. 3. Unilateral transactions. 4. Management of alien affairs. 5. Unjust enrichment. 6. Civil Liability. 6.1. Contractual and non contractual liability. 6.2. Liability for unlawful actions. Requirements and regime of the obligation on compensation. The function of civil liability. 6.3. Objective Liability. Liability of the committer. Liability of public legal persons by acts of private management. Liability for damages caused by animals. Liability for damages caused by terrestrial circulation vehicles. Liability for damages caused by electrical energy or gas installations. 6.4. Liability for legal actions. 6.5. Mandatory civil liability insurance. 6.6. Mandatory automobile civil liability insurance. 6.7. Limitations to the liability and the right to compensation.

Pre-requisite: None

#### LAWS3002/LAWS3003 OBLIGATION LAW II

Chapter I. Modalities of obligations. 1. Obligations in relation to their binding: the natural and civil obligations. 2. Obligations in relation to the individuals: conjoint and jointly liable obligations. 3. Obligations in relation to the object. Pecuniary, interest and compensation obligations.

Chapter II Transfer of obligations. 1. Transfer of credit. Sub-rogation. 2. Individual transfer of debts. 3. Cession of the contractual position.

Chapter III General security of obligations. 1. Scope. 2. Protection of patrimonial guarantees. Void contracts. Sub-rogation of the creditor to the debtor. *Actio pauliana*. Seizure of assets.

Chapter IV. Special security of obligations. 1. Personal and real securities. 2. Bail. 3. Real securities. 4. Bond.

Chapter V. Performance and non performance of obligations. 1. Performance. Performance and principle of good faith. Timeliness of obligations. Who can perform and to whom can the obligation be performed. Place and deadline of the performance. Allocation and evidence of performance. 2. Non performance. Impossibility and delay not imputable to the debtor. Impossibility and delay imputable to the debtor. 3. Defective performance. 4. Contractual regulation of the rights of the creditor. Penalty clause. 5. Forced execution of the credit. Action to enforce the performance, specific performance, performance by equivalent. 6. Cession of assets to the creditors. 7. Delay of the creditor.

Chapter VI. Causes of extinction of obligations besides the performance.

Chapter VII. Special contracts. 1. Contracts regulated and not regulated in the law. 2. Mixed contracts and contracts related. 3. Contracts regulated in the Civil Code. 4. Gaming and betting. General and special features of gaming and betting. Pre-requisite: None

#### LAWS3004/LAWS3005 LABOUR LAW

Title I. Labour Law: concept, object and importance. Chapter I. Historical evolution of Labour Law. Chapter II. Sources of Labuor Law.

Title II. The labour contract. Chapter I. Concept, elements and legal characteristics of the labour contract.

Title III. The formation of the labour contract. Chapter I. Parts of the labour contract. 1. Employee. 2. Employer. 3. Rights and duties. Chapter II. Types of employment contracts. 1. Infinitive duration period. 2. Fixed term and non-fixed term. Chapter III. Probationary period. Chapter IV. Employment of minors.

Title IV. Working time. Chapter I. Normal working hours. 1. Exemption for the working time schedule. 2. Overtime work. 3. Night work. 4. Shift work. Chapter II. Periods of rest. 1. Weekly rest. 2. Holidays. 3. Annual leave. 4. Absences. 5. Maternity leave.

Title V. Salary. Chapter I. Types of salary. 1. Basic remuneration. 2. Variable remuneration. 3. Calculation of the retribution. 4. Compensation and deductions on salary.

Title VI. Termination of the labour relation. Chapter I. Forms of termination. 1. Revocation. 2. Resolution. 3. Rescission. 4. Expiry.

Title VII. Labour relations with non-residents workers.

Title VIII. Social Security.

Pre-requisite: None

#### LAWS3006/LAWS3007 COMMERCIAL LAW I

Title I. The exercise of commercial entrepreneurs in general. Chapter I. 1. Introduction to Commercial Law. 2. The commercial law as the law "around" the business. Chapter II. Commercial enterprise and Commercial entrepreneurs. 1. Commercial entrepreneurs and acts of commerce. Chapter III. Commercial entrepreneurs. 1. Commercial capacity, Impediments and incompatibilities. 2. Legitimacy. 3. Obligations of commercial entrepreneurs. 3.1. Firm. 3.2. Commercial bookkeeping. 3.3. Commercial register. 3.4. Render accounts. Chapter IV. Representation in the performance of an enterprise. 1. Managers. 2. Assistants of an enterpreneur. Chapter V. Liability for the exercise of an commercial enterprise. 1. Liability for debts contracted in the exercise of an enterprise. 2. Liability for defective products. Chapter VI. A commercial enterprise as nobject of business. 1. The right over the enterprise and the rights on the assets of the enterprise. 2. 2. Lease of commercial enterprise. 3. Usufruct of commercial enterprise. 4. Pledge of commercial enterprise. Chapter VIII. Trade distinctive signs. 1. Firm (remission). 2. Name and emblem. 3. Trademark. Chapter VIII. Competition legal discipline. 1. Competition in general. 2. Unfair competition.

Title II. Negotiable instruments. Chapter I. Negotiable instrument in general. Chapter II. Bill of exchange. 1. Typical notes of the obligation incorporated in a negotiable instrument. 2. Requisites of the bill of exchange. 2.1. Essential requisites. 2.2. Non essential requisites. 3. Legal institutes of the Bill of Exchange. 3.1. Drawing. 3.2. Endorsement. 3.3. Acceptance. 3.4. "Aval". 3.5. Types of maturity. 3.6. Recourse.

Pre-requisite: None

#### LAWS3008/LAWS3009 COMMERCIAL LAW II

Title I. Commercial companies in general. Chapter I. Notion of commercial company and related figures. Chapter II. Brief historical reference. Chapter III. Types of commercial companies.

Title II. Constitution and functioning of commercial companies. Chapter I. Constitution of commercial companies. Chapter II. Legal personality and capacity of commercial companies. Chapter III. On the shares. Chapter IV. Capital and legal capital, profits and losses. Chapter V. Company organs. 1. Administration. 2. General Meeting. 2.1. Company resolutions. 2.2. Ineffectiveness of company resolutions. 2.2.1. Resolutions ineffective. 2.2.2. Void resolutions. 2.2.3. Voidable resolutions. 2.2.4. Nonexistent resolutions? 3. Supervisory Board and single supervisor. 4. The company secretary. 5. The liability of members of company organs.

Title III. Amendment of the articles of association. Chapter I. Amendments to the articles of association. 1. Generalities. 2. Increase or reduction of the company capital. 3. Modification of the company object. Chapter II. Mergers and divisions of companies. Chapter III. Transformation

of companies.

Title IV. Extinction of commercial companies. Chapter I. Winding up of commercial companies. Chapter II. Liquidation of commercial companies

Pre-requisite: None

## LAWS3010/LAWS3011 CRIMINAL LAW I

Title I. General Considerations. Chap. I. Criminal Law in a formal perspective. 1. Concept. Chap. II. The whole Criminal Law Science. Chap. III. Criminal Law main principles. Chap. IV. The role of the Criminal Law in the legal system – the question of the material concept of crime. 1. The criminal legal property. Chap. V. The aim of the penalties and the security measures. Chap. VI. Criminal Law limits. 1. Comparison to the other Law fields. Chap. VII. The principle of the legality – role, reasons and consequences. 1. Criminal Law interpretation and integration. 2. Criminal Law validity – application of the Criminal Law depending on time and space factors. Title II. The General Theory of the Criminal Infraction. Chap. II. Introduction. 1. Constitutive elements of the crime. 2. Classification of the crimes. Chap. II. The so-called 'incriminatory type'. 1. The illicit type in a subjective perspective and the attribution of the result to the behave. 2. The illicit type in a subjective perspective. 3. The intention and its elements. 4. The problem of the mistake. 5. The negligence. Pre-requisite: None

LAWS3012/LAWS3013 CRIMINAL LAW II

Title I. Continuation of the General Theory of the Criminal Infraction. Chap. I. The so-called 'justifying type'. 1. The causes of exclusion of the illicit. Chap. II. The so-called 'type of fault'. 1. Definition of the criminal fault. 2. Intentional and negligent fault. 3. Non-imputability due to the age or to a mental health disorder. 4. The causes of exclusion of the fault. Chap. III. Punishment. Chap. IV. Omission – general notions. Chap. V. Attempt. Chap. VI. Participation in the crime – perpetration and complicity.

Title II. Legal consequences of the crime. Chap. I. Penalties. 1. Preliminary remarks. 2. Imprisonment – or the penalty that restricts the freedom . 3. Fine – or the penalty that restricts the property. 4. Alternative penalties. 5. Accessory penalties. Chap. II. Determination of the penalty. 1. The system of determination of the penalty. 2. The concrete penalty measure. 3. Special cases of determination of the penalty. Brief approach. Pre-requisite: None

## LAWS3014/LAWS3015 PROPERTY LAW

Introduction (evolution of the systems of real property rights). I – Notion of real property right. II. Characteristics of the real property rights. III. The real property rights. Community property. Joint ownership. Horizontal ownership. IV. Limited real property rights. The usufruct. The use and habitation rights. Timesharing right. Superficial right. Emphyteusis constituted before the new Civil Code of Macao. Real property rights resulting from concession of government land in Macao: granted dominium utile; ownership of buildings on leased land. Abstract on real property rights for acquisition and for real security. V. Possession. Definition. Possession and mere detention. Rights that can be possessed. Things that can be possessed. Capacity for possess. Characteristics of possession. Acquisition of possession. The protection of the possession: Rights resulting from the possession; Legal actions to defend the possession. Usucapio (the adverse possession).

Pre-requisite: None

#### LAWS3016/LAWS3017 ADMINISTRATIVE LAW III

I.Introduction. 1. Administrative justice. 2. Separation of powers. 3. Main historical models of administrative justice. 4. Subjective and objective models.

II. Evolution of the judicial review in Macao. 1. Jurisdictional competence within the judicial review in Macao. The administrative Court. Appeal Courts. Judicial organization in Macao.

III. Mechanisms of Judicial review. 1. Judicial review. 1.1 Concept and nature. 1.2 General principles. 1.3 Administrative acts that can be judicially reviewed. 1.4 Procedural requirements

1.5 Standing of the parties 1.6 Proceeding. 2. Special judicial remedies 2.1 Judicial review of norms 2.2 Electoral litigation 2.3 Administrative infractions 3. Administrative Actions 3.1 Judicial action on administrative contracts 3.2 Judicial action on torts liability 3.3 Injunction. Judicial action to compel the practice of an administrative act 3.4 Judicial action for the protection of rights and lawful interests. 4. Interim Measures. 4.1 Suspension of the effects of an administrative decision. 4.2 Provisory injunction. 4.3 Production of endangered evidence. 4.4 Other interim measures.

IV. Judicial Decisions 1. Legal effects of the judicial decisions

V. Judicial appeals 1. Right to appeal 2. Legal regime.

VI. Execution of judicial decisions. 1. Execution for the delivery of an asset or performance in kind. 2. Execution for payment of an amount 3. Guarantees against illegitimate non execution. VII. Arbitration 1. Ambit. 2. Appeal of arbitration. 3. Arbitration centers.

Pre-requisite: None

#### LAWS3018/LAWS3019 CIVIL PROCEDURAL LAW I

I.Introduction. Procedure and Procedural Law. Jurisdiction and jurisdictional function. General frame of the action in civil jurisdiction.

II. The action. The right to a legal action. Legal classification of the actions: according to their goal, according to their form. Interlocutory injunctions.

III. Civil Procedure Law. Concept. Features. Importance. Interpretation and integration of its norms. Application in time. Application in space.

IV. Sources of the Portuguese Civil Procedure Law and close Disciplines. Historical evolution. Special mention of Macao.

V. Theory of the Procedural Relationship. The instance as a procedural relationship. The structure of procedural relationship. The parties. Procedural requisites concerning the parties. Judiciary personality. Judiciary capacity. Legitimization. Compulsive representation by an attorney at law. The procedural interest. The court. The judicial organization. Jurisdiction and competence. The object of the procedural relation. The claim and the cause of action.

VI. The process forms. Common process and special processes. Ordinary and summary common process. Special process of small claims.

Pre-requisite: None

#### LAWS3022/LAWS3023 LEGAL ENGLISH I AND II

These subjects require the basic knowledge of English language, as well as of legal issues. The main objective is to learn how to express some fundamental Civil Law notions in English, as well as to understand some Common Law key concepts.

Pre-requisite: None

#### LAWS4000/LAWS4001 FAMILY LAW

Chapter I. Introduction. 1. Legal notion of family. 2. Constitutional principles. 3. Sources of Family Law. 4. Features of family law and of family rights.

Chapter II Family relations. 1. Relatives. Affiliation relationship. Establishment of mother-child relationship. Establishment of father-child relationship. Assisted procreation. Medical assisted procreation. Effects of the affiliation. Parental responsibility. 2. In-laws. 3. Adoption. Constitution and effects. 4. Marriage. Concept, Matrimonial regimes, features of the marriage as an act and as a status.

Chapter III. Marriage. 1. Constitution of the matrimonial relation: marriage as an act. Civil marriage. Requirements. Consent. Capacity. Formalities. Invalid marriage. Putative marriage. 2. Effects of marriage: marriage as a status. 2.1. Personal effects. 2.2. Patrimonial effects. General principles and suppletive regime of the matrimonial goods. 3. Modification of the matrimonial relations. Judicial separation of goods. Judicial separation of persons and goods. 4. Termination of the matrimonial relation. 4.1. Death and presumed death. 4.2. Divorce. Divorce by mutual consent. Process. Nature. Litigious divorce. Causes of litigious divorce.

Chapter IV De facto union. Notion of legally relevant de facto union.

Pre-requisite: None

#### LAWS4002/LAWS4003 PATRIMONIAL FAMILY LAW AND SUCCESSION LAW

Title I. Patrimonial Family Law. Chapter I Introduction. Patrimonial effects of relatives, in-laws and adoption. Chapter II Patrimonial effects of marriage. 1. Regime of the matrimonial goods. Nuptial agreements. Description of the legal regimes of goods. Separation. General community of property. Community of acquired property. Participation in acquired property. Administration of the goods of the couple. Matrimonial illegitimacies. Liability for the debts of the spouse. 2. Termination of the patrimonial relations. Chapter III Alimony.

Title II. Succession Law. Chapter I Introduction. Legal notion of succession. Constitutional principles and sources. Succession systems. Features of the succession law and of the succession rights. Chapter II Succession in general. 1. Death as a prerequisite to succession. 2. Several types of succession by death. 3. Heir and legatee. 4. Opening of succession, 5. Succession "calling", succession "appointment", content and object of the succession "calling". Prerequisites of succession "calling". Prevalence of the succession "appointment". Existence of the "called" person. Succession capacity, indignity and disinheritance. Modes of "calling". Indirect "calling". Right to representation. Direct substitution. Right of accretion. 6. Vacant succession. 7. Succession acquisition. Acceptance and refusal of the inheritance. 8. Request of the inheritance. 9. Transfer of the inheritance. 10. Administration of the inheritance. 11. Charges for the inheritance and its liquidation, 12 Partition of the inheritance. Chapter III Successions in special. 1. Legal succession. 2. Legal mandatory succession. 3. Testate succession. 4. Contractual succession. Partition in life.

Pre-requisite: None

#### LAWS4004/LAWS4005 COMMERCIAL LAW III

Title I. Commercial contracts in general. Chapter I. Introduction. Chapter II. General theory of Commercial contracts. 1. Physiognomy of the modern commercial contract: the problem of standard contractual clauses. 2. Special legal regime of commercial obligations. 3. Prescription of commercial obligations. 4. Classification of commercial contracts.

Title II. Study of some Commercial contracts in particular. Chapter I. Contract of sale. Chapter II. Contract for sale or return. Chapter III. Supply contract. Chapter IV. Commission contract and forwarding contract. Chapter V. Distribution contracts. 1. Agency contact. 2. Commercial concession contract. 3. Franchising. 4. Brokerage contact. Chapter VI. Advertising contracts. 1. Contract Advertising. 2. Advertising diffusion contract. 3. Advertising creation contract. 4. Advertising sponsorship contract. Chapter VII. Carriage contract. Chapter VIII. Deposit in general warehouses. Chapter IX. Lodging contract. Chapter X. Current account contract. Chapter XI. Securities lending contract (reporte). Chapter XII. Banking contracts. 1. Bank deposit. 2. Rental of safe deposit boxes 3. Opening credit. 4. Bank advance. 5. Current Bank account. 6. Bank discount. 7. Factoring contract. 8. Leasing. Chapter XIII. Guarantee contracts. 1. Commercial pledge. 2. Fiduciary transfer guarantee. 3. Floating charge. 4. Independent guarantee. Chapter XIV. Insurance contract.

Pre-requisite: None

#### LAWS4006/LAWS4007 PRIVATE INTERNATIONAL LAW

Title I. 1. Introduction. 2. Method. 3. General principles and regulation values. 4. Function of the conflict rule. 5. Structure of the conflict rule. 6. Classification 7. Renvoi (remission/transmission). 8. Vested rights. 9. General clause of public policy ("ordre public"). 10. The "fraus legis". Title II. 1. Personal law. 2. Natural persons. 3. Juridical persons. 4. Law on foreignors. 5. Legal business. 6. Obligations. 7. Real property rights. 8. Family. 9. Succession. Pre-requisite: None

#### LAWS4008/LAWS4009 **CRIMINAL PROCEDURAL LAW**

I.General Notions. 1. Function and meaning of the criminal law procedure. 2. Criminal law procedure within the legal system, 3. The juristic and constitutional compliance of the criminal procedure and its structure. 4. The application of the criminal procedure law.

II. General Principles of Criminal Procedure Law. 1. Principles relating to the initial stage of the procedure. 2. Principles relating to the continuation of the procedure. 3. Principles relating to evidence. 4. Principles relating to the form of the procedure.

III. The Agents of the Criminal Procedure. 1. Court. 2. Public prosecutor and criminal police bodies. 3. The defendant and the defendant's lawyer. 4. The victim and injured party.

IV. Procedural measures 1. Means to obtain evidence. 2. Safeguard and Police measures. 3. Coercive Measures 4. Measures of patrimonial guarantee.

V. Stages of the Criminal Procedure. 1. The forms of criminal procedure and their respective procedure. 2. Appeals.

Pre-requisite: None

#### LAWS4011/LAWS4012 CIVIL PROCEDURAL LAW II

I.Procedural acts theory. Concept of procedural act. Form. Time. Place. Parties. Goal. Pathology of procedural acts.

II. Dynamics of the procedural relation. The bringing of a suit. Development of the instance. Modifications. Suspension and interruption. Conclusion. Incidents of the instance.

III. Formalities of the Ordinary Declaratory Procedure. Phases. Articulated pleading. Declaration. "In limine" order. Service of summons. The answer: defensive-answer; counterclaim-answer. The replication. The rejoinder. Supervening articulated pleadings. Healing and abridgement. Curative decision. Facts specification and questionnaire. The instruction. The evidences in general. Material probative law. Formal probative law. The burden of proof. Fundamental principles. Means of proof. Trial. Final hearing. 5. Final decision. "Res judicata" and its limits. IV. Formalities of the Summary Declaratory Procedure.

V. Special procedure of small claims.

v. Special procedure of small cl

Pre-requisite: None

#### LAWS4013/LAWS4014 CIVIL PROCEDURAL LAW III

I.General Theory of the enforcement action. Concept and goals. The legal classification.

II. Procedural requisites of the enforcement action. 1. Specific requisites. Formal and substantial requisites. The writ of enforcement. Legal nature. Historical evolution. Classification of the writ of enforcement. Consequences of the lack of writ of enforcement or of its non-enforcementness. Certainty and exigibility of the debt: The liquidated debt. General requisites of the enforcement action. International and internal jurisdiction. Formal legitimization. Compulsive representation by an attorney.

II. Forms of the executive proceedings. Legal regime of the different species and forms of executive proceedings.

IV. The phases of the enforcement process. Ordinary enforcement process for the payment of a right amount. Phases: The Articulates. Initially pleading. "In limine" decision. Service of summons. Opposition. Attachment: definition, object, cases of withdrawing from execution and forced sale. Opposition to the attachment. Finding. Concurrence of creditor claims. Reclamation and verification of claims. Proceeding. Payment. Forms of payment. Termination of the enforcement procedure. Voidance and renovation of the enforcement procedure. Summary enforcement procedure for the payment of a certain amount of money. Common enforcement proceedings. Common enforcement proceedings. Common enforcement proceedings. Common enforcement proceedings. Ordinary and summary proceedings.

Pre-requisite: None

#### LAWS5000 GENERAL THEORY OF CHINESE LAW

Title I. History of Chinese Law. 1. Legal thoughts and characteristics of legal system in ancient China. 2. The transition of Chinese traditional legal system towards modernization.

Title II. Constitutional Law. 1. The basic political system. 2. The State Organs of China. 3. Rights and duties of Chinese citizens.

Title III. Sources of Law and Legislative System. 1. Hierarchy of sources of law. 2. Legislative procedures prescribed in the Law on Law-Making.

Title IV. Judicial System and Judicial Reform. 1. Judicial Organs. 2. People's Courts, Organizations, Jurisdictions and trial systems. 3. People's Procuratorates, Organizations and Competences.

Title V. Criminal Law. 1. Scope of application of criminal law. 2. Conception and constitution of crime 3. Penalties.

Title VI. Civil Law. 1. General principles of civil law, 2. The parties of the civil juridical relationship, 3. Civil juridical acts, 4. The right of property, 5. Contracts, 6. Civil liability.

Title VII. Marriage and successions law. 1. marriage regimes, divorce regimes and procedures, 2. blood relations and affinity, 3. inheritance, 4. legal succession, 5. testate succession.

Title VIII. Company Law. 1. General regime and types of companies, 2. Limited companies. 3. Joint stock limited liability companies 4. Partnership associations.

Title IX. Arbitration and mediation

Pre-requisite: None

#### LAWS5001 GENERAL THEORY OF LAW

I. Introduction: Object and interest of the subject.

II. The phenomenon of law. 1. Grounds of law. 1.1. Recurrent issues of General Theory of Law. 1.1.1. The concept of law. 1.1.2. Legal norms. 1.1.3. The ground of validity of a legal system. 1.1.4. Hume's *law* and legal positivism. 1.1.5. The theory of justice. John Rawls: justice as fairness. 1.1.6. Law and ethics.

Pre-requisite: None

## LAWS5002 COMPARATIVE LAW

Title I. Introduction. 1. The concept of comparative law and its neighbouring disciplines. 2. The history of comparative law. 3. The function and aims of comparative law. 4. The method of comparative law. 5. Legal formants. 6. Comparative law as a science. 7. The grouping of the legal systems into families.

Title II. Legal traditions of the world. 1. Civil Law: a) History. b) Structure. c) Sources. d) The French and German experiences of Codification. e) The diffusion of the respective patterns. 2. Common Law. 2.1. The English Law: a) History. b) Structure. c) Sources. 2.2. The American Law: a) History. b) Structure. c) Sources. 3. Far East Law. 3.1. Chinese Law. 3.2. Japanese Law. 4. Religious Law. 4.1. Islamic law. 4.2. Hindu Law. 5. African law.

Title III. Introduction to European Union Law.

Pre-requisite: None

#### LAWS5003 RESEARCH PAPER

The research may fall on any issue within the subjects taught in the Programme. The research shall be conducted under the concerned teacher's supervision. The research paper should count between 6.600 and 11.000 words (between 30 and 50 pages), double spaced lines. Pre-requisite: None

#### LAWS5004 RESEARCH AND COMMUNICATION SKILLS

The course has two main goals: on one hand, the students shall learn the basics on how to do research and write a paper (Research Skills); on the other hand, the course shall provide to the students the essential skills in speaking and debating in public, also including the presentation and discussion of a research paper (Communication Skills). The learnings acquired in Research and Communication Skills shall be later on applied to the Research Paper, to be prepared, written, presented and discussed in the 2nd semester.

Pre-requisite: None

# PROGRAMMES OF STUDY Faculty of Science and Technology

# **Doctoral Degree Programmes**

## AREAS OF STUDY

- Civil Engineering
- Computer Science
- Electrical and Computer Engineering
- Electromechanical Engineering
- Mathematics

# FACULTY OF SCIENCE AND TECHNOLOGY **Doctoral Degree Programmes**

# **Doctor of Philosophy**

Civil Engineering

Faculty-wid	e Compulsory Courses	Credits
STGC8002	Research Writing	1
STGC8003	Research Methods and Ethics	3
Department	-wide Compulsory Courses	
CIVL8001	Advanced Topics in Civil Engineering	3
CIVL8999	Doctoral Thesis	18
Total Credit	S:	25
Other Cours	se(s):	Credits
For students	admitted without a relevant Master's degree:	
5 required electives selected from existing compulsory and elective courses of Master's degree programmes in Civil Engineering		15
Total Credit	S:	40

# FACULTY OF SCIENCE AND TECHNOLOGY **Doctoral Degree Programmes**

# **Doctor of Philosophy**

Computer Science

Faculty-wide Compulsory Courses		Credits
STGC8002	Research Writing	1
STGC8003	Research Methods and Ethics	3
Department	wide Compulsory Courses	
CISC8001	Advanced Topics in Computer Science	3
CISC8999	Doctoral Thesis	18
Total Credits	S:	25
Other Cours	e(s):	Credits
For students	admitted without a relevant Master's degree:	
5 Required Electives from the list of elective courses in Master's degree programme in Computer Science or E-commerce Technology		15
Total Credits:		40

FACULTY OF SCIENCE AND TECHNOLOGY

# **Doctoral Degree Programmes**

# **Doctor of Philosophy**

# • Electrical and Computer Engineering

Faculty-wide Compulsory Courses		Credits
STGC8002	Research Writing	1
STGC8003	Research Methods and Ethics	3
Department	-wide Compulsory Courses	
ECEN8001	Advanced Topics in Electrical and Computer Engineering	3
ECEN8999	Doctoral Thesis	18
Total Credits:		25
Other Cours	se(s):	Credits
For students admitted without a relevant Master's degree:		
5 Required Electives from the list of elective courses in Master's degree programme in Electrical and Computer Engineering		15
Total Credits:		40

# FACULTY OF SCIENCE AND TECHNOLOGY Doctoral Degree Programmes

# **Doctor of Philosophy**

# • Electromechanical Engineering

Faculty-wide Compulsory Courses		Credits
STGC8002	Research Writing	1
STGC8003	Research Methods and Ethics	3
Department-	wide Compulsory Courses	
EMEN8001	Advanced Topics in Electromechanical Engineering	3
EMEN8999	Doctoral Thesis	18
Total Credits	:	25
Other Course	ə(s):	Credits
For students	admitted without a relevant Master's degree:	
5 Required Electives from the list of elective courses in Master's degree programme in Electromechanical Engineering		15
Total Credits		40

# FACULTY OF SCIENCE AND TECHNOLOGY **Doctoral Degree Programmes**

# **Doctor of Philosophy**

• Mathematics

Faculty-wide Compulsory Courses		Credits
STGC8002	Research Writing	1
STGC8003	Research Methods and Ethics	3
Department-	wide Compulsory Courses	
MATH8001	Advanced Topics in Mathematics	3
MATH8999	Doctoral Thesis	18
Total Credits	:	25
Other Course	ə(s):	Credits
For students a	admitted without a relevant Master's degree:	
5 Required Electives from the list of elective courses in Master's degree programme in Mathematics		15
Total Credits		40

# FACULTY OF SCIENCE AND TECHNOLOGY Master's Degree Programmes

# **Master of Science**

• Civil Engineering with Specialization in Hydraulics and Environmental Engineering

		Credits
CIVL7001	Advanced Mathematics	3
CIVL7029	Hydrodynamics	3
CIVL7999	Academic Thesis*	6
6 Required El	ectives chosen from the elective table	18
Total Credits	:	30
OR		
CIVL7001	Advanced Mathematics	3
CIVL7029	Hydrodynamics	3
CIVL7996	Applied Thesis*	3
7 Required Electives chosen from the elective table		21
Total Credits	:	30

\*Academic thesis based programme targets all MSc students, while applied thesis based programme targets all MSc students except for studentship/assistantship holders.

Elective Table for MSc in Civil Engineering (Hydraulics and Environmental Engineering):			
CIVL7003 Finite Element Method	3		
CIVL7023 Economic Analysis and Financial Management in Engineering	3		
CIVL7030 Environmental Fluid Mechanics	3		
CIVL7031 Sediment Transport	3		
	3		
CIVL7033 Environmental Chemistry	3		
	3		
CIVL7035 Water Pollution Control: Physical and Chemical Modeling	3		
CIVL7036 Environmental Assessment and Planning: Computer Modeling	3		
CIVL7037 Air Pollution Control	3		
	3		
	3		
CIVL7040 Special Topics in Environmental Engineering I	3		
	3		
•·····································	3		
CIVL7043 Quantitative Methods for Construction Decision Making	3		
CIVL7044 Quality and Safety Management in Construction	3		

# FACULTY OF SCIENCE AND TECHNOLOGY Master's Degree Programmes

# **Master of Science**

• Civil Engineering

	Credits
2 Required Electives chosen from Table I	6
6 Required Electives chosen from Table I and II*	18
CIVL7998 Project Report	6
Total Credits:	30
OR	
2 Required Electives chosen from Table I	6
7 Required Electives chosen from Table I and II*	21
CIVL7997 Internship and Report	3
Total Credits:	30

\* The 2 chosen Required Electives from Table I stated in the first requirement cannot count towards the 6 / 7 Required Electives stated in the second requirement.

List of Requi	red Electives (Table I)	
CIVL7001	Advanced Mathematics	3
CIVL7002	Theory of Elasticity and Plasticity	3
CIVL7003	Finite Element Method	3
CIVL7029	Hydrodynamics	3
List of Requi	red Electives (Table II)	
CIVL7004	Advanced Soil Mechanics	3
CIVL7005	Subsurface Investigation and Soil Testing	3
CIVL7006	Advanced Foundation Engineering	3
CIVL7007	Soil Dynamics	3
CIVL7008	Structural Design of Foundations	3
CIVL7009	Special Topics in Geotechnical Engineering II	3
CIVL7010	Structural Vibrations	3
CIVL7011	Plates and Shells	3
CIVL7012	Structural Analysis and Finite Elements	3
CIVL7013	Special Topics in Structural Engineering III	3
CIVL7014	Numerical Modeling in Geomechanics	3
CIVL7015	Random Vibrations of Structures	3
CIVL7016	Behavior and Design of Steel Members	3
CIVL7017	Ground Improvement Techniques	3
CIVL7018	Slope Stability and Earth Retaining Structures	3
CIVL7019	Special Topics in Geotechnical Engineering I	3
CIVL7020	Special Topics in Structural Engineering I	3
CIVL7021	Special Topics in Structural Engineering II	3

CIVL7022 CIVL7023 CIVL7024 CIVL7025	Advanced Applications of Structural Dynamics Economic Analysis and Financial Management in Engineering Fracture Mechanics and Fatigue Reliability Analysis in Civil Engineering	3 3 3 3
CIVL7025	Instrumentation Systems in Civil Engineering	3
CIVL7027	Constitutive Modeling in Soil Mechanics	3
CIVL7028	Analysis and Design of Reinforced Concrete Members	3
CIVL7030	Environmental Fluid Mechanics	3
CIVL7031	Sediment Transport	3
CIVL7032	Municipal Solid Waste Management	3
CIVL7033	Environmental Chemistry	3
CIVL7034	Water and Waste Water Treatment: Principle and Application	3
CIVL7035	Water Pollution Control: Physical and Chemical Modeling	3
CIVL7036	Environmental Assessment and Planning: Computer Modeling	3
CIVL7037	Air Pollution Control	3
CIVL7038	Special Topics in Environmental Engineering IV	3
CIVL7039	Air Pollution Meteorology and Chemistry	3
CIVL7040	Special Topics in Environmental Engineering I	3
CIVL7041	Special Topics in Environmental Engineering II	3
CIVL7042	Special Topics in Environmental Engineering III	3
CIVL7043	Quantitative Methods for Construction Decision Making	3
CIVL7044	Quality and Safety Management in Construction	3

FACULTY OF SCIENCE AND TECHNOLOGY Master's Degree Programmes

# **Master of Science**

# • Computer Science

		Credits
CISC7005	Computer Science Seminar	3
CISC7999	Academic Thesis*	6
7 Required E	lectives chosen from the elective table except CISC7005	21
Total Credits		30
OR		
CISC7001	Fundamentals of Software Engineering	3
CISC7996	Applied Thesis*	3
8 Required E	lectives chosen from the elective table except CISC7001	24
Total Credits	:	30

\*Academic thesis based programme targets all MSc students, while applied thesis based programme targets all MSc students except for studentship/assistantship holders.

#### Elective Table for MSc in Computer Science:

	CISC7001	Fundamentals of Software Engineering	3
	CISC7002	Computer Communications and Networks	3
	CISC7004	Current Development in Database	3
	CISC7005	Computer Science Seminar	3
	CISC7006	Compiler Construction	3
	CISC7007	Design and Analysis of Algorithms	3
	CISC7008	Complexity Theory	3
	CISC7009	Formal Methods in Software Engineering	3
	CISC7010	Discrete System Simulation	3
	CISC7011	Computer System Performance Modeling	3
	CISC7012	Computer Graphics - Principles and Systems	3
	CISC7013	Principles of Applications of Artificial Intelligence	3
	CISC7014	Advanced Topics in Computer Science	3
	CISC7015	Advanced Topics in Computer Science I	3
	CISC7016	Advanced Topics in Computer Science II	3
	CISC7017	Principles and Applications of Concurrent Programming	3
	CISC7018	Computer Vision and Pattern Recognition	3
	CISC7019	Web Mining	3
	CISC7020	Distributed Computer	3
	CISC7021	Applied Natural Language Processing	3
	CISC7022	Big Data Processing and Analysis	3
	CISC7023	Introduction to Business Process Management	3

# FACULTY OF SCIENCE AND TECHNOLOGY Master's Degree Programmes

# **Master of Science**

# • E-Commerce Technology

		Credits
CISC7104	Fundamental of E-Commerce	3
CISC7199	Academic Thesis*	6
7 Required E	lectives chosen from the elective table	21
Total Credits	s:	30
OR		
CISC7104	Fundamental of E-Commerce	3
CISC7105	Internet Programming and Java Technology	3
CISC7196	Applied Thesis*	3
7 Required E	lectives chosen from the elective table except CISC7105	21
Total Credite	Total Credits:	

\*Academic thesis based programme targets all MSc students, while applied thesis based programme targets all MSc students except for studentship/assistantship holders.

Elective Table for MSc in E-Commerce Technology:

CISC7101	Information Systems Development Methodologies	3
CISC7102	Computer Networks and Internet	3
CISC7103	Distributed Database Management	3
CISC7105	Internet Programming and Java Technology (Not for applied thesis)	3
CISC7106	Data Warehousing	3
CISC7107	Data Mining and Decision Support Systems	3
CISC7108	Advanced Computer Graphics and Multimedia	3
CISC7109	Internet Security and Cryptography	3
CISC7110	Electronic Payment Systems	3
CISC7111	Smart Card Technology and Applications	3
CISC7112	Legal Issues of IT and E-Commerce	3
CISC7113	Topics in E-Commerce	3
CISC7114	Topics in E-Commerce (Electronic Marketplace)	3
CISC7115	Topics in E-Commerce (E-Business Integration Technology)	3
CISC7116	Fundamentals of Business Process Management	3
CISC7117	Discrete System Simulation	3

FACULTY OF SCIENCE AND TECHNOLOGY

# Master's Degree Programmes

# Master of Science

# • Financial Technology

		Credits
CISC7301	Introduction to Financial Technologies (FinTech)	3
CISC7110	Electronic Payment Systems	3
CISC7107	Data Mining and Decision Support System	3
CISC7398	Project Report ectives from Table I	6 6
	ectives from Table II	9
		0
Total Credits	:	30
OR		
CISC7310	Introduction to Financial Technologies (FinTech)	3
CISC7110	Electronic Payment Systems	3
CISC7107	Data Mining and Decision Support Systems	3
CISC7397	Internship and Report	3
	ectives from Table I	21
4 Required El	ectives from Table II	21
Total Credits		30
Table I: Requi	red Electives from Financial, Economics, Accounting	
BECO7010	Statistics and Financial Economics	3
CISC7112	Legal Issues of IT and E-Commerce	3
FINC7010	Corporate Finance	3
FINC7024 FINC7035	Investments and Portfolio Management Financial Risk Management	3
FINC/035		5
	ired Electives from Information Technologies	
CISC7004	Current Development in Database	3
CISC7013 CISC7021	Principles of Artificial Intelligence Applied Natural Language Processing	3 3
CISC7021 CISC7022	Big Data Processing and Analysis	3
CISC7022 CISC7101	Information Systems Development Methodologies	3
CISC7106	Data Warehousing	3
CISC7109	Internet Security and Cryptography	3 3
CISC7111	Smart Card Technology and Applications	3
CISC7116	Fundamentals of Business Process Management	3
CISC7302	Algo Trading and High Frequency Trading	3
CISC7303	Cloud Computing	3

# FACULTY OF SCIENCE AND TECHNOLOGY Master's Degree Programmes

## **Master of Science**

## • Electrical and Computer Engineering

		Credits
ECEN7001	Introduction to Research	3
ECEN7002	Advanced Mathematics	3
ECEN7999	Academic Thesis*	6
6 Required E	6 Required Electives chosen from the elective table	
Total Credits	3:	30
OR		
ECEN7001	Introduction to Research	3
ECEN7002	Advanced Mathematics	3
ECEN7996	Applied Thesis*	3
7 Required E	lectives chosen from the elective table	21
Total Credits	5:	30

\*Academic thesis based programme targets all MSc students, while applied thesis based programme targets all MSc students except for studentship/assistantship holders.

Elective Table for MSc in Electrical and Computer Engineering:

	Ter mee in Electrical and Compater Engineering.	
ECEN7003	Microelectronic Circuit Design	3
ECEN7004	Digital Signal Processing	3
ECEN7005	Active Network Theory	3
ECEN7006	Advanced Topics in Control Systems	3
ECEN7007	Advanced Topics in Simulation	3
ECEN7008	Expert Systems	3
ECEN7009	Microelectronics for Telecommunication and Signal Processing	3
ECEN7010	Laser and Semiconductor Physics	3
ECEN7011	Advanced Topics in Telecommunications	3
ECEN7018	Flexible Alternative Current Transmission System	3
ECEN7019	Embedded System	3
ECEN7020	Advanced Topics in Analog and Mixed-Signal Integrated Circuits	3
ECEN7021	Biomedical Transducers and Instruments	3
ECEN7022	Electrochemical Energy Conversion and Storage	3
ECEN7023	Special Topics in Biomedical Engineering	3
ECEN7024	Medical Imaging Systems	3
ECEN7025	Modeling and Theoretical Analysis for Communication Systems	3
CISC7102	Computer Networks and Internet	3
CISC7002	Computer Communications and Networks	3
CISC7109	Internet Security and Cryptography	3
CISC7110	Electronic Payment Systems	3
CISC7111	Smart Card Technology & Applications	3

FACULTY OF SCIENCE AND TECHNOLOGY Master's Degree Programmes

# **Master of Science**

## • Internet of Things

		Credits
ECEN7101	Introduction to Internet of Things	3
ECEN7102	Advanced Topics in Applied Probability and Statistics	3
ECEN7198	Project Report	6
6 Required El	ectives chosen from the elective table	18
Total Credits	:	30
OR		
ECEN7101	Introduction to Internet of Things	3
ECEN7102	Advanced Topics in Applied Probability and Statistics	3
ECEN7197	Internship and Report*	3 3
7 Required El	ectives chosen from the elective table	21
Total Credits	:	30
*The number of	hours for Internship is 720.	

Elective Table for MSc in Internet of Things:

Group 1 ECEN7103 ECEN7104 ECEN7105	RFID Principle and Applications Advanced Integrated Circuit Design for Internet of Things Embedded Systems for Internet of Things Applications	3 3 3
Group 2 CISC7102 ECEN7011 ECEN7025 ECEN7108	Computer Networks and Internet Advanced Topics in Telecommunications Modeling and Theoretical Analysis for Communications Systems Advanced Topics in Internet of Things	3 3 3 3
Group 3 CISC7303 CISC7013 CISC7022 CISC7107 CISC7109 ECEN7106 ECEN7107	Cloud Computing Principles of Artificial Intelligence Big Data Processing and Analysis Data Mining and Decision Support Systems Internet Security and Cryptography Convex Optimization for Internet of Things Applications Data Analysis for Internet of Things	3 3 3 3 3 3 3 3 3

#### Remarks:

<sup>^</sup> Students who take Project Report are required to take 6 Required Electives to obtain 18 credits. And students are required to choose at least one course from each of the Group 1, 2 and 3, OR

^ Students who take Internship and Report are required to take 7 Required Electives to obtain 21 credits. And students are required to choose at least one course from each of the Group 1, 2 and 3.

FACULTY OF SCIENCE AND TECHNOLOGY

# **Master's Degree Programmes**

# Master of Science

# • Electromechanical Engineering

	Credits
EMEN7037 Advanced Mathematics for Electromechanical Engineering	3
EMEN7998 Project Report	6
7 Required Electives chosen from the elective table	21
Total Credits:	30
OR	
EMEN7037 Advanced Mathematics for Electromechanical Engineering	3
EMEN7997 Internship and Report	3
8 Required Electives chosen from the elective table	24
Total Credits:	30

Elective Table	ofor MSc in Electromechanical Engineering:	
EMEN7002	Physics of Materials	3
EMEN7003	Variational Principles and the Application	3
EMEN7006	Mechatronics	3
EMEN7007	Process Heat Transfer	3 3
EMEN7008	Convective Heat Transfer	3
EMEN7009	Computational Method for Thermo-Fluid System	3
EMEN7010	Energy Conversion and Utilization	3 3
EMEN7011	Advanced Robotics and Control	3
EMEN7014	Fluid Power Engineering	3 3
EMEN7017	Special Topics in Manufacturing I	3
EMEN7018	Special Topics in Manufacturing II	3 3
EMEN7019	Special Topics in Thermal Engineering I	3
EMEN7020	Special Topics in Thermal Engineering II	3 3
EMEN7021	Automotive Engineering	3
EMEN7022	Failure Analysis in Mechanical Engineering	3
EMEN7023	Advanced Electrical Services	3
EMEN7024	Advanced Electromechanical Energy Conversion	3
EMEN7025	Human Factors Engineering	3
EMEN7027	Engineering Acoustics	3
EMEN7028	Advanced Electric Vehicles	3 3
EMEN7029	Special topic in Electromechanical Engineering I	3
EMEN7030	Special topic in Electromechanical Engineering II	3 3
EMEN7031	Micromechatronics and Applications	3
EMEN7032	Intelligent Theory and Engineering Applications	3
EMEN7033	Industrial Engineering and Engineering Management	3
EMEN7034	Theories and Practice of CAD/CAM/CAE	3
EMEN7035	Product Design and Management	3

# FACULTY OF SCIENCE AND TECHNOLOGY Master's Degree Programmes

# **Master of Science**

• Mathematics

		Credits
MATH7001	Functional Analysis	3
MATH7002	Real Analysis	3
MATH7998	Project Report	6
6 Required E	lectives chosen from the elective table	18
Total Credits	:	30

Elective Table	for MSc in Mathematics:	
MATH7003	Advanced Numerical Linear Algebra	3
MATH7004	Advanced Probability and Statistics	3
MATH7005	Clifford Analysis	3
MATH7006	Geometry and its Applications	3
MATH7007	Mathematical Theory of Computational Intelligence	3
MATH7008	Matrix Analysis	3
MATH7009	Numerical Methods for Differential Equations	3
MATH7010	Partial Differential Equations	3
MATH7011	Reading Course I	3
MATH7012	Reading Course II	3
MATH7013	Stochastic Differential Equations	3
MATH7014	Stochastic Processes	3
MATH7015	Time Series Analysis	3
MATH7016	Topics in Analysis	3
MATH7017	Topics in Geometry	3
MATH7018	Topics in Matrix Analysis	3
MATH7019	Topics in Partial Differential Equations	3
MATH7020	Topics in Probability and Statistics	3
MATH7021	Financial Mathematics	3

# FACULTY OF SCIENCE AND TECHNOLOGY Bachelor's Degree Programmes

# **Bachelor of Science**

# • Applied Physics and Chemistry

Year I		Credits
APAC1000	Advanced Mathemactics I	3
APAC1001	College Physics	3
APAC1002	Electromagnetism and Physical Optics	3
APAC1003	Introduction to College Chemistry	3
CISC1001	Programming Science	3
Community and Peer Education Courses		2
Languages and Skills Courses		9
General Educ	ation Courses:	
GELH1000	Chinese Language and Culture	3
GEST1004	Quantitative Reasoning for Science and Technology	3
1 course from	area of Science and Technology	3
Total Credits	:	35

Year II		Credits
APAC2000	Advanced Mathemactics II	3
APAC2001	Analytical and Environmental Chemistry	3
APAC2002	Modern Physics	3
APAC2003	Inorganic Chemistry	3
APAC2004	Quantum Physics3	
Community and Peer Education Courses		1
Languages and Skills Courses		6
General Education Courses:		
GESB1000	Ethics, Values, Law and Society	3
GEGA1000	Macao and Chinese Civilization	3
1 Free Elective		3
Total Credits	:	31

Year III		Credits
APAC3000	Materials Physics and Chemistry	3
APAC3001	Solid State Physics	3
APAC3002	Thermodynamics and Statistical Physics	3
APAC3003	Materials Characterization	3
APAC3004	Optoelectronics	3
APAC3005	Physical Chemistry	3
APAC3006	Semiconductor Physics	3
General Edu	cation Courses:	
2 General Ec	ducation Courses	6
1 Free Electi	ve	3
Total Credits	S:	30

Year IV	<b>Credits</b>
APAC4000 Research Project	6
4 Required Electives	
General Education Courses:	
1 General Education Course	
1 Free Elective	
Total Credits:	24

## Required Elective Course List:

Required Elective Course List.		
CISC1006	Probability and Statistics	3
APAC3007	Low-Dimentional Physics	3
APAC3008	Nanochemistry	3
APAC3009	Organic and Polymer Chemistry	3
APAC3010	Thin Film Physics	3
APAC4001	Electrochemistry	3
APAC4002	Electrodynamics	3
APAC4003	Magnetic Properties of Materials	3
APAC4004	Mathematical Methods in Physics	3
APAC4005	Micro-/Nano-Systems	3
APAC4006	Physics of Semiconductor Processing	3
APAC4007	Semiconductor Materials and Devices	3
APAC4008	Supramolecular Chemistry	3
APAC4009	Theory and Modeling of Materials Properties	3
APAC4010	Topics in Emerging Materials	3

# FACULTY OF SCIENCE AND TECHNOLOGY Bachelor's Degree Programmes

# **Bachelor of Science**

# • Civil Engineering

Year I		Credits
CIVL1000	Computer Science	3
CIVL1001	Introduction to Civil and Environmental Engineering	2
CIVL1003	Statics	3
CIVL1004	Engineering Geology	3
MATH1003	Intermediate Calculus	3
ECEN1008	Physics I	3
ECEN1010	Physics II	3
Community a	and Peer Education Courses	2
Languages and Skills Courses		9
General Edu	cation Courses:	
GEGA1000	Macao and Chinese Civilization	3
GELH1000	Chinese Language and Culture	3
GESB1000	Ethics, Values, Law and Society	3
GEST1004	Quantitative Reasoning for Science and Technology	3
Total Credits	8:	43

Year II		Credits
CIVL1002	Civil Engineering Drawing	2
CIVL2000	Kinematics and Dynamics	3
CIVL2001	Mechanics of Materials	3
CIVL2002	Surveying	2
CIVL2003	Fluid Mechanics	3
CIVL2004	Mathematics for Civil Engineering	3
CIVL2005	Construction Materials	3
CIVL2006	Structural Analysis	3
CIVL2007	Soil Mechanics	3
STGC1001	General Chemistry	3
MATH2000	Engineering Mathematics I	3
MATH2001	Engineering Mathematics II	3
Community and Peer Education Courses		1
Languages and Skills Courses		3
Total Credits	Total Credits:	

Year III		Credits
CIVL3000	Steel Design	3
CIVL3001	Construction Management and Practice	3
CIVL3002	Environmental Engineering I	3
CIVL3003	Environmental Engineering II	3
CIVL3004	Reinforced Concrete Design	3
CIVL3005	Foundation Engineering	3
4 Required Electives from the Required Elective Course List		12
Languages and Skills Courses:		3
General Education Course:		
GEGA1000	Macao and Chinese Civilization	3
Total Credit	s:	36

#### **Total Credits:**

Year IV		Credits
CIVL4000	Graduation Project I	3
CIVL4001	Graduation Project II	3
CIVL4002	Integrated Project Design	3
STGC3000	Work-integrated Education	3
3 Required E	lectives from the Required Elective Course List	9

30

1 course from area of Literature and Humanities	3
1 course from area of Society and Behaviour	3
1 course from area of Global Awareness	3

# **Total Credits:**

Required Elective Course List:			
CIVL3006	Civil Engineering Hydraulics	3	
CIVL3007	Advanced Topics in Soil Mechanics	3	
CIVL3008	Environmental Modeling	3	
CIVL4004	Advanced Mechanics of Materials	3	
CIVL4005	Advanced Structural Analysis	3	
CIVL4006	Structural Vibrations	3	
CIVL4007	Advanced Reinforced Concrete Design	3	
CIVL4008	Structural Systems and Analysis	3	
CIVL4009	Selected Topics in Geotechnical Engineering	3	
CIVL4010	Earth Retaining Systems	3	
CIVL4011	Application of Numerical Methods in Geotechnical Engineering	3	
CIVL4012	Introduction to Soil Improvement	3	
CIVL4013	Engineering Economics and Ethics	3	
CIVL4014	Construction Planning, Scheduling and Control	3	
CIVL4015	Construction Methods, Procedure and Equipment	3	
CIVL4016	Environmental Engineering III	3	
CIVL4017	Essentials to Environmental Biotechnology	3	
CIVL4018	Wastewater Treatment Engineering	3	
CIVL4019	Traffic Engineering	3	
CIVL4020	Transportation Planning and Public Transport System	3	
CIVL4021	Special Topics in Civil Engineering	3	

# FACULTY OF SCIENCE AND TECHNOLOGY Bachelor's Degree Programmes

# **Bachelor of Science**

# Computer Science

Year I		Credits		
CISC1001	Programming Science	3		
CISC1004	Introduction to Computer Science	3		
CISC1006	Probability and Statistics	3		
MATH1003	Intermediate Calculus	3		
Community and Peer Education Courses				
Languages and Skills Courses		12		
General Education Courses:				
	GELH1000 Chinese Language and Culture			
	GEST1004 Quantitative Reasoning for Science and Technology			
1 course from	I course from area of Science and Technology			
Total Credits:		35		

Year II		Credits	
CISC1002	Discrete Structures	3	
CISC2001	Computer Organization	3	
CISC2002	Numerical Methods and Computation	3	
CISC2003	Object Oriented Programming and Data Structures	3	
CISC2005	Principles of Operating Systems	3	
CISC2006	Algorithm Design and Analysis	3	
MATH1001	Linear Algebra I	3	
Community and Peer Education Courses			
Languages and Skills Courses		3	
General Education Courses:			
GEGA1000 Macao and Chinese Civilization			
1 course from area of Science and Technology		3	
1 course fron	1 course from area of Literature and Humanities		
Total Credits	:	34	

Year III			Credits	
CISC3000	Introduction to Database Systems		3	
CISC3001	Computer Networks		3	
CISC3026	Software Engineering Principles		3	
CISC3002	Mobile Application Programming	or	3	
CISC3003	Web Programming			
4 Required Electives			12	
General Education Courses:				
1 course from area of Society and Behaviour			3	
1 course fron	course from area of Global Awareness			
1 Free Elective		3		
Total Credits:		33		

Year IV		Credits
CISC4000	Graduation Project	6
CISC4001	Professionalism and Ethics in Computer Science	3
STGC3000	Work-Integrated Education	3
3 Required Electives		9
2 Free Electives		6
Total Credits:		27

## **Required Elective Course List\***

Stream A: Data Science and Artificial Intelligence			
CISC3005	Advanced Database Systems	3	
CISC3012	Artificial Intelligence	3	
CISC3014	Information Retrieval and Web Search	3 3 3 3	
CISC3018	Cloud Computing and Big Data Systems	3	
CISC3023	Machine Learning	3	
CISC3024	Pattern Recognition		
CISC3025	Natural Language Processing	3	
Stream B: Mul	timedia Computing		
CISC3009	Computer Graphics	3	
CISC3011	Digital Image Processing	3 3	
CISC3016	Multimedia Computing	3	
CISC3021	Multimedia Forensics and Security	3	
CISC3024	Pattern Recognition	3	
CISC3029	Computer Vision	3	
Stream C: Sof	tware Engineering		
CISC2007	Human-Computer Interaction	3	
CISC2008	Object-Oriented Analysis and Design Patterns	3 3 3	
CISC3010	Distributed Computer Systems	3	
CISC3020	Formal Software Specification	3	
CISC3022	Software Testing	3	

3

#### CISC4002 Software Project Management 3 Other Electives: CISC2004 3 Compiler Construction 3 Computer Based Simulation CISC3006 CISC3007 Formal Languages and Automata 3 Data and Information Visualization 3 3 3 3 3 CISC3015 **Bioinformatics** CISC3017 CISC3019 Competition Programming and Problem Solving Special Topics in Computer and Information Science CISC3027 CISC3028 Entrepreneurship in Computer Science

CISC4003 Information Security

Remarks:

\* Students are required to take 4 courses from one of the Stream A, B or C, and 3 courses from outside that Stream or from Other Electives in the Required Elective Course List.

FACULTY OF SCIENCE AND TECHNOLOGY

# **Bachelor's Degree Programmes**

# **Bachelor of Science**

# • Electrical and Computer Engineering

Year I		Credits	
ECEN1001	Introduction to Electrical and Computer Engineering	1	
ECEN1003	Information Technology Revolution and Electronics	1	
ECEN1004	Embedded Systems	3	
ECEN1005	Circuit Analysis	4	
ECEN1011	Digital Systems	3	
ECEN1012	Computer Programming and Network Fundamentals	4	
ECEN1013	Physics for Electrical and Computer Engineering	3	
MATH1003	Intermediate Calculus	3	
Community and Peer Education Courses		2	
Languages and Skills Courses		9	
General Education Course:			
GEST1004	Quantitative Reasoning for Science and Technology	3	
Total Credits		36	

Year II		Credits
ECEN2001	Measurement and Instrumentation	3
ECEN2002	Electric Machines	3
ECEN2003	Fundamental Electronics	3
ECEN2005	Electromagnetism	3
ECEN2015	Applied Electronics	3 3
ECEN2017	Signal and Systems	3
ECEN2018	Linear Algebra, Probability and Statistics for Electrical and Compute Engineering	er 4
ECEN2019	Power System Engineering and Protection	3
MATH2000	Engineering Mathematics I	3
Community and Peer Education Courses 1		
Languages and Skills Courses		3
General Education Course:		
1 course from area of Science and Technology		3
Total Credits:		35

Year III		Credits		
ECEN3000	Control Systems	3		
ECEN3001	Digital Signal Processing	3		
ECEN3008	Power Systems Analysis	3		
7 Electrical and Computer Engineering Required Electives				
General Education Courses:				
GESB1000	Ethics, Values, Law and Society	3		
GEGA1000	Macao and Chinese Civilization	3		
Total Credits	:	36		

Year IV		Credits	
ECEN3002	Electrical and Computer Engineering Seminars	1	
ECEN4000	Graduation Project I	3	
ECEN4001	Graduation Project II	3	
STGC3000	Work-Integrated Education	3	
3 Electrical a	nd Computer Engineering Required Electives	9	
Languages a	3		
General Educ	cation Courses:		
GELH1000	Chinese Language and Culture	3	
1 course from area of Literature and Humanities		3	
1 course from area of Society and Behaviour		3	
1 course from	1 course from area of Global Awareness		
Total Credits	:	34	

#### Electrical and Computer Engineering Required Elective Course List<sup>A</sup> Group A: Biomedical Engineering

Group A: Biomedical Engineering				
	ECEN2009	Biology	3	
	ECEN3003	Introduction to Biomedical Engineering	3	
	ECEN3004	Fundamental Bio-Electricity	3	
	ECEN3005	Biomedical Electronics	3	
	ECEN3006	Introduction to Biomedical Signal Analysis	3	
	ECEN4004	Biomedical Measurement and Instrumentation	3	
	ECEN4005	Introduction to Biomedical Imaging	3	
	•	tric Power Engineering and its Automation		
	ECEN3007	Power Electronics	3	
	ECEN3009	Power Quality and Energy Saving	3	
	ECEN3010	Power Electronics Design and Implementation	3	
	ECEN3011	Electric Drive	3	
	ECEN4006	Renewable Energy Conversion	3	
	ECEN4007	Power System Design and Implementation	3	
		roelectronics Discipline		
	ECEN3017	5 5 5	3	
	ECEN3018	Introduction to Data Converters	3	

ECEN3019 ECEN3020 ECEN3022	Introduction to Radio-Frequency Circuits and Systems Advanced Topics in Analog and Mixed-Signal Integrated Circuit Design Advanced Integrated Circuit Design for Internet of Things Systems	3 3 3
Group D: Wire ECEN3012 ECEN3013 ECEN3014 ECEN3015 ECEN3016 ECEN4008 ECEN4009	less Technology Discipline Principles of Communication Systems Radio Frequency and Microwave Techniques for Wireless Systems Antenna Theory and Applications In Wireless Communications Cellular Communication Network Design and Optimization Introduction to Wireless Technology for Digital Game Introduction to Wireless Sensing Network Microwave and Millimeter Wave System Design	3 3 3 3 3 3 3 3 3 3 3
Group E: Intern ECEN3023 ECEN3024 ECEN3025 ECEN3026	net of Thing Engineering and Intelligent Control Intelligent Methods for Electrical and Computer Engineering Fundamentals of Internet of Things Internet of Things Workshop Data Analytics for Electrical and Computer Engineering	3 3 3 3
Group F: Gene ECEN1006 ECEN2006 ECEN2010 ECEN2011 ECEN3021 ECEN4002 ECEN4003	eral and Mathematics Engineering and Society Numerical Method and Computation Semiconductor Device Physics Introduction to Electro-Robot Design Multimedia Technology Digital Control Special Topic in Electrical and Computer Engineering	3 3 3 3 3 3 3 3 3 3

<u>Remarks:</u> ^ Students are required to select 10 courses in the above Required Elective Course Groups with the following rubrics:

-	1 course from each of Group A-F	18
-	1 more course from one of the Discipline Group A-E	3
-	3 more courses freely selected from any of the Groups A-F	9

Total: 30

# FACULTY OF SCIENCE AND TECHNOLOGY Bachelor's Degree Programmes

# **Bachelor of Science**

# • Electromechanical Engineering

Year I		Credits
EMEN1001	Engineering Drawing I	1
EMEN1002	Engineering Drawing II	1
EMEN1003	Engineering Materials	3
EMEN1004	Statics	3
MATH1003	Intermediate Calculus	3
ECEN1008	Physics I	3
Community ar	nd Peer Education Courses	2
Languages and Skills Courses		12
General Educ	ation Courses:	
GELH1000	Chinese Language and Culture	3
GEST1004	Quantitative Reasoning for Science and Technology	3
1 course from	area of Science and Technology	3
Total Credits		37

Year II		Credits
EMEN2000	Strength of Materials	3
EMEN2001	Thermodynamics	3
EMEN2002	Manufacturing Technology	3
EMEN2003	Electrical Engineering	3 3
EMEN2004	Dynamics	3
EMEN2005	Computer-Aided Design	3 3
EMEN2006	Machine Elements	3
EMEN2007	Mechatronics	3
MATH2000	Engineering Mathematics I	3 3
MATH2001	Engineering Mathematics II	3
Community and Peer Education Courses		1
Languages and Skills Courses		3
General Education Course:		
GEGA1000	Macao and Chinese Civilization	3
<b>Total Credits</b>	:	37

Year III		Credits
EMEN3000	Production Management	3
EMEN3001	Fluid Mechanics	3
EMEN3002	Control Engineering	3
EMEN3003	Heat Transfer	3
EMEN3004	Computer Engineering	3
EMEN3005	Society and the Engineer	1
4 Required El	lectives	12
General Educ	cation Courses:	
GESB1001	Applied Ethics	1
GESB1002	Foundations of Moral Values	1
GESB1003	Law and Society	1
1 course from	area of Global Awareness	3
Total Credits	:	34

Year IV		Credits
EMEN4000	Graduation Project	6
STGC3000	Work-Integrated Education	3
6 Required El	lectives	18
General Educ	cation Courses:	
1 course from area of Literature and Humanities		3
1 course from	area of Society and Behaviour	3
<b>Total Credits</b>	:	33

## Required Elective Course List^:

Stream A – Building Services			
EMEN3008	Air Conditioning and Refrigeration	3	
EMEN3012	Electrical Services - Wiring and Installations	3	
EMEN3018	Intelligent Buildings	3	
EMEN3025	Fire Protection Engineering	3	
EMEN3030	Special Topics in Electromechanical Engineering I	3	
EMEN3036	Extra-low-voltage Electrical Systems in Buildings	3	
EMEN3037	Facility Management	3	
EMEN3038	Lighting Technology	3	
Stream B – Ei	nergy, Engineering Design & Control		
EMEN3009	Applications of Vibration and Noise Control	3	
EMEN3010	Computer Technology in Engineering	3	
EMEN3013	Electromechanical Energy Conversion	3	
EMEN3014	Electronics and Instrumentation	3	
EMEN3015	Finite Element Techniques in Engineering	3	
EMEN3016	Fundamentals of Automotive Engineering	3	
EMEN3019	Internal Combustion Engines	3	
EMEN3023	Computational Fluid Dynamics	3	
EMEN3026	Robotics	3	
EMEN3028	Optimization Techniques and Their Applications in Engineering	3	

EMEN3031 EMEN3033 EMEN3035 EMEN3040 EMEN3041 EMEN3042 EMEN3045	Special Topics in Electromechanical Engineering II Theory of Mechanisms Electric Vehicles Nonlinear Dynamics and Chaos Selection of Materials for Engineering Design Sensors and Actuators Thermal Energy Transportation in Porous Media	3 3 3 3 3 3 3 3
Stream C – Ma EMEN3006 EMEN3007 EMEN3011 EMEN3017 EMEN3024 EMEN3027	aterials, Manufacturing & Engineering Management Advanced Manufacturing Advanced Materials for Engineering Corrosion, Wear and Degradation of Materials Industrial Data Management Engineering Management Mechanical Behaviour of Engineering Materials and Basic Failure Analysis	3 3 3 3 3 3 3
EMEN3029 EMEN3032 EMEN3034 EMEN3039 EMEN3043 EMEN3044	Production Systems, Planning and Control Special Topics in Electromechanical Engineering III Creative Industry Mechanical Processing of Materials Statistics and Probability for Engineering Surface Engineering and Coating Technology	3 3 3 3 3 3 3

<u>Remarks:</u> ^ Students are required to select at least one Required Elective from each stream and the rest can be from Stream A, B or C.

# FACULTY OF SCIENCE AND TECHNOLOGY Bachelor's Degree Programmes

# **Bachelor of Science**

# • Mathematics with Specialization in Mathematics and Applications

Year I		Credits
MATH1000	Discrete Mathematics	3
MATH1001	Linear Algebra I	3
MATH1002	Linear Algebra II	3
MATH1003	Intermediate Calculus	3
Community ar	nd Peer Education Courses	2
Languages and Skills Courses		12
General Educ	ation Course:	
GELH1000	Chinese Language and Culture	3
GEST1004	Quantitative Reasoning for Science and Technology	3
1 Free Elective		3
Total Credits		35

Year II		Credits
MATH2002	Multivariable Calculus	3
MATH2003	Mathematical Analysis I	3
MATH2005	Probability	3
MATH2004	Mathematical Analysis II	3
MATH2006	Applied Statistics	3
MATH2007	Numerical Analysis	3 3
MATH2008	Operations Research	
ECEN1008	Physics I	3
Community a	nd Peer Education Courses	1
Languages ar	nd Skills Courses	3
General Educ	cation Courses:	
GESB1000	Ethics, Values, Law and Society	3
GEGA1000	Macao and Chinese Civilization	3
<b>Total Credits</b>	:	34

Veen III		Creadite
Year III		Credits
MATH3000	Ordinary Differential Equations	3
MATH3001	Complex Analysis	3
MATH3002	Introduction to Stochastic Process	3
MATH3003	Abstract Algebra	3
MATH3005	Mathematics Experiments	3
2 Required E	lectives	6
General Educ	cation Courses:	
1 course from	3	
1 course from	n area of Society and Behaviour	3
1 Free Electiv	ve	3
Total Credits	:	30

Year IV		Credits
MATH4001	Introduction to Real Analysis and Hilbert Spaces	3
MATH4002	Research in Mathematics	3
1 Required E	lective	3
General Educ	cation Courses:	
1 course from	n area of Global Awareness	3
1 course from	area of Science and Technology	3
2 Free Electiv	/es	6
Total Credits	::	21

Required Elective Course List:			
MATH3004	Partial Differential Equations	3	
MATH3006	Mathematical Analysis III	3	
MATH3007	History of Mathematics	3	
MATH3008	Introduction to Stochastic Calculus	3	
MATH3009	Time Series Analysis	3	
MATH3010	Applied Linear Algebra	3	
MATH3011	Numerical Matrix Analysis	3	
MATH3012	Introduction to Computational Intelligence	3	
MATH3013	Mathematical Modeling	3	
MATH3014	Topics in Applied Mathematics	3	
MATH3015	Introduction to Financial Mathematics	3	
MATH3016	Fourier and Signal Analysis	3	

# FACULTY OF SCIENCE AND TECHNOLOGY Bachelor's Degree Programmes

# **Bachelor of Science**

# • Mathematics with Specialization in Statistics and Data Science

Year I		Credits		
CISC1001	Programming Science	3		
CISC1002	Discrete Structures	3		
MATH1001	Linear Algebra I	3		
MATH1002	Linear Algebra II	3		
MATH1003	Intermediate Calculus	3		
Community ar	2			
Languages ar	12			
General Education Course:				
GELH1000	Chinese Language and Culture	3		
GEST1004	Quantitative Reasoning for Science and Technology	3		
Total Credits		35		

Year II		Credits		
MATH2002	Multivariable Calculus	3		
MATH2003	3			
MATH2004	3			
MATH2005	Probability	3 3		
MATH2006	Applied Statistics			
Community ar	1			
Languages and Skills Courses				
General Educ	ation Courses:			
GESB1000	Ethics, Values, Law and Society	3		
GEGA1000	Macao and Chinese Civilization	3		
2 Free Electives				
Total Credits:				

Year III		Credits
CISC3000	Introduction to Database Systems	3
MATH2009	Linear Statistical Analysis	3
MATH3000	Ordinary Differential Equations	3
MATH3002	Introduction to Stochastic Process	3
MATH3017	Data-Driven Sampling Methods	3
MATH3018	Multivariate Data Analysis	3
3 Required E	9	
• - · · · · · · · · · · · · · · · · · ·	cation Courses: a area of Literature and Humanities	3
1 course from area of Society and Behaviour		
<b>Total Credits</b>	33	

Year IV		Credits
MATH2010	Computational Statistics	3
MATH4003	Nonparametric Statistics	3
MATH4004	Graduation Project	3
1 Required El	3	
General Educ		
1 course from	3	
1 course from area of Science and Technology		
1 Free Elective		
Total Credits	:	21

_		 ~		

Required Ele	ctive Course List:	
MATH3008	Introduction to Stochastic Calculus	3
MATH3009	Time Series Analysis	3
MATH3019	Applied Regression Analysis	3
MATH3020	Bayesian Method in Data Analysis	3
MATH3021	Data Mining and Statistical Learning	3
MATH3022	Design and Analysis of Experiments	3
MATH3023	Optimization for Big Data Inference	3
MATH3024	Statistical Techniques in Life Science	3
MATH3025	Topics in Statistics and Data Science	3
CISC2003	Object Oriented Programming and Data Structures	3
CISC2006	Algorithm Design and Analysis	3
CISC3005	Advanced Database Systems	3
CISC3012	Artificial Intelligence	3
CISC3015	Data and Information Visualization	3
CISC3018	Cloud Computing and Big Data Systems	3
CISC3023	Machine Learning	3
CISC3024	Pattern Recognition	3
CISC3025	Natural Language Processing	3

## **Course Description**

## DOCTORAL DEGREE PROGRAMMES

#### CIVL8001 ADVANCED TOPICS IN CIVIL ENGINEERING

Any specialized topics in Civil Engineering chosen by staff members who have experience in that particular field, but the topics are not covered by other postgraduate courses. A major emphasis will be placed on the state of the art methods and techniques associated with these selected topics.

Pre-requisite: None

#### CIVL8999 DOCTORAL THESIS

An independent investigation under the supervision of a faculty staff member. Pre-requisite: None

#### CISC8001 ADVANCED TOPICS IN COMPUTER SCIENCE

Any specialized topic in Computer Science chosen by staff member who has experience in that particular field, but the topic is not covered by the other postgraduate courses. Pre-requisite: None

#### CISC8999 DOCTORAL THESIS

An independent investigation under the supervision of a faculty staff member. Pre-requisite: None

#### ECEN8001 ADVANCED TOPICS IN ELECTRICAL AND COMPUTER ENGINEERING

Any specialized topic in Electrical and Computer Engineering chosen by staff member who has experience in that particular field, but the topic is not covered by the other postgraduate courses. Pre-requisite: None

#### ECEN8999 DOCTORAL THESIS

An independent investigation under the supervision of a faculty staff member. Pre-requisite: None

#### EMEN8001 ADVANCED TOPICS IN ELECTROMECHANICAL ENGINEERING

Any specialized topic in Electromechanical Engineering chosen by staff member who has experience in that particular field, but the topic is not covered by the other postgraduate courses. Pre-requisite: None

#### EMEN8999 DOCTORAL THESIS

An independent investigation under the supervision of a faculty staff member. Pre-requisite: None

## MATH8001 ADVANCED TOPICS IN MATHEMATICS

Any specialized topic in Mathematics chosen by staff member who has experience in that particular field, but the topic is not covered by the other postgraduate courses. Pre-requisite: None

#### MATH8999 DOCTORAL THESIS

An independent investigation under the supervision of a faculty staff member. Pre-requisite: None

### STGC8002 RESEARCH WRITING

The course focuses on helping students to make academic presentations whether verbally (as in a conference) or in writing (as in a paper). Topics include:

- How to structure a presentation (on paper and in power point)
- Tenses used in various parts of a paper presentation

- How to structure clear logical paragraphs
- How to be concise
- How to avoid ambiguity and different writing styles (for example, conventions for use of numbers, abbreviations, etc.)

Pre-requisite: None

#### STGC8003 RESEARCH METHODS AND ETHICS

This course aims to provide PhD students with research skills that are essential to become a successful researcher. The need for research ethics and the responsibility of the researcher (the student) and to avoid committing acts of academic dishonesty (such as through using citations and references). The topics of this course will include research methodology, professional ethics and academic integrity, and oral presentation and paper writing techniques. Students will be required to perform a literature survey, to construct a research proposal, and to write a paper summary in the style of formal scientific paper, in one of their familiar research topics. Pre-requisite: None

## MASTER'S DEGREE PROGRAMMES

#### **ADVANCED MATHEMATICS** CIVL7001

This course introduces the methods for numerical analysis in science and engineering. It includes the mathematical modeling and error analysis, methods for the solutions of linear and nonlinear algebraic equations, optimization, numerical differential derivation and integration, curve fitting, numerical solutions of ordinary and partial differential equations. Pre-requisite: None

#### CIVL7002 THEORY OF ELASTICITY AND PLASTICITY

This course intends to provide students a comprehensive knowledge on the theory of elasticity and plasticity. The course focuses on the following topics: continuous medium, Cartesian tensors, deformation, displacement and strain tensors, compatibility conditions, external and internal forces, equilibrium, stress tensors, principal stresses, invariants and stress deviators. Mohr's circle, constitutive law, plasticity theory, yield and failure criteria, stability postulates, laws of mechanics, Navier's equations, plane stress and plane strain problems, variational principles, general theory of plane strain for perfectly plastic materials.

Pre-requisite: None

#### CIVL7003 FINITE ELEMENT METHOD

Basic concepts. Virtual work and energy methods. Weighted residual methods. Rayleigh-Ritz and Galerkin methods. Finite element displacement method. Interpolation functions. Plate stretching and plane strain. Triangular elements, Isoparametric elements, Three dimensional stress analysis. Plate bending. Field problems. Vibrations. Stability. Nonlinear behaviour. Hybrid elements

Pre-requisite: None

#### CIVL7004 ADVANCED SOIL MECHANICS

The emphasis of this course is on the practical knowledge of soil behavior required by civil engineers for design and construction of geotechnical projects. Two most important topics of soil mechanics, consolidation and shear strength of soils, will be discussed in detail. Pre-requisite: None

#### CIVL7005 SUBSURFACE INVESTIGATION AND SOIL TESTING

The aim of this course is designed to provide postgraduate civil engineering students an advanced knowledge of geotechnical site investigation and soil testing. It includes site investigation procedures, planning and reporting, methods of subsurface investigation; ground or soil exploration includes boring, sampling soils and rocks; description and classification of

soils and rocks, determination of stratigraphy and engineering properties by different types of field tests and laboratory tests; estimation of soil properties for foundation design and geophysical methods for site investigation.

Pre-requisite: None

#### CIVL7006 ADVANCED FOUNDATION ENGINEERING

Shallow foundations. Bearing capacity of foundations on homogeneous soils and layered soils. Estimation of settlements. Measures to minimize damage. Analysis of combined footings and rafts. Pile foundations. Piles subjected to lateral loads. Displacement of pile group under axial and lateral loads. Foundation design for fills. Foundations for transmission towers. Pre-requisite: None

#### CIVL7007 SOIL DYNAMICS

Dynamics of elastic systems. Single and multi-degree of freedom systems. Wave propagation in soil. Deformation and elastic properties of soils. Types of machine foundations. Mass-spring-dashpot model and elastic half space theory. Foundations for reciprocating machines and hammer foundations. Construction aspects of machine foundations. Foundations for miscellaneous machines. Vibration isolation and dampers. Pre-requisite: None

#### CIVL7008 STRUCTURAL DESIGN OF FOUNDATIONS

Conventional structural design of continuous footings, individual footings, combined footings and rafts of various types subjected to vertical loads, lateral loads and moments. Design of circular rafts. Soil-structure interaction and design of foundation using flexibility approach. Structural design of piles and pile caps, under-reamed piles piers and caissons. Structural design of retaining structures.

Pre-requisite: None

#### CIVL7009 SPECIAL TOPICS IN GEOTECHNICAL ENGINEERING

This is a course for postgraduate students to understand the principles of geotechnical earthquake engineering. The basic concepts of seismology will be covered. Basic principles of wave propagation and ground response analysis will be presented. Advanced topics including liquefaction and seismic slope stability will also be covered. Pre-requisite: None

### CIVL7010 STRUCTURAL VIBRATIONS

This course introduces fundamental concepts of structural dynamics. It serves as an introductory course for graduate students in civil and mechanical engineering. This course starts from fundamental concepts and formulation of structural dynamic problems. Then, analysis in time-domain and frequency-domain will be introduced. Numerical methods will be delivered with consideration in accuracy, efficiency and stability. Pre-requisite: None

# CIVL7011 PLATES AND SHELLS

Basic concept of plates and shells will be introduced such as small defection theory of elastic thin plates, rectangular plates, circular plates, plates on elastic foundation, in plane forces, bucking of plates, large deflections of plates, membrane theory of shells, bending theory of shells, shallow shells, cylindrical shells, buckling of shells.

Pre-requisite: None

#### CIVL7012 STRUCTURAL ANALYSIS AND FINITE ELEMENTS

This course focuses on the following topics: finite element modeling for analysis of tall buildings, frame structure, shear wall structure, wall-frame structure, space structure, core structure, and core wall structure, tube structure, outrigger-braced structure, giant structure, stability and dynamics of structures, the analysis and behavior of various structures. Pre-requisite: None

600

### CIVL7013 SPECIAL TOPICS IN STRUCTURAL ENGINEERING

Members of the staff will arrange special courses on advanced topics for properly qualified raduate students.

Pre-requisite: None

### CIVL7014 NUMERICAL MODELING IN GEOMECHANICS

This course introduces constitutive models of soils and numerical modeling in geotechnical engineering. Soil constitutive models, such as Linear Elastic, Elasto-Plastic, Nonlinear and Cam-Clay models are discussed. Basic background of the finite element (FE) technique is briefly introduced with emphasis on geotechnical applications. A finite element commercial program (PLAXIS or SIGMA/W) is introduced to students to analyze geotechnical problems. The course aims to provide students essential knowledge on soil behavior, numerical modeling, and their applications.

Pre-requisite: None

#### CIVL7015 RANDOM VIBRATIONS OF STRUCTURES

This course focuses on the following topics: random variable; random process; correlation function; power spectral density function; properties of linear systems; response of linear SDOF systems to random excitation; responses of linear MDOF systems to random excitation; probability density responses of linear systems; reliability analysis of linear systems; introduction to nonlinear random vibrations.

Pre-requisite: None

#### CIVL7016 BEHAVIOR AND DESIGN OF STEEL MEMBERS

This course is designed to introduce the behaviour and design of steel structural members according to the limit states design concept. The behaviour and design of the following topics will be discussed: (1) Steelmaking, Steel Properties, Design Philosophy, (2) Torsion of beam (St. Venant torsion, warping torsion of W-shapes, solution of torsion problem), (3) Beam (Beam classifications - Bending moment and shear capacity. Lateral torsional buckling), (4) Plate Girders (Local buckling, plastic action and moment redistribution, lateral buckling under uniform moment and special loading cases, inelastic effects, elastic and inelastic shear behaviour of plate girder), (5) Axially Loaded Members (Elastic and inelastic buckling theories, effect of residual stresses and initial curvature, local buckling), (6) Beam-Columns (In-plane behaviour, ultimate strength, out-of-plane behaviour, elastic and inelastic stability, local buckling). Students are expected to obtain advance knowledge about the design and failure mode of steel structural members after finished this course.

Pre-requisite: None

#### CIVL7017 GROUND IMPROVEMENT TECHNIQUES

Soil densification, Compaction Control Tests, Preloading and use of vertical sand drains, In-situ reinforcement- stone columns, soil nailing, micropiles, ground anchors, rock bolts, Flexible Geosynthetic sheet reinforcement.

Pre-requisite: None

#### CIVL7018 SLOPE STABILITY AND EARTH RETAINING STRUCTURES

Engineered Slopes, Landslides, Slope Stability Concepts- modes of failure, infinite slopes, Analysis of various shapes of failure surfaces, Method of slices, design charts, Slope Stabilization Methods, Earth Pressure theories, lateral pressures due to external loads, compaction pressures, design of earth retaining structures, backfilled walls, supported excavations.

Pre-requisite: None

#### CIVL7019 SPECIAL TOPICS IN GEOTECHNICAL ENGINEERING I

This course explores current special topics in geotechnical engineering, such as site characterization, instrumentation, ground improvement and remediation. Topics vary with each offering and are disseminated before registration. Pre-requisite: None

### CIVL7020 SPECIAL TOPICS IN STRUCTURAL ENGINEERING I

Members of the staff will arrange special courses on advanced topics for properly qualified graduate students.

Pre-requisite: None

### CIVL7021 SPECIAL TOPICS IN STRUCTURAL ENGINEERING II

Members of the staff will arrange special courses on advanced topics for properly qualified graduate students.

Pre-requisite: None

## CIVL7022 ADVANCED APPLICATIONS OF STRUCTURAL DYNAMICS

Revision of structural vibrations, Monte Carlo simulation and its limitations, First-order reliability method (FORM) and second-order reliability method (SORM), Importance sampling and computational issues, Vibration control, System identification and damage detection, Bayesian methods, Other updated topics.

Pre-requisite: None

#### CIVL7023 ECONOMIC ANALYSIS AND FINANCIAL MANAGEMENT IN ENGINEERING

The course is to cover the fundamental principles needed by construction managers to successfully manage the finances of construction companies. These principles include accounting for financial resources, managing costs and profits, managing cash flows and analyzing financial alternatives.

Pre-requisite: None

#### CIVL7024 FRACTURE MECHANICS AND FATIGUE

Linear elastic fracture mechanics, Concept of Stress intensity factor, Correction factors of stress intensity factor, Numerical methods for stress intensity factor determination, Introduction to the elastic plastic fracture mechanics. Assessment of residual life of structural members. Pre-requisite: None

#### CIVL7025 RELIABILITY ANALYSIS IN CIVIL ENGINEERING

This course focuses on the following topics: development of design code in civil engineering, randomness in civil engineering, limit state design and performance function, reliability analysis, reliability-based design criteria and factors in design codes, system reliability, further development and research topics on reliability analysis in civil engineering. Pre-requisite: None

#### CIVL7026 INSTRUMENTATION SYSTEMS IN CIVIL ENGINEERING

This course is designed to introduce the concept and application of instrumentation system in Civil Engineering. The following topics will be discussed in the class: (1) Instrumentation systems, Signals and Errors, (2) Characteristics of instruments – Transducers, Noise and Nonlinearity, Static characteristics, Dynamic characteristics, (3) Signal conditioning – Introduction, Operating amplifier, Applications of Op-amps, filtering, (4) Data acquisition – Analog devices, Digital Devices, Sampling Theorem, Nyquist frequency, Quantization error, (5) Noise Reduction – Interference, Shielding, Grounding, Noise mode, Noise elimination or reduction, (6) Instruments and Sensors – Strain gauge, LVDT, Pressure transducer, Load cell (7) Signal Processing – Sampling Theorem, Laplace-transform and Z-transform. Students are expected to obtain knowledge about the background theory and application of different type of instruments used in Civil Engineering.

Pre-requisite: None

#### CIVL7027 CONSTITUTIVE MODELING IN SOIL MECHANICS

Constitutive modelling is an important subject in continuum mechanics. This course focuses on the physical and mathematical principles of constitutive modelling with emphasis on soil mechanics. Elasticity and plasticity frameworks for isotropic and anisotropic soil modelling are discussed. Critical state hardening models such as the original Cam clay and modified Cam clay

are elaborated in details. The concept of bounding surface and more advanced state-dependent dilatancy models are introduced. The course aims at providing students a fundamental understanding of the constitutive modelling techniques in soil mechanics. Pre-requisite: None

#### CIVL7028 ANALYSIS AND DESIGN OF REINFORCED CONCRETE MEMBERS

This course intends to provide students the knowledge on both analytical and design aspects of reinforced concrete and prestressed concrete members. The course focuses on the following topics: the analysis and design of both statically determinate and indeterminate prestressed concrete members, the analysis and design of prestressed concrete composite sections, the limit analysis of reinforced concrete slabs, and the strut-and-tie method. Pre-requisite: None

#### CIVL7029 HYDRODYNAMICS

In this course the fundamentals of fluid mechanics are developed in the context of hydraulic and environmental engineering. The course is designed for students who wish to learn more about the fundamentals of fluid mechanics. Topics discussed during the course of the class include Scalar and Vector, Tensors, Kinematics, Conservation of mass, Momentum equations, Equations for mechanical energy, Newtonian fluids and the Navier-Stokes equations, Boundary conditions, some exact solutions, Dimensional analysis and scaling, Stream function and velocity potential. Bernoulli equation. Vorticity dynamics. Flow around circular cylinder. Viscous Flow in Pipes. Open channel flow. Two-dimensional potential flows. Laminar boundary lavers. some low, moderate, and high Reynolds number flows.

Pre-requisite: None

#### CIVL7030 ENVIRONMENTAL FLUID MECHANICS

Fick's law, the random walk and molecular diffusion, solutions of the diffusion equation, advective diffusion, turbulent diffusion, dispersion in laminar, turbulent, unsteady and unbounded shear flows, dispersion in two dimensions, turbulent mixing in rivers, one-dimensional dispersion in rivers, mixing in estuaries driven by wind, tide, and river, vertical and transverse mixing in estuaries, one-dimensional analysis of wastes dispersion in estuaries, jets and plumes, buoyant jet, introduction to river and estuary models.

Pre-requisite: None

#### CIVL7031 SEDIMENT TRANSPORT

Properties of water and sediment; incipient motion criteria and applications; resistance to flow and bed forms; bed-load transport; suspended load transport; total load transport; sediment transport functions; reservoir sedimentation.

Pre-requisite: None

#### CIVL7032 MUNICIPAL SOLID WASTE MANAGEMENT

Integrated Solid Waste Management: Throughout this course, the management of our society's waste will be covered in a manner that meets public health and environmental concerns and the public's desire to reduce, reuse, and recycle waste materials. The engineering principles, the data, the engineering and scientific formulas, and examples of the day-to-day issues associated with the management of municipal solid waste (MSW) will be discussed. Starting from the introductory materials in integrated MSW, materials recovery, processing, and waste transformation, and integrated MSW policy issues will also be covered. Eventually the reflective and logical way of thinking regarding the problems and solutions in solid waste engineering will be nourished.

Pre-requisite: None

#### CIVL7033 ENVIRONMENTAL CHEMISTRY

Many aspects of environmental engineering involve the treatment of water for human consumption and the treatment of wastes prior to their release into the environment. In addition. an understanding of the chemical fate of pollutants in the environment is important. Water

chemistry and chemical reactions are therefore important in both engineered treatment processes and in natural systems in which wastes may be attenuated. Pre-requisite: None

#### CIVL7034 WATER AND WASTE WATER TREATMENT: PRINCIPLE AND APPLICATION

This course emphasizes on the fundamental principles in the design and operation of key technologies in water and wastewater treatment and effluent reuse: Mixing continuous and plug flow reactors, chemical reaction kinetics; Physicochemical principles of unit operations of water treatment processes; Biological principles for wastewater treatment processes: Activate sludge treatment and biofilm treatment; Urban sewage treatment and disposal. Pre-requisite: None

### CIVL7035 WATER POLLUTION CONTROL: PHYSICAL AND CHEMICAL MODELING

Carbonate buffering systems of natural waters: acid and base equilibrium; Inorganic species in natural waters: solid dissolution and precipitation equilibrium; Metal behavior in natural waters: metal-ligand complex formation; Redox reactions in natural waters: equilibrium and kinetics; Particulate matters in natural waters: aqueous surface chemistry. Pre-requisite: None

### CIVL7036 ENVIRONMENTAL ASSESSMENT AND PLANNING: COMPUTER MODELING

General methods for environmental assessment and planning: pollution monitoring, pollution source and pathways, impacts on environment, pollution control; Linear and non-linear multiobjectives programming; Regional planning of air and water pollution control; Urban development vs. environmental planning.

Pre-requisite: None

### CIVL7037 AIR POLLUTION CONTROL

Air quality and meteorological conditions; Air pollution index and indicators; Air pollution control: strategies and technologies; Aerosols; Vehicular emission pollution; Toxic organic air pollution; Global environmental issues: acid rain; global warming; ozone depletion. Pre-requisite: None

### CIVL7038 SPECIAL TOPICS IN ENVIRONMENTAL ENGINEERING

(Subtitle: Biological Wastewater Treatment)

Principles of microbiological, biochemical, and biophysical processes used in environmental waste treatment and remediation processes, with particular emphasis on water quality control processes.

Pre-requisite: None

#### CIVL7039 AIR POLLUTION METEOROLOGY AND CHEMISTRY

It is designed to provide a rigorous, comprehensive treatment of the chemistry of air pollutants in the ambient air, the meteorology of air pollution, and the transport, diffusion and removal of the pollution species in the atmosphere. In this course, students will learn the methods and models, which would allow to predict the concentration profile that would result from any specified set of pollution emissions for any specific meteorological conditions at any location for any period.

Pre-requisite: None

#### CIVL7040 SPECIAL TOPICS IN ENVIRONMENTAL ENGINEERING I

(Subtitle: Remediation of Contaminated Soil and Groundwater)

This course will nourish students with their capabilities of selecting and/or developing remediation technologies appropriate for the causes and characteristics of contamination of the subsurface environment, soil and groundwater. This course will especially be focused on studying the causes of contamination of soil and groundwater, the characteristics and behaviors of contaminants, and the physical / chemical / biological / thermal remediation technologies. Pre-requisite: None

## CIVL7041 SPECIAL TOPICS IN ENVIRONMENTAL ENGINEERING II

(Subtitle: Physical and Chemical Water Treatment)

Physical-chemical treatment processes for the treatment of water, including sedimentation, flotation, filtration, coagulation, oxidation, disinfection, precipitation, adsorption, and membrane treatment processes. Current issues in drinking water quality and treatment are discussed. Pre-requisite: None

#### CIVL7042 SPECIAL TOPICS IN ENVIRONMENTAL ENGINEERING III

(Subtitle: Environmental Biotechnology)

This course reflects the most current and exciting fields of environmental science engineering, as a combination of ET (Environmental Technology) and BT (Bio-Technology) and would enable students first to connect two different facets of environmental biotechnology, principles of environmental microbiology and environmental engineering. They can develop the basic concepts and quantitative tools in the principles part and then can apply those in the applications part. They will be able to, in the long run, exploit microbiological processes to improve environmental quality, such as preventing the discharge of pollutants into the environment, cleaning up contaminated environments, and recovering valuable resources for human society. For students not already having a solid background in environmental microbiology, this course will also provide fundamentals in taxonomy, metabolism, genetics, and microbial ecology, by addressing the microbiology concepts that are most essential for understanding the principles and applications of environmental biotechnology.

Pre-requisite: None

### CIVL7043 QUANTITATIVE METHODS FOR CONSTRUCTION DECISION MAKING

This course aims to provide sound and comprehensive coverage of the concepts of quantitative methods for construction decision making. Major topics include: (1) analytic hierarchy process (AHP), (2) decision tree analysis, (3) inventory analysis, (4) simulation techniques, (5) linear, mixed-integer and goal programming, (6) dynamic programming. Pre-requisite: None

#### CIVL7044 QUALITY AND SAFETY MANAGEMENT IN CONSTRUCTION

This course aims to provide sound and comprehensive coverage of the concepts of quality management and safety management for the construction industry of Macau, as compared to their international practices. Major topics include: (1) quality management system based on ISO9000, (2) QA/QC in construction, (3) quality indicators and quality costs, (4) safety management systems, (5) construction accidents, (6) safety schemes. Pre-requisite: None

#### CIVL7998 PROJECT REPORT

An independent project carried out under the supervision of a faculty staff member. Pre-requisite: None

### CIVL7997 INTERNSHIP AND REPORT

An independent project in cooperation with industry carried out under the supervision of a faculty staff member and co-supervised by an industrial supervisor. Pre-requisite: None

#### CIVL7990 THESIS

An independent and original research study under the supervision of a faculty staff member. The topic of research must be in line with the stream taken by the student. In general, the study could result in a technical publication or a presentation at a professional meeting. Pre-requisite: None

#### CISC7001 FUNDAMENTALS OF SOFTWARE ENGINEERING

The course discusses the theories, methods and tools of software engineering for developing large and complex software systems. The main contents are requirement, specification, system

analysis and modeling, software design, architectural design, object-oriented design, functionaloriented design, verification and validation. Unified Development Process based on Modeling Language (UML) as well as its CASE tool are used to software system analysis and design combining with the course projects.

Pre-requisite: None

#### CISC7002 COMPUTER COMMUNICATIONS AND NETWORKS

Introduction to computer network high level protocols, internetworking techniques, client server architecture, API for Networking programming, High speed networks and ATM technology, Network management, Mobile and Wireless communication technology. The Important protocols for Internet in TCP/IP suit protocols will be discussed in detail. Pre-requisite: None

### CISC7004 CURRENT DEVELOPMENT IN DATABASE

The course introduces Distributed DBMS architecture, distributed database design, semantic data control, distributed query processing, distributed transaction management, distributed concurrency control, distributed DBMS reliability, database interoperability, e-commerce application development and deployment with HTML, Web server, Java applet, CORBA, JavaBean, and DB server technologies.

Pre-requisite: None

### CISC7005 COMPUTER SCIENCE SEMINAR

Under the supervision of academic staff, students will search the literature for a topic in computing that is of interest to them, and give a presentation on the state of the art technology. Visiting researchers and staff members may also present their research work. Pre-requisite: None

#### CISC7006 COMPILER CONSTRUCTION

Design of compilers for block-structured general-purpose programming languages. Automatic generation of lexical analyzers and parsers. Error detection and correction. Code optimization. Pre-requisite: None

### CISC7007 DESIGN AND ANALYSIS OF ALGORITHMS

Principles of design of efficient algorithms: recursion, divide and conquer, balancing, dynamic programming, greedy method, data structure selection. Correctness and analysis of algorithms. Examples drawn from problems in sorting, searching, set manipulation, pattern matching, graphs, matrices, polynomials, and integers.

Pre-requisite: None

#### CISC7008 COMPLEXITY THEORY

Models of computation, such as Turing machines and random access machines; nondeterminism and alternation. Computable and noncomputable functions. Time and space complexity, complexity hierarchies, NP-completeness, and provably difficult problems. Proof techniques, such as simulation, diagonalization, and reducibility. Pre-requisite: None

#### CISC7009 FORMAL METHODS IN SOFTWARE ENGINEERING

Formal models and methods and their application in all phases of software engineering process; operational, algebraic, model-based and property-based specification methods; verification of consistency and completeness of specifications; verification of properties of software; specification construction and verification using method-based tools. Pre-requisite: None

#### CISC7010 DISCRETE SYSTEM SIMULATION

Principles of simulation of discrete, event-oriented systems. Model construction, simulation and validation; relationship to other techniques for system analysis and design. Pre-requisite: None

#### CISC7011 COMPUTER SYSTEM PERFORMANCE MODELING

Use of queuing network models as tools to evaluate the performance of centralized and distributed computer systems.

Pre-requisite: None

#### CISC7012 COMPUTER GRAPHICS - PRINCIPLES AND SYSTEMS

This course introduces the generation of graphics by computers with or without human interaction. The contents include hardware and software of computer graphics, graphics modeling, graphical transformations, realistic image synthesis and illumination techniques, interactive methods and user interface, graphics programming languages and systems. Pre-requisite: None

#### CISC7013 PRINCIPLES OF ARTIFICIAL INTELLIGENCE

Overview of Artificial Intelligence Application Areas, Languages and Programming Techniques for Artificial Intelligence, Problem Solving, Knowledge-based Systems, Knowledge Representation, Planning, Machine Learning, Natural Language Processing, Genetic Algorithms. Pre-requisite: None

### CISC7014 ADVANCED TOPICS IN COMPUTER SCIENCE

This course introduces students to advanced topics in Computer Science. The detailed contents may change from year to year depending on current developments and teacher specialization. Pre-requisite: None

#### CISC7015 ADVANCED TOPICS IN COMPUTER SCIENCE I

To introduce the most advanced technologies in the field of Computer Science. Pre-requisite: None

#### CISC7016 ADVANCED TOPICS IN COMPUTER SCIENCE II

To introduce the most advanced technologies in the field of Computer Science. Pre-requisite: None

#### CISC7017 PRINCIPLES AND APPLICATIONS OF CONCURRENT PROGRAMMING

The aim of the course is to introduce the principles of concurrency and concurrent programming languages. The main contents are processes, concurrency, synchronous and asynchronous communication, non-determinism, shared variables and resources, deadlock, safety and liveness, event-driven multithreads, real-time distributed and concurrent systems, concurrent programming languages (Java, CSP).

Pre-requisite: None

#### CISC7018 COMPUTER VISION AND PATTERN RECOGNITION

This course introduces the fundamentals and advanced topics of computer vision and pattern recognition for postgraduate students. It emphasizes both theory and applications of pattern recognition. Topics include overviews of general computer vision and pattern recognition techniques, statistical decision theory, linear discriminant functions, multilayer neural and deep networks, supervised learning, unsupervised learning and clustering, and applications of computer vision and pattern recognition.

Pre-requisite: None

#### CISC7019 WEB MINING

The course will cover the fundamental concepts, principles and algorithms in the area of Web Mining. It will firstly give an introduction to the concepts of the traditional information retrieval systems and the principles of web search engines, then, the course will extensively discuss techniques and algorithms of web mining, including Link-Base analysis, web page classifications, web advertisement, recommendation algorithms, web information extractions, web image indexing. The course also requires each student to complete a related course project Pre-requisite: None

#### CISC7021 APPLIED NATURAL LANGUAGE PROCESSING

This course covers both the fundamental and advanced topics in Natural Language Processing (NLP), which deals with the application of computational models to text data. In this course, the core tasks in natural language processing will be examined, including minimum edit distance, language modelling, Naive Bayes, Maximum Entropy, text classification, sequence labelling, POS tagging, syntax parsing and computational lexical semantics. Modern NLP applications will be explored such as information retrieval, and statistical machine translation. Students will learn how to formulate and investigate research questions on related topics Pre-requisite: None

### CISC7022 BIG DATA PROCESSING AND ANALYSIS

This course introduces the latest development of data engineering techniques, including data query processing (e.g., multi-dimensional data, sequence data, and spatial-temporal data) in cloud computing and HPC environments. Students will learn study and learn how to formulate and investigate the state-of-the-art problems and solutions on related topics. Pre-requisite: None

#### CISC7023 INTRODUCTION TO BUSINESS PROCESS MANAGEMENT

The course introduces students to the principles and methods of business process management. Topics include business process modeling foundation, process orchestrations, managing process flows, and process discovery techniques. Pre-requisite: None

#### CISC7996 APPLIED THESIS

An independent project under the supervision of a faculty staff member. An applied thesis focuses on combining existing academic theories or advanced technologies with an evaluation of a case study or industrial project. The goal of this option is to facilitate the integration of practice with academic research.

Pre-requisite: None

### CISC7999 ACADEMIC THESIS

An independent and original research study under the supervision of a faculty staff member. An academic thesis is a scholarly written document of a piece of original research on a particular topic in consistent with every details of research methodology. In general, the study could result in a technical publication or a presentation at a professional meeting. Pre-requisite: None

#### CISC7101 INFORMATION SYSTEMS DEVELOPMENT METHODOLOGIES

The course introduces software development process and principles, In particular, Unified Modeling Language (UML) is introduced and applied to describe the information system analysis and design from high level design to low level implementation. Rational Rose CASE tool of UML is introduced and used for course project to specify the system requirement, analysis and design from static and dynamic aspects.

Pre-requisite: None

#### CISC7102 COMPUTER NETWORKS AND INTERNET

Introduction to computer network high level protocols, internetworking techniques, client server architecture, API for Networking programming, High speed networks and ATM technology, Network management, Mobile and Wireless communication technology. The Important protocols for Internet in TCP/IP suit protocols will be discussed in detail. Pre-requisite: None

### CISC7103 DISTRIBUTED DATABASE MANAGEMENT

The course introduces Distributed DBMS architecture, distributed database design, semantic data control, distributed query processing, distributed transaction management, distributed concurrency control, distributed DBMS reliability, database interoperability, e-commerce

application development and deployment with HTML, Web server, Java applet, CORBA, JavaBean, and DB server technologies. Pre-requisite: None

# CISC7105 INTERNET PROGRAMMING AND JAVA TECHNOLOGY

This course introduces the principles of developing Internet software applications, and the technologies current in their development, including: static web content using HTML and CSS; dynamic web content using CGI and PHP; extensible markup using XML and XSL; client-side scripting using JavaScript; client-server programming using Java applets and Java applications; database access using JDBC; thin-client applications using Java servlets and JavaServer Pages; large-scale applications using Enterprise JavaBeans; and application interoperability using web services. Emphasis is placed on learning the technical skills and knowledge necessary for the design and development of Internet-based, and in particular web-based, systems. Pre-requisite: None

# CISC7106 DATA WAREHOUSING

The course will introduce data warehouse architecture, data modeling for a data warehouse, the processes of data warehousing, OLTP technologies. Pre-requisite: None

# CISC7107 DATA MINING AND DECISION SUPPORT SYSTEMS

The course will introduce principles and techniques of data-mining and knowledge-based decision support for E-Commerce. Topics will include clustering, regression, classification, estimation, forecasting, statistical analysis, warehousing principles, knowledge acquisition and representation, as well as decision support systems.

Pre-requisite: None

# CISC7108 ADVANCED COMPUTER GRAPHICS AND MULTIMEDIA

This course introduces the generation of graphics and processing of multimedia by computers with or without human interaction. The contents include hardware and software of graphics and multimedia, graphics modeling, graphical transformation, realistic image synthesis and illumination techniques, interactive methods and user interface, graphics programming languages and systems, internet graphics by VRML, Hypermedia, modeling and rendering of virtual environment, compression and rendering of image and sound.

Pre-requisite: None

# CISC7109 INTERNET SECURITY AND CRYPTOGRAPHY

The course introduces fundamental technical issues concerning Internet security and applied cryptography. The areas covered are protecting information using symmetric and public key cryptography, key management, trust models and public key infrastructure, system security, authentication and handshake protocols, digital cash and payment mechanisms. Pre-requisite: None

# CISC7110 ELECTRONIC PAYMENT SYSTEMS

This course covers various methods of transferring payments over the Internet and compares their functionality. Topics include electronic money, electronic contracts, micro-payments, authenticity, integrity and reliability of transactions, the encryption and digital signature techniques needed to support electronic cash, and the technologies available to support secure transactions on the Internet.

Pre-requisite: None

# CISC7111 SMART CARD TECHNOLOGY AND APPLICATIONS

This course covers the current state-of-the-art in smart card hardware and software. It emphasizes on designing systems and developing application programmes that incorporate smart card technologies. It also illustrates how smart card technology can be successfully employed in an information technology architecture. Pre-requisite: None

# CISC7112 LEGAL ISSUES OF IT AND E-COMMERCE

The course introduces about the principal legal problems generated by recent development in information technology and electronic commerce, and the possible solutions. Topics include privacy and data protection, patents and copyrights, contractual and tortious liability, and computer fraud.

Pre-requisite: None

# CISC7113 TOPICS IN E-COMMERCE

This course will introduce students advanced topics in Electronic Commerce. The detailed contents may change from year to year depending on the current development and teacher speciality.

Pre-requisite: None

# CISC7114 TOPICS IN E-COMMERCE (ELECTRONIC MARKETPLACE)

Electronic marketplace is a fundamental subject of e-commerce technology. It provides a common online place for buyers, sellers and governments to interact with each to establish and fulfil e-business transactions. This course will introduce the electronic marketplace by describing its basic concepts, historical evolution, major functions, and technical construction methods. Through the course study, students will have learnt both the theories and practices about how to technically construct an e-marketplace in a given context and scenario. Pre-requisite: None

# CISC7115 TOPICS IN E-COMMERCE (E-BUSINESS INTEGRATION TECHONOLGY)

E-Business Integration is a research course on how to integrate various vocabularies, business documents and business processes. It focuses on the aspects of e-business integration technologies on its framework, history, theory, technical approach and practice. The course will be taught in four key clues of e-business integration technology on standardization, enterprise integration, outsourced service provision, and semantic integration. Pre-requisite: None

CISC7116 FUNDAMENTALS OF BUSINESS PROCESS MANAGEMENT

The course introduces students to the principles and methods of business process management. Topics include business process modeling foundation, process orchestrations, managing process flows, and process discovery techniques. Pre-requisite: None

# CISC7117 DISCRETE SYSTEM SIMULATION

Modeling and simulation is an important tool for representing, analyzing and solving real-world problems. The application areas include computer game, computer hardware and network simulation, business process, transportation, health care and risk analysis, etc. This course aims at teaching the basic concepts and methods in developing simulation models of discrete event dynamic and stochastic systems. Topics will include stochastic modeling, random number generators, discrete-event simulation approaches, and simulated data analysis. Pre-requisite: None

# CISC7196 APPLIED THESIS

An independent project under the supervision of a faculty staff member. An applied thesis focuses on combining existing academic theories or advanced technologies with an evaluation of a case study or industrial project. The goal of this option is to facilitate the integration of practice with academic research.

Pre-requisite: None

# CISC7199 ACADEMIC THESIS

An independent and original research study under the supervision of a faculty staff member. An academic thesis is a scholarly written document of a piece of original research on a particular topic in consistent with every details of research methodology. In general, the study could result

in a technical publication or a presentation at a professional meeting. Pre-requisite: None

# CISC7201 INTRODUCTION TO DATA SCIENCE PROGRAMMING

This course is designed for students who are new to the world of data science. After the introduction of some basic arithmetic, variables, and data structures in Python, students will start to learn how to collect and extract data from real datasets. Some data analytical skills using the control flows and Python packages (e.g., NumPy, SciPy, Pandas, etc.) will be introduced. To address the needs of big data processing, some distributed computing frameworks (e.g., Spark) and visualization tools with Python will be discussed. Students may apply some basic learning algorithms with Python packages (e.g., scikit-learn) to extract knowledge from data. Pre-requisite: None

# CISC7202 TOOLS FOR MACHINE LEARNING

The course will start from the very beginning of the ML basis. First, the basic concepts such as liner algebra; probability and information theory, and numerical methods will be introduced. Next machine learning overview, inductive learning, and representation learning will be introduced. Basic deep learning processes are designed as artificial neural network; Bayesian Networks and learning; Deep learning and deep neural networks; convolution neural network. Throughout the course, practical methodology of using tools such as Tensorflow or Karas etc. will be emphasized. Pre-requisite: Introduction to Data Science Programming

# CISC7203 DATABASE AND DATA MINING TECHNOLOGIES

This course is designed to enable students to learn the database and data mining concepts and techniques for big data analytics and development in different domains. The course concentrates on the practical issues of database and data mining for solving big data problems. The content includes data modeling in database and data warehouse, SQL, Python programming for database, Python programming and R programming for data mining applications. Students will learn the skills of database modeling, querying, and programming, as well as the programming techniques for data mining.

Pre-requisite: None

# CISC7204 DATA SCIENCE AND DATA VISUALIZATION

This course is designed to enable students to learn the significance of data visualization in data science and big data analytics, and develop knowledge and skills to present quantitative data using data visualization tools. This course emphasizes on the practical aspects of data science with a focus on using R or Python programming language to process data, produce visualizations, and interpret these visualizations. Students will learn the practice of data cleaning, reshaping of data, basic tabulations, aggregations and visual representation in order to increase the understanding of complex data and models.

Pre-requisite: None

# Specialization A: Artificial Intelligence Applications

# CISC7013 PRINCIPLES OF ARTIFICIAL INTELLIGENCE

Overview of Artificial Intelligence Application Areas, Languages and Programming Techniques for Artificial Intelligence, Problem Solving, Knowledge-based Systems, Knowledge Representation, Planning, Machine Learning, Natural Language Processing, Genetic Algorithms. Pre-requisite: None

# CISC7018 COMPUTER VISION AND PATTERN RECOGNITION

This course introduces the fundamentals and advanced topics of computer vision and pattern recognition for postgraduate students. It emphasizes both theory and applications of pattern recognition. Topics include overviews of general computer vision and pattern recognition techniques, statistical decision theory, linear discriminant functions, multilayer neural and deep

networks, supervised learning, unsupervised learning and clustering, and applications of computer vision and pattern recognition. Pre-requisite: None

# CISC7019 WEB MINING

The course will cover the fundamental concepts, principles and algorithms in the area of Web Mining. It will firstly give an introduction to the concepts of the traditional information retrieval systems and the principles of web search engines, then, the course will extensively discuss techniques and algorithms of web mining, including Link-Base analysis, web page classifications, web advertisement, recommendation algorithms, web information extractions, web image indexing. The course also requires each student to complete a related course project. Pre-requisite: None

# CISC7021 APPLIED NATURAL LANGUAGE PROCESSING

This course covers both the fundamental and advanced topics in Natural Language Processing (NLP), which deals with the application of computational models to text data. In this course, the core tasks in natural language processing will be examined, including minimum edit distance, language modelling, Naive Bayes, Maximum Entropy, text classification, sequence labelling, POS tagging, syntax parsing and computational lexical semantics. Modern NLP applications will be explored such as information retrieval, and statistical machine translation. Students will learn how to formulate and investigate research questions on related topics. Pre-requisite: None

# CISC7022 BIG DATA PROCESSING AND ANALYSIS

This course introduces the latest development of data engineering techniques, including data query processing (e.g., multi-dimensional data, sequence data, and spatial-temporal data) in cloud computing and HPC environments. Students will learn study and learn how to formulate and investigate the state-of-the-art problems and solutions on related topics. Pre-requisite: None

# CISC7998 PROJECT REPORT

An independent project under the supervision of a faculty staff member. A Project Report focuses on combining existing academic theories or advanced technologies with an evaluation of a case study or industrial project. The goal of this Project Report is to facilitate the integration of practice with academic research.

Pre-requisite: None

# CISC7301 INTRODUCTION TO FINANCIAL TECHNOLOGIES

The world of global tourism and entertainment, banking and financial services, as well as logistics and supply chain is changing rapidly with the emergence of start - up financial technologies, commonly referred to as FinTech, that are not only empowering or disrupting the status quo, but are shaping almost all the services industries. This course will discuss the scope of FinTech that defined by WeBank (ABCD) or by AntFinance (BASIC) as well as how they changed the way people live, how companies operate, and how government regulate. This course will provide students with the latest empowering and practical knowledge on FinTech enabling them to understand some FinTech changes taking place currently and the trends that will impact different industries in the future.

Pre-requisite: None

# CISC7302 ALGO TRADING AND HIGH FREQUENCY TRADING

Program trading and high frequency trading (HFT) have become important to the financial industry that it generated over sixty percent of trading volume at Nasdaq and NYSE. There are wide range of activities that AI and big data can support in such trading process, which include opportunities identification, cost/friction estimation, market impact estimation, trading strategies selection, trade scheduling, capital and liquidity management, as well as risk management. In this course, we will discuss both traditional financial engineering models and modern AI,

especially the machine learning and deep learning, that can be used in supporting Algo Trading. Modern topics like RoboAdvisor, AlphaGo Zero, and social media based market sentiment analysis will also be discussed.

Pre-requisite: None

#### CISC7303 **CLOUD COMPUTING**

This course will introduce Cloud Computing and relevant technologies in designing and implementing large-scale and composite business web applications on Cloud Computing platform. Topics covered include Software-as-a-Service (SaaS), Platform-as-a-Service (PaaS), Infrastructure-as-a-Service (IaaS), Data-as-a-Service (DaaS), and Cloud Computing Ecosystem. This course will cover scalable computing services in a pay-as-you-go model and Cloud Computing approaches for development and deployment of web services and information systems. This course will also introduce computer network high level protocols, internetworking techniques, client server architecture, API for Networking programming, High speed networks and ATM technology, Network management, Mobile and Wireless communication technology. The Important protocols for Internet in TCP/IP suit protocols will be discussed in detail. Students will study state-of-the-art solutions for cloud computing developed by Google, Amazon, Microsoft, Tencent Cloud, and Aliyun (Ali Cloud), etc.

Pre-requisite: None

# ECEN7001 INTRODUCTION TO RESEARCH

This is one of the fundamental courses in the Electrical and Electronics Engineering Master of Science Programme and is intended that it will provide the student with the basic knowledge about what is the research of one specific topic in the specialized areas of Power. Control or Electronics leading the student to make a survey on that topic and afterwards to write a report about it. This report will serve as an important basis for the future Thesis research work (that is the reson why it is mandatory). The responsibility of supervising this course is given to the student's Supervisor.

Pre-requisite: None

# ECEN7002 ADVANCED MATHEMATICS

Laplace Transform. Transforms of Derivatives and Integrals. s-Shifting, t-Shifting, Unit Step Function, Dirac's Delta Function, Differentiation and Integration of Transforms, Convolution, The Heaviside Expansion Theorem, Periodic Functions. Fourier Series, Half-Range Expansion, Complex Fourier Series. Fourier Integrals. Fourier Transform. Series Solution of Differential Equations, Legendre Polynomial, Bessel Functions, Sturm-Liouville Problem, Eigenfunction Expansions. Partial Differential Equations. Separation Variables, Use of Fourier-Bessel Series, Use of Fourier-Legendre Series. Solution by Laplace Transforms, solution by Fourier Transforms. Pre-requisite: None

#### ECEN7003 MICROELECTRONIC CIRCUIT DESIGN

The primary goal of this course is to introduce basic electronic principles needed by the integrated circuit designer and to discuss engineering tradeoffs and practical considerations that are necessary for the student to make the transition from the classroom to industry as an integrated circuit designer. After the introduction of these principles, some basic circuitsm either digital or analog are presented together with one real advanced VLSI CMOS process. The evaluation is composed by several assignment works of simulation and layout design of basic circuits in the beginning of the semester and after mid-term the students will make a real IC design that will be implemented in a Multi-Project Chip. Pre-requisite: None

# ECEN7004 DIGITAL SIGNAL PROCESSING

Orthogonal expansions, z-transformation and its properties. Band limited signals and sampling theorem. Discrete-time systems. The design and realisation of digital filters. Non-recursive and recursive digital filtering. Multi-rate sampling. Auto-correlation and cross-correlation techniques. Matching filtering. Power frequency spectrum. Adaptive signal processing - random gradient

method. The concept of Parametric Model and its applications for random signal power spectrum modern estimation, extraction and pattern recognition. Multi-channel signal processing by using Singular Value Decomposition (SVD). The introduction of Artificial Neural Networks. Pre-requisite: None

# ECEN7005 ACTIVE NETWORK THEORY

Network Theory investigates the universal laws and the calculations of networks. Its contents, methods and style are always changed by the influence of era. Network analysis and synthesis has been transformed drastically, due to the emergence of digital computer and optimum method. And there are close and deep connections between network theory and system theory. Therefore, the basic achievements of the latter were introduced into the former, such as states, state equations and matrix algebra descriptions.

Pre-requisite: None

# ECEN7006 ADVANCED TOPICS IN CONTROL SYSTEMS

The course introduces the digital control system and intelligent control system. The topics discussed include modern design techniques for digital control system and fuzzy logic and control.

Pre-requisite: None

# ECEN7007 ADVANCED TOPICS IN SIMULATION

Simulation of electronic circuits with SPICE has replaced bread boarding as a powerful means of analyzing the performance of complex circuits (including IC circuits) and systems. Because of the huge number of devices contained in today's electronic circuits and systems, device model level has to be raised to a higher level, macro model in simulation. So macro modeling is a very powerful tool in simulation.

Pre-requisite: None

# ECEN7008 EXPERT SYSTEMS

In the past ten years research in the field of artificial intelligence has many important successes. One of the most significant has been the development of powerful expert or knowledge-based systems. In many world famous universities, the subject has already been treated as one of their core courses. We should of course attach importance to the subject in the making of our master training programme.

Artificial intelligence background (including intelligent supports of decision making, CIM and CA technologies). Problem analysis and selection. Knowledge acquisition. Knowledge representation. Reasoning under uncertainty. Selecting a development tool. Constructing the knowledge base. Knowledge-based technology. Verification, validation, and integration. Implementation and management strategies. Survey of electromechanical engineering and manufacturing applications. Case studies: samples of expert system development. Pre-requisite: None

# ECEN7009 MICROELECTRONICS FOR TELECOMMUNICATION AND SIGNAL PROCESSING

The primary goal of this course is to present the most important functions that can be encountered in most of the applications in Telecommunications and Signal Processing. These functions that include, namely: Sampling, Discrete-Time and Digital Filtering and A/D and D/A Conversion, are presented both in theory and practice. The theory includes the basic fundamentals associated with each function and the practice comprises the presentation of different architectures for implementation, using for example Switched-Capacitor and Digital Techniques. The evaluation is composed by 4 laboratory works of simulation and electronic testing that will include the design of filters, A/D and D/A converters. The Software used for simulation includes the SWITCAP II programme (for functional SC-simulation) and the HSPICE programme (for electronic simulation at the transistor level). The Hardware used for electronic design and testing includes the MF10 (Integrated Switched-Capacitor Filter) and the Digital Signal Processor - Texas TMS 320C25.

# ECEN7010 LASER AND SEMICONDUCTOR PHYSICS

The course includes two parts. Part one introduces concepts and characteristics of laser principles, theories, operations and optic fiber. Other technologies for laser cavity and laser beam are covered. For part two, the objective is for engineering students to understand and to apply the knowledge of quantum physics to the semiconductor applications. Student learns elementary properties of semiconductor, energy bands structure, carrier properties, devices properties and various semiconductor fabrication techniques.

Pre-requisite: None

# ECEN7011 ADVANCED TOPICS IN TELECOMMUNICATIONS

This course is designed to introduce the key techniques in digital communications systems and wireless networks including source coding, channel coding, modulation, communication channels, performance evaluation, wireless cellular networks, WiFi, and IoT networks; Channel coding schemes including block codes and convolutional codes, basic modulation schemes including PSK, ASK, FSK, QAM and TCM, advanced communication techniques including MIMO, OFDM and edge computing are particularly introduced.

Pre-requisite: None

# ECEN7018 FLEXIBLE ALTERNATIVE CURRENT TRANSMISSION SYSTEM

The Flexible Alternative Current Transmission System and Distribution Flexible AC Transmission System (FACTS/DFACTS) are a new converging technology based on the Power Electronics, Control Theory and Power System for revolution of ever more efficient control and better utilization of power and energy in the existing systems. The FACTS offers an opportunity to enhance controllability, stability and power transfer capability of AC transmission systems with fastest control speed. DFACTS is the extended modern technique of FACTS to focus on the Custom issues or power line conditioning in the distribution site as well as the Information Technology's Electricity Issues. During the last decade, a number of control devices under the term FACTS/DFACTS technology have been proposed and implemented. This course provides a comprehensive guide to FACTS, covering all the major aspects in research and development of FACTS technologies. Various applications are also included to demonstrate the issues and benefits of applying FACTS. This course involved in the operation and control of modern power systems by FACTS technology.

Pre-requisite: None

# ECEN7019 EMBEDDED SYSTEM

This is a project oriented course of Embedded System for postgraduate students. It emphasizes general concepts and design techniques of embedded system. Topics include overview of embedded system, real-time system, hardware and software co-design, and components selection.

Pre-requisite: None

# ECEN7020 ADVANCED TOPICS IN ANALOG AND MIXED-SIGNAL INTEGRATED CIRCUITS

This course will provide a detailed discussion to the various types of analog and mixed-signal integrated circuits, e.g. data conversion and RF communication ICs, which are the key components in electronic systems. The performance characterization of data converters and RF circuits will be presented, and various types of data converters (including analog-to-digital and digital-to-analog) and RF building block (low-noise amplifier and mixer) will be discussed. The students are expected to complete several design and simulation projects with the implementation of the whole data converters and RF building blocks and the projects are expected to lead to chip fabrications for experimental verification.

#### ECEN7021 BIOMEDICAL TRANSDUCERS AND INSTRUMENTS

This essentially interdisciplinary course aims to introduce students the basic principles & techniques for biomedical transducers and instrumentations. This course covers sensing and

measurement for qualitative description and quantitative analysis in biomedical engineering field mainly on noninvasive techniques.

Pre-requisite: None

# ECEN7022 ELECTROCHEMICAL ENERGY CONVERSION AND STORAGE

This course introduces principles, mathematical models and implementation of electrochemical energy conversion and storage. The principle of electrochemistry is introduced, including components of an electrolytic cell, Nernst's equation, thermodynamics and electrokinetics. The basic of power conversion is also introduced, including power electronics switches, converters and their control. The applications to batteries, solar cells, fuel cells and other emerging energy generation technologies are explored.

Pre-requisite: None

# ECEN7023 SPECIAL TOPICS IN BIOMEDICAL ENGINEERING

The course will introduce a selected special topic in the Biomedical Engineering (BME) area, includes any specialized topic in BME chosen by the staff member who has experienced in that particular field, but the topic is not covered by other postgraduate courses. Students may register for this course multiple times as long as the topic is different. Pre-requisite: None

# ECEN7024 MEDICAL IMAGING SYSTEMS

The course aims to introduce the physics and principles of operation behind the major medical imaging systems including X-ray radiography, computed tomography (CT), magnetic resonance imaging (MRI), ultrasound (US) and nuclear medicine imaging (SPECT and PET). Image quality such as impulse response, signal-to-noise, resolution and its tradeoffs with system design for different imaging modalities will also be discussed.

Pre-requisite: None

# ECEN7025 MODELLING AND THEORETICAL ANALYSIS FOR COMMUNICATION SYSTEMS

This course is designed to introduce fundamental knowledge on the several theoretic methods and how to use them to model and analyze different issues in communication systems such as resource allocation in mobile computing, routing in the networking, and protocol design in wireless communication systems. For instance, the strategic making decision can be used to analyze the task and resource allocation in mobile computing. The VCG auction can be used to analyze the shortest path routing problem in communication networks. Reverse auction can be used to design incentive mechanism in the mobile intelligent sensing network. Coalitional activity can be used to analyze the cooperative relay networks. By learning this course, students should have deep understanding on these theoretic analysis methods and have the capability of using these methods to mathematically model and analyze various interactive problems in communication systems. All of these are assessed in assignments, presentations and projects. Pre-requisite: None

# ECEN7101 INTRODUCTION TO INTERNET OF THINGS

This course introduces students to advanced topics in Internet of Things. The detailed contents may change from year to year depending on current developments and teacher specialization Pre-requisite: None

# ECEN7102 ADVANCED TOPICS IN APPLIED PROBABILITY AND STATISTICS

This course prepares students with the fundamental principles and methods in probabilities and statistics for machine learning and data sciences. It covers from first a review of basic concepts such as common distributions, conditional and joint distributions, covariance and correlation, central limit theorem, sampling, to classical theory in estimation, hypothesis testing and Bayesian inference, and some advanced topics for regression, clustering, classification and learning.

Pre-requisite: None

# ECEN7103 RFID PRINCIPLE AND APPLICATIONS

This course provides students about radio frequency identification (RFID) information systems from hardware architecture, communication protocols to applications. Students will learn various types of RFID (e.g. HF, UHF RFID) technologies and different types of tags (i.e., active, passive, antenna polarizations, etc.), and their operating principles in hardware. The communication protocol for anti-collision and security enhancement will also be introduced. This course brings out various examples of both prevalent and emerging applications, to allow the students to obtain an idea of the potential applications in IoT such as item tracking and tracing, inventory monitoring and control, asset monitoring and management, anti-theft, electronic payment, access control, anti-counterfeit, smart tags.

Pre-requisite: None

# ECEN7104 ADVANCED INTEGRATED CIRCUIT DESIGN FOR INTERNET OF THINGS

This course targets to provide an overview of the enabling integrated circuit design techniques for the development of energy constrained Internet of Things (IoT) systems. The fundamental building blocks in an IoT system will be systematically introduced, including the analog interface, power management circuits, energy harvesting modules, analog-to-digital converters, shortrange radios, digital architecture, non-volatile memory, hardware security and battery/packaging. Advanced circuit design techniques targeting for ultra-low power consumption to fulfill the application level requirements will also be introduced.

Pre-requisite: None

#### ECEN7105 EMBEDDED SYSTEMS FOR INTERNET OF THINGS APPLICATIONS

This is a project oriented course for IoT related smart applications, especially the sensors for collecting data/information. It emphasizes the multi-tasking and time-driven programming for real-time applications. Topics include overview of embedded systems, time-driven multi-tasking programming, hardware and software co-design, and sensors interfaces. Pre-requisite: None

# ECEN7106 CONVEX OPTIMIZATION FOR INTERNET OF THINGS APPLICATIONS

This course focuses on convex optimization with applications to wireless communication systems, information theory, signal processing, control systems and machine learning. The first part will be on the theory of convex optimization--recognizing convex sets. convex functions. convex optimization problems and duality. The second part of the course will be on algorithms for solving convex optimization problems. This course is crucial to students and researchers in the above fields of engineering.

Pre-requisite: None

# ECEN7107 DATA ANALYSIS FOR INTERNET OF THINGS

This course is an introductory course on data analytics and its application in IoT. It covers three major topics: 1) Primary data analytics theory including classification, regression, principal component analysis, etc.; 2) Hands on data analytics experiences with NumPy, Pandas, Matplotlib, & Scikit-learn packages; and 3) Applications in IOT (with a special example on buildings energy systems), in which comprehensive experiments with real data will be included. In this course, students will learn systematic knowledge on data analytics and Python. They will also gain solid hands-on experiences in using Python to analyze IOT data. Pre-requisite: None

# ECEN7108 ADVANCED TOPICS IN INTERNET OF THINGS

This course introduces students to advanced topics in Internet of Things. The detailed contents may change from year to year depending on current developments and teacher specialization. Pre-requisite: None

# ECEN7197 INTERNSHIP AND REPORT

An independent project in cooperation with industry carried out under the supervision of a faculty staff member and co-supervised by an industrial supervisor. Pre-requisite: None

### ECEN7198 PROJECT REPORT

Project Report is distinguished from the Academic Thesis by its focus on combining existing academic theories or advanced technologies with an evaluation of a case study or academic project. Project Report focuses on combining existing academic theories or advanced technologies with an evaluation of a case study or academic project. The goal of this option is to facilitate the integration of practice with academic research.

#### ECEN7996 APPLIED THESIS

An independent project under the supervision of a faculty staff member. An applied thesis focuses on combining existing academic theories or advanced technologies with an evaluation of a case study or industrial project. The goal of this option is to facilitate the integration of practice with academic research.

Pre-requisite: None

# ECEN7999 ACADEMIC THESIS

An independent and original research study under the supervision of a faculty staff member. An academic thesis is a scholarly written document of a piece of original research on a particular topic in consistent with every details of research methodology. In general, the study could result in a technical publication or a presentation at a professional meeting. Pre-requisite: None

#### EMEN7002 PHYSICS OF MATERIALS

Atomic Theory: Hydrogen atom, Angular momentum and Pauli Exclusion Principle, Energy levels of atom, Energy bands, Fermi energy. Defects of materials. Dislocation: Edge dislocation, Screw dislocation, Burgers vector, Dislocation density, Elastic property of dislocation, Force on dislocation, Stress field and strain energy of dislocation, Dislocation motion and interaction, Dislocations in real crystal, Dislocations observation. Atomic structures and properties of some new materials.

Pre-requisite: None

### EMEN7003 VARIATIONAL PRINCIPLES AND THE APPLICATION

Principle of minimum potential energy; Principle of minimum complementary energy; Ritz method; Galerkin method; Kantonowitch method; Treffiz method; Hellinger-Reissner principle; Hu-washizu principle; Lagrange multiplier; High order Lagrange multiplier; Variational principle of non-linear elasticity; Methods for establishing generalized variational principle; Variational principle and the relating theorems in limit analysis; Applications for FEM, for limit analysis, for to find solutions and for to derive formulas; Developments in research work. Pre-requisite: None

#### **EMEN7006 MECHATRONICS**

Mechanical system interfacing; Combinational digital logic; Synchronous sequential logic; Asynchronous sequential logic; Register transfer logic; Embedded control computers; Analog digital conversion; Position and velocity measurement; Operational amplifiers for analog signal processing; Power amplifiers.

Pre-requisite: None

#### EMEN7007 PROCESS HEAT TRANSFER

Application of fundamental principles of single- and two-phase fluid dynamics and heat transfer to the design and analysis of different types of heat exchangers, such as double pipe heat exchangers, shell and tube heat exchangers, fin-plate heat exchangers, cross flow heat exchangers.

Pre-requisite: None

# EMEN7008 CONVECTIVE HEAT TRANSFER

Convective heat transfer occurs in almost all branches of engineering applications. This course

will cover the followings. The equation of convective heat transfer, the differential equation for the boundary layer, the integral equation of the boundary layer, momentum and heat transfer for the laminar internal and external flow, the momentum and heat transfer for the turbulent internal and external flow natural and mixed convections

Pre-requisite: None

## EMEN7009 COMPUTATIONAL METHOD FOR THERMO-FLUID SYSTEM

The purpose of this course is to use computational method to investigate heat transfer and fluid flow and other related processes that occur in engineering equipment. This course will cover: Discretization method. Explicit and implicit methods for heat conduction. Upwind, exponential, hybrid and power-law schemes for convection. Calculation of flow field use various algorithms. Pre-requisite: None

# EMEN7010 ENERGY CONVERSION AND UTILIZATION

Renewable energy resources. Solar energy, wind power, wave and tidal power, geothermal energy, hydroelectric power. Environmental assessment of alternative energy resources. Conventional energy resources, fossil fuel in solids, liquid and gaseous states. Nuclear energy, Energy analysis, energy economics, energy and society. Energy and the third world, energy conservation and energy policies. Pre-requisite: None

#### EMEN7011 ADVANCED ROBOTICS AND CONTROL

Analyzes kinematic characteristics of planar and spatial manipulators. Differential kinematics and statics. Dynamics. Trajectory planning. Introduction to feedback control of physical system behavior. State-space and functional descriptions of linear and nonlinear systems. Feedback, stability, and robustness. Design of PID controllers and compensators. Interaction control. Actuators and sensors. Robot control architecture.

Pre-requisite: None

# EMEN7014 FLUID POWER ENGINEERING

Basics of fluid flow and hydro-mechanics. Advanced pneumatic power systems. Advanced hydraulic power systems. Fluidics. Fluid logic control circuits. Modelling of fluid power systems. Fluid power system control. Dynamic analysis and simulation of fluid power systems. Fluid power plumbing and maintenance.

Pre-requisite: None

#### EMEN7017 SPECIAL TOPICS IN MANUFACTURING I

Laser physics, types of lasers and laser radiation for material processing, laser hazards & safety, laser optics and beam delivery systems, laser beam interaction with materials, laser materials processing : laser surface engineering, laser cutting, laser welding, laser drilling, laser marking, laser selective sintering.

Pre-requisite: None

# EMEN7018 SPECIAL TOPICS IN MANUFACTURING II

In industry, material degradation of components and equipment arises from one or more of the three modes: wear, corrosion and fracture. The lifetime of the component is determined by the interaction among materials properties, component design, and the application conditions. This course intends to give a comprehensive knowledge on materials degradation and preventive methods by surface engineering. In addition, the fabrication of microelectronic devices will also be introduced in this course. This course focuses on the following topics: Surfaces: Their Nature, Roughness & Characterization; Corrosion; Tribology; Friction, Wear & Lubrication; Surface Treatment & Coating Technology.

Pre-requisite: None

# EMEN7019 SPECIAL TOPICS IN THERMAL ENGINEERING I

To introduce the most advanced technologies in the field of thermal engineering according to

recent literatures/ publications in indoor air quality, ventilation and energy saving and advanced HVAC systems.

Pre-requisite: None

# EMEN7020 SPECIAL TOPICS IN THERMAL ENGINEERING II

To introduce the most advanced technologies in the field of thermal engineering according to recent literatures/ publications in single and multi-phase heat transfer and its applications. Pre-requisite: None

# EMEN7021 AUTOMOTIVE ENGINEERING

Introduction to road vehicles. Modern internal combustion (IC) engine construction. Fuels and combustion. Thermodynamic analysis of IC engines. Advances in IC engines. Electronic fuel injection. Variable valve actuation. Turbocharging and supercharging. Advanced electronic control technology. Emission control. Engine characteristics and performance measurement. Engine trouble-diagnosis. Advanced automotive drive trains, braking, steering and suspension systems. Safety devices. Racing technology. Vehicle aerodynamics. Chassis engineering. Automobile mechanics.

Pre-requisite: None

# EMEN7022 FAILURE ANALYSIS IN MECHANICAL ENGINEERING

This course presents theories for preventing/mitigating the failure modes that are most frequently encountered in mechanical engineering. These include fatigue, stress concentration, fracture, creep, impact, buckling, wear, residual stresses, etc. This course shall cover such important design tools as: linear fracture mechanics, the various widely-used rules for predicting fatigue strength, models for predicting crack growth, the most important criteria for yield failure, and so forth. Case studies (such as the effects of residual stresses on the failure of railway rails) that involved the various failure modes shall be discussed, with an eye to reinforcing the students' ability in applying the various theories.

Pre-requisite: None

# EMEN7023 ADVANCED ELECTRICAL SERVICES

- To introduce the most advanced technologies in the field of electrical services engineering according to recent literatures and publications.
- To introduce the fundamentals in design of vertical transportation, security, lighting and energy storage systems.
- To enable students to understand the major design features, operating characteristics and functions of facilities used in electrical building services.

Pre-requisite: None

# EMEN7024 ADVANCED ELECTROMECHANICAL ENERGY CONVERSION

- To provide students understanding of various advanced electromechanical energy conversion systems, including the operating principles, performance characteristics and applications.
- To provide students knowledge in the selection, operation and control of electric machines.
- To ensure the students to develop an understanding of various variable speed drive systems and their applications

Pre-requisite: None

# EMEN7025 HUMAN FACTORS ENGINEERING

Students will gain an understanding of the basic theoretical concepts, principles and techniques of ergonomics as well as an introduction to fundamental ergonomic measurement tools for assessment of physical workload, posture, occupational exposure, and stress. The topics include systems design and task analysis, muscle use and anthropometry, workspace design, activity-related soft tissue disorders, back injuries, shiftwork, organizational and psychosocial aspects of work, skilled work and mental activity and regulations in ergonomics. The professional software such as "HumanCAD" is introduced for supporting ergonomic systems design and task

analysis. The students are required to complete a related course project. Pre-requisite: None

# EMEN7027 ENGINEERING ACOUSTICS

This course is to develop students' understanding of fundamentals of acoustics and its applications. Through this course students should be capable of modeling and analyzing engineering acoustics problems. Topics include: Fundamentals of vibrations. Vibration of continuous bodies (string, bar, plate). Acoustics wave equation. Acoustics impedance, power, and intensity. Spectral descriptions of acoustics. Transmission and reflection of sound. Acoustic radiation. Room acoustics. Introduction of acoustics and vibration measurements. Introduction of boundary element method.

Pre-requisite: None

# EMEN7028 ADVANCED ELECTRIC VEHICLES

This course will introduce the electrical and mechanical aspects of EVs, including the fundamentals, design, control, modeling, battery and other energy storage, electricpropulsion systems. It will cover vehicle dynamics, energy sources, electric propulsion systems, regenerative braking, parallel and series hybrid electric vehicle (HEV) design, EV charging and infrastructure, impacts to environment and economy, and practical design considerations. Pre-requisite: None

#### EMEN7029 SPECIAL TOPIC IN ELECTROMECHANICAL ENGINEERING I

Any specialized topic in Electromechanical Engineering chosen by staff member who has experience in that particular field, but the topic is not covered by the other postgraduate courses in the MSc. programme.

Pre-requisite: None

# EMEN7030 SPECIAL TOPIC IN ELECTROMECHANICAL ENGINEERING II

Any specialized topic in Electromechanical Engineering chosen by staff member who has experience in that particular field, but the topic is not covered by the other postgraduate courses in the MSc. programme.

Pre-requisite: None

#### EMEN7031 MICROMECHATRONICS AND APPLICATIONS

Micro/nanotechnology has become very important in creating innovative technologies in the fields of ultrahigh precision mechatronics, bio-medical engineering and energy/environmental technology. This course introduces fundamental aspects of micromechatronics. It involves scaling laws at the micro/nano-scales, electrostatics, piezoelectrics, electromagnetism, measurement tools, materials and fabrication methods, diverse micromechatronic systems and their applications.

Pre-requisite: None

# EMEN7032 INTELLIGENT THEORY AND ENGINEERING APPLICATIONS

This course introduces the fundamentals of intelligent system technologies and their engineering applications. It will present the principles of knowledge-based systems, fuzzy logic and artificial neural networks and explore how manufacturing and automation could benefit from application of these technologies. It will also discuss the representation of knowledge, knowledge acquisition, decision making mechanism, learning and machine learning, as well as its applications in various engineering domains.

Pre-requisite: None

#### EMEN7033 INDUSTRIAL ENGINEERING AND ENGINEERING MANAGEMENT

This course is intended to introduce to the concepts of supervision and management in an engineering environment. Design of Work Systems, Facilities design and planning, Operation Management, Knowledge Management, Supply Chain Management, Materials and Inventory Management, Logistical Management, Enterprise Resource Planning, and Decision Making

System are studied as part of the course. Skills on analytical problem solving, statistical thinking and creativity are essential. The course project is required to apply Industrial Engineering (IE) and Engineering Management (EM) technology in solving the critical problems for the industries. Pre-requisite: None

# EMEN7034 THEORIES AND PRACTICE OF CAD/CAM/CAE

This course studies modern design and manufacturing techniques in the computer-based environment. It is designed to address the key issues in product development with the goal of providing the future engineers with a thorough understanding of the concepts and technologies in CAD/CAM/CAE. The major focus of the course will be computer graphics, geometric modeling, design reuse, feature recognition, process planning, NC path planning, rapid prototyping, engineering optimization, and computer integrated manufacturing. Pre-requisite: None

# EMEN7035 PRODUCT DESIGN AND MANAGEMENT

Innovation management and new product development are critical for improving the competitiveness of economies and firms. This course presents and utilizes multi-disciplinary approaches to cover different aspects of product design innovation and development management. The topics include innovation management, product design and optimization, design principle and process (design for manufacturability/environment/usability/X, axiomatic design, robust design, etc), product portfolio management, product life cycle management and design collaboration, etc.

Pre-requisite: None

# EMEN7036 MODELING AND ANALYSIS OF PRODUCTION SYSTEMS

The complexity of the design and control problems encountered in the modern production system is increasing. This course introduces modeling and analysis methods for linking decision and performance throughout the production system. The methods could be used to support analysis of alternative manufacturing material/service strategies. The fundamental production operation issues will be discussed, ranging from serial systems, mass customization, quality control, group technology, cellular manufacturing, facility management, layout planning and material handling systems, etc.

Pre-requisite: None

# EMEN7037 ADVANCED MATHEMATICS FOR ELECTROMECHANICAL ENGINEERING

First-order Ordinary Differential Equation; Second-order Ordinary Differential Equation; Fourier Series, Integrals, and Transforms; Analytical Solution of Partial Differential Equations: Heat Equation, Wave Equation, Circular Membrane, Laplace's Equation, Poisson's Equation; Complex Analytic Functions; Complex Integration; Power Series; Taylor Series; Laurent Series; Residue Integration Method; Numerical methods in Linear algebra with Matlab; Numerical Methods for Differential Equations with Matlab. Pre-requisite: None

# EMEN7038 MECHANICAL PROCESSING OF MATERIALS

Mechanical processing technologies are amongst the eldest manufacturing processes used by mankind. These processes are multi-discipline activities that require knowledge from different engineering areas. The methods for analysing these processes seek to integrate this multidisciplinary aspect to obtain analytical or numeral solutions for the distribution of main field variables in the interior of the parts and the tool-part contact surfaces, resulting in a group of essential elements for design, project and optimization of parts and tools, aiding future engineers to cultivate a critical spirit on analysing the results and purpose alternative manufacturing solutions.

Pre-requisite: None

# EMEN7039 PROGNOSTICS AND HEALTH MANAGEMENT OF ENGINEERING SYSTEMS

This course provides the concepts and methods of prognostics and health management (PHM)

of engineering system, which describes PHM techniques and their applications in engineering systems. A variety of tools and techniques for developing health management and monitoring of components and systems will be discussed. Topics related to sensor signal acquisition, data preprocessing techniques, various signals processing methods for feature extraction, machine learning methods and data driven prognostics models. After successfully completing this course, students will have a good understanding of system health monitoring, optimum sensor placement for health assessment, and current challenges and opportunities in the PHM field. Pre-requisite: None

# EMEN7997 INTERNSHIP AND REPORT

An independent project in cooperation with industry carried out under the supervision of a faculty staff member and co-supervised by an industrial supervisor. Pre-requisite: None

#### EMEN7998 PROJECT REPORT

Project Report is distinguished from the Academic Thesis by its focus on combining existing academic theories or advanced technologies with an evaluation of a case study or academic project. Project Report focuses on combining existing academic theories or advanced technologies with an evaluation of a case study or academic project. The goal of this option is to facilitate the integration of practice with academic research. Pre-requisite: None

#### MATH7001 FUNCTIONAL ANALYSIS

The first level of abstract analysis is about operators and, in particular, functionals, in linear normed and Banach spaces, and in Hilbert spaces. Besides the basic concepts the course will finally rest on the three corner stone theorems, viz., the Hohn-Banach theorem of Extension of bounded linear functional in linear normed spaces, the resonance theorem (Banach-Steinhaus Theorem) and the open mapping theorems (the closed range theorem). Pre-requisite: None

# MATH7002 REAL ANALYSIS

Based on the concept completeness of the real number system this course systematically extends the length concept for intervals to general measurable sets. Based on the concept measurable sets and their measures the course introduces measurable functions and its subclass integrale functions and their integration. In such way completeness of Lebesgue integrable functions extending Riemann integration is established. This is develop analysis is indispensable.

Pre-requisite: None

#### MATH7003 ADVANCED NUMERICAL LINEAR ALGEBRA

Direct methods for solving linear systems. Iterative methods for solving linear systems. Sparse matrix computations. Eigenvalue problems. Least squares problems. Toeplitz solvers. Pre-requisite: None

#### MATH7004 ADVANCED PROBABILITY AND STATISTICS

This course studies advanced theory such as law of large number, central limit theorem and Poisson limit theorem with their applications in Statistics. Pre-requisite: None

#### MATH7005 CLIFFORD ANALYSIS

Clifford algebras, spinors, elementary geometric algebra, Dirac differential operators, monogenic (Clifford analytic) functions, Taylor and Laurent series for monogenic functions, CK extensions of real analytic functions, Cauchy integrals, generalized exponential functions and Hardy spaces, singular Cauchy integrals and Plemelj formulas. Pre-requisite: None

# MATH7006 GEOMETRY AND ITS APPLICATIONS

This is a research oriented course related to one of the following 3 areas in geometry: algebraic geometry, differential geometry, or even computational geometry. The topics can be different from year to year, depending on the instructors' interest. The instructor can also discuss the materials from some current topics, or some topics in his or her research area. The instructor can develop the theory toward the geometric application as well. Pre-requisite: None

#### MATH7007 MATHEMATICAL THEORY OF COMPUTATIONAL INTELLIGENCE

Mathematicial model of neurons and nerual networks, learning of ANN, optimazation methods for error function, Backpropagation learning methods, Approximation theory of ANN and applications. Evolutionary algorithms and their convergence theorem. Pre-requisite: None

#### MATH7008 MATRIX ANALYSIS

Similarities and canonical forms of matrices. Normal, Hermitian and positive definite matrices. Matrix norms. Inequalities of eigenvalues and singular values. Pre-requisite: None

#### MATH7009 NUMERICAL METHODS FOR DIFFERENTIAL EQUATIONS

In this course, we focus on the numerical methods for solving the ordinary and partial differential equations. The main contents include single and multi-step methods for ordinary differential equations; finite difference method, finite element method, spectral method for partial differential equations; the related numerical analysis; quality programming for the numerical algorithm. Pre-requisite: None

#### MATH7010 PARTIAL DIFFERENTIAL EQUATIONS

This course provides some knowledge on partial differential equations. It includes the study of Fourier transformation and translation invariant operators. Characteristic theory of linear equations will be given. Various boundary value problems for homogeneous wave equations, Laplace equations and parabolic equations will also be studied. Pre-requisite: None

#### MATH7011 READING COURSE I

For individual students or a group of students. Self-study of specific topics under the guidance of a supervisor.

Pre-requisite: None

# MATH7012 READING COURSE II

For individual students or a group of students. Self-study of specific topics under the guidance of a supervisor.

Pre-requisite: None

# MATH7013 STOCHASTIC DIFFERENTIAL EQUATIONS

This course starts from reviewing the basic probability theory and stochastic processes such as Markov chains, Poisson processes and so on, and then studies Brownian motions, Ito formula, Ornstein-Uhlenbeck process, growth models, Black-Scholes equations and some applications of stochastic differential equations in Finance and biology. Pre-requisite: None

### MATH7014 STOCHASTIC PROCESSES

Gaussian processes, stationary processes, Markov chain and Markov processes. Stochastic processes with independent increments, Brownian motions, martingales and semi-martingales. Pre-requisite: None

# MATH7015 TIME SERIES ANALYSIS

This module introduces methods for analyzing the time series data. Topics include: Stationary random processes, Autocovariance and autocorrelation functions, Discrete parameter models, Purely random processes, Autoregressive processes (first order, second order, general orders), Moving average processes, ARMA processes, General linear processes, Harmonic processes, Stochastic limiting operations and standard continuous parameter models, etc. This module is targeted at students who are interested in time series and are able to meet the prerequisite. Pre-requisite: None

## MATH7016 TOPICS IN ANALYSIS

Selected topics in analysis. The content may vary from year to year. Pre-requisite: None

# MATH7017 TOPICS IN GEOMETRY

Selected topics in geometry. The content may vary from year to year. Pre-requisite: None

#### MATH7018 TOPICS IN MATRIX ANALYSIS

Selected topics in matrix analysis. The content may vary from year to year. Pre-requisite: None

#### MATH7019 TOPICS IN PARTIAL DIFFERENTIAL EQUATIONS

Selected topics in partial differential equations. The content may vary from year to year. Pre-requisite: None

#### MATH7020 TOPICS IN PROBABILITY AND STATISTICS

Selected topics in probability and statistics. The content may vary from year to year. Pre-requisite: None

# MATH7021 FINANCIAL MATHEMATICS

Introduction to option pricing and the Black-Scholes model. Introduction to martingale theory and stochastic calculus, the Cox-Ross-Rubinstein model, and the martingale method in option pricing. Backward stochastic differential equations and option pricing. Consumption-investment strategies, and maximization problems of utilities in financial markets. Other updated topics in financial mathematics.

Pre-requisite: None

# MATH7998 Project Report

An independent project under the supervision of a faculty staff member. A Project Report focuses on combining existing academic theories or advanced technologies with an evaluation of a case study or industrial project. The goal of Project Report is to facilitate the integration of practice with academic theory.

Pre-requisite: None

# **BACHELOR'S DEGREE PROGRAMMES**

# APAC1000 ADVANCED MATHEMATICS I

The course aims at providing mathematical concepts and methods to students in the study of classical mechanics, electromagnetism, quantum mechanics as well as statistical mechanics. The topics will cover linear algebra, vector calculus, special functions, complex numbers and hyperbolic functions.

Pre-requisite: None

## APAC1001 COLLEGE PHYSICS

In this part, mechanics included rotation, gravitation, elasticity, oscillation, waves, sound waves, fluid, gas theory and laws of thermodynamics will be introduced. Pre-requisite: None

# APAC1002 ELECTROMAGNETISM AND PHYSICAL OPTICS

In this part, Electromagnetism will be introduced in terms of forces, fields, potential, laws, current, circuits, induction, circuit components, electromagnetic waves, light, geometric optics, interference and diffraction.

Pre-requisite: None

#### APAC1003 INTRODUCTION TO COLLEGE CHEMISTRY

This course addresses the basic concepts of chemistry through lectures and laboratory experiments. Topics include: atoms and molecules, periodic table, electronic structure, chemical bonding, chemical reactions, electrochemistry, and organic chemistry. Pre-requisite: None

#### APAC2000 ADVANCED MATHEMATICS II

The course is the extension of Advanced Mathematics I. The course aims at providing mathematical concepts and methods to students in the study of classical mechanics, electromagnetism, quantum mechanics as well as statistical mechanics. The topics will cover infinite series, Fourier series and transformation, ordinary differential equations, probability. Pre-requisite: APAC1000

## APAC2001 ANALYTICAL AND ENVIRONMENTAL CHEMISTRY

Introduction of analytical chemistry, including the concept of analytical chemistry, sample preparation, analysis methods, quality control, as well as analytic techniques for environmental science. Related experiments will also be arranged in this course. Pre-requisite: None

# APAC2002 MODERN PHYSICS

This course is intended to develop basic theoretical tools needed to understand fundamental atomic processes. It will introduce you to modern quantum physics starting with the special theory of relativity and the foundations of quantum mechanics. Then it presents the basic concepts and principles of atomic physics. Topics may include the hydrogen and helium atoms, spin-orbit coupling schemes, hyperfine interaction, Lamb shift, atoms in magnetic fields, multielectron atoms, Pauli exclusion principle, Hund's rules, diatomic molecules, Born-Oppenheimer approximation, electronic, vibrational, rotational and rotational-vibrational spectra.

# APAC2003 INORGANIC CHEMISTRY

Introduction of inorganic chemistry, including general principles of chemistry, periodic properties of elements, acid-base theory, structure of compounds, s, p, d-block elements, etc. Some related experiments will be included.

Pre-requisite: None

#### APAC2004 QUANTUM PHYSICS

Introduction to quantum mechanics. It may cover the following topics: Wavefunction and Schrodinger equation, observables, eigenfunctions, one-dimensional steady state problem, Mechanical quantities expressed by operators and representation transformation, the evolution of mechanical quantities over time and symmetry, the Schrodinger equation in spherical coordinates, spin and orbital angular momentum, Quantum transitions, hydrogen atom and addition of angular momenta.

Pre-requisite: APAC2000

# APAC3000 MATERIALS PHYSICS AND CHEMISTRY

The course will introduce the general synthesis methodologies in material science based on Physics and Chemistry principles. Exploration and applications of novel and functional materials, especially in modern technology, will also be covered in the course. Pre-requisite: None

# APAC3001 SOLID STATE PHYSICS

In this course, the behavior of atoms and shared electrons in solids will be described by classical physics and quantum mechanics. The discussion of solid with crystalline structure will be one of the emphases. Some properties of crystal such as defects, disorder and thermal vibration will be studied. Then, band theory and motion of electron will be investigated. Pre-requisite: None

# APAC3002 THERMODYNAMIC AND STATISTICAL PHYSICS

This course introduces the foundations of statistical mechanics to students with a strong mathematics and physics background, who are contemplating a major in Physics or interested in a rigorous treatment of physics. The main contents include the zeroth, first, second and third laws, thermodynamical potentials and Legendre transformation, phase coexistence and phase transition, thermodynamical stability, statistical distribution of almost independent systems, and others.

Pre-requisite: None

#### APAC3003 MATERIALS CHARACTERIZATION

Introduction of commonly used materials characterization methods (XPS, SEM, AFM, XRD, Raman, XPS), including their theory of operation and hands-on experience. Includes a discussion of the measurement process and instrumental analysis of samples. Pre-requisite: None

#### APAC3004 OPTOELECTRONICS

This course covers the fundamental principles of wave and geometric optics, photonics and optoelectronics, with an emphasis on applications. Topics may include light propagation and basic properties, polarization, waveguide and optical fibre, optical properties of crystals and semiconductors, semiconductor light emitting didoes, lasers, photodetectors, photovoltaic devices and displays. The course also includes substantial laboratory and project work. Pre-requisite: None

#### APAC3005 PHYSICAL CHEMISTRY

This course provides a theoretical and mathematical description of the physical behavior of chemical systems. Introduce and interpret observations on the physical and chemical properties of matter. Physical chemistry is also essential for developing and interpreting the modern techniques used to determine the structure and properties of matter, such as new synthetic materials. Related experiments will also be arranged in this course. Pre-requisite: APAC1003 or HSCI1000

#### APAC3006 SEMICONDUCTOR PHYSICS

Brief introduction of solid-state physics and crystallography, followed by a major focus on the knowledge of semiconductor physics with topics including electronic states in semiconductors, defects in semiconductors, the carrier transportation in semiconductors, unbalanced carriers in semiconductors and semiconductor junctions, via both classroom teaching and lab exercises. Pre-requisite: None

#### APAC3007 LOW-DIMENSIONAL PHYSICS

The course aims at an introduction to basic principles of nanophysics allowing working in research and development in nanotechnology. Students will learn basic principle of physics of nanometer-size systems with a focus on basic physical phenomena. Pre-requisite: None

## APAC3008 NANOCHEMISTRY

Introduction of nanomaterials and nanochemistry, including the concept of nanoscale, the band structure and the corresponding characters of nanomaterials, the fabrication, modification and application of nanosystem.

Pre-requisite: None

#### APAC3009 ORGANIC AND POLYMER CHEMISTRY

Introduction of various classes of organic and polymer compounds, emphasizing organic and polymer chemical reactions and mechanisms of major functionalities and their importance in the area of chemistry. Topics covered include: structure and bonding; regio-, geometric, and stereoisomerism; substitution and elimination reactions; synthesis and reactions of alcohols and epoxides; structure and properties of polymer; free radical polymerization; condensation polymerization; crystallization and crosslinking of polymer chains; characterization and application of organic and polymer compounds. Related experiments will also be arranged in this course.

Pre-requisite: None

#### APAC3010 THIN FILM PHYSICS

Thin films are used in many aspects in modern technologies. This course mainly focuses on introducing the working principles of various thin film fabrication techniques, such as, thermal evaporation, sputtering, chemical vapor depositions. Physics in obtaining vacuum and/or plasma conditions as well as the applications of thin films in modern society are also going to be covered. Pre-requisite: None

# APAC4000 RESEARCH PROJECT

The course is designed for the students to carry out projects at year 4. The projects should be focused on the scope of Applied Physics and Chemistry. Pre-requisite: None

# APAC4001 ELETROCHEMISTRY

Introduction to fundamental principles of electrochemistry and electrochemical methods of analysis. The course will cover topics in physical as well as electroanalytical chemistry including thermodynamics, electrode potentials, galvanic and electrolytic cells, electrode kinetics, dynamic electrochemistry, mass transport by migration, diffusion and convection, diffusion layers, and electrochemical instrumentation and techniques. The student will learn about the theoretical and practical aspects of electrochemical measurements whether they be used for determining some physical property a system. Using a combination of problem-based learning approaches and traditional lectures, the student will develop critical thinking skills in the areas of electrochemical method and data interpretation.

Pre-requisite: None

# APAC4002 ELECTRODYNAMICS

Electrodynamics is aimed at exploring the properties of electromagnetic fields, law of motion, and its interaction with charged matter. The main focus of this course is to explain the theory of macroscopic electromagnetic field.

Pre-requisite: None

#### APAC4003 MAGNETIC PROPERTIES OF MATERIALS

Introduction of electric and magnetic properties of materials, including interesting macroscopic phenomena such as superconductor, multiferrics, frustration, etc., and related macroscopic origins, based on frontier researches and emerging new materials. Pre-requisite: None

#### APAC4004 MATHEMATICAL METHODS IN PHYSICS

The course focuses on the partial differential equations in physics, their mathematical structures, as well as related numerical methods. The main topics will cover the introduction of elliptic,

parabolic, and hyperbolic equations, their key theoretical results, and numerical methods for solving these equations.

Pre-requisite: GEST1004

# APAC4005 MICRO-/NANO-SYSTEMS

This course provides an overall introduction to miniaturization and microelectromechanical systems (MEMS) with basic theoretical principles of the scaling in micro/nano-devices. Key fabrication methodology, material, and structural design of MEMS will be introduced. The stateof-the-art applications of MEMS in interdisciplinary fields will also be covered. Pre-requisite: None

#### APAC4006 PHYSICS OF SEMICONDUCTOR PROCESSING

The course covers fundamental scientific and engineering principles of various processing techniques involved in the fabrication of semiconductor devices. The basic physics and methodology behind the techniques will be emphasized in this course. Also, the chemistry, electronics, and material issues related to semiconductor processing will be provided for this multi-disciplinary field.

Pre-requisite: None

#### APAC4007 SEMICONDUCTOR MATERIALS AND DEVICES

Introduction of semiconductor and device physics. Brief introduction of semiconductor growth and the device fabrication processes, including crystal growth, floating zone refining, defects control, doping and lithography. Main focus will be on the properties of semiconductor devices, such as p-n junction, metal-semiconductor contact, MIS and transistor. Also, applications of semiconductor devices will be introduced.

Pre-requisite: APAC3006 or APAC3001

# APAC4008 SUPRAMOLECULAR CHEMISTRY

Supramolecular chemistry is "chemistry beyond the molecule". It is an interdisciplinary field that covers the physical, chemical and biological properties of complex chemical species held together mainly by non-covalent interactions. This course provides an introduction to the field, and discusses the intermolecular forces that dictate the formation of supermolecules and supramolecular assemblies and their properties. Main topics include basics of molecular recognition, host-guest chemistry, self-assembly, supramolecular materials and function, as well as supramolecular medicine.

Pre-requisite: None

#### APAC4009 THEORY AND MODELING OF MATERIALS PROPERTIES

This course uses the theory and application of atomistic computer simulations to model, understand, and predict the properties of real materials. Pre-requisite: None

#### APAC4010 TOPICS IN EMERGING MATERIALS

Materials are fundamental to economic, social and industrial development. They form the basis for the functionality of the built environment, products and technologies that are vital to modern society. This course will discuss the recent discovery of emerging materials that they can be the key innovative trigger in the development of many new products and technologies. Pre-requisite: None

#### CIVL1000 COMPUTER SCIENCE

This course introduces computer science with basic logic and fundamental programming techniques, and demonstrates how to improve procedural solutions by the object-oriented programming (OOP) approach as well. Fundamental of programming includes primitive data types, expressions, control statements, functions and arrays, which prepare students to learn object-oriented programming. Both theoretical concepts and practical skills are involved; students can experience problem solving by formulating programmatic solutions for real

problems and translate them into programs with the programming language C/C++. Pre-requisite: None

# CIVL1001 INTRODUCTION TO CIVIL AND ENVIRONMENTAL ENGINEERING

Introduction to the study and practice of civil engineering; subfields in the discipline, such as structural, geotechnical, environmental, water resources, ocean & coastal, transportation, and construction engineering; professionalism and professional registration; engineering ethics and safety. Independent study on various topics will be assigned to students. Pre-requisite: None

# CIVL1002 CIVIL ENGINEERING DRAWING

This course is designed to provide civil engineering undergraduates with basic understanding of the theory and practice of engineering drawings and computer-aided design for civil engineering applications. Students will learn to read and construct blueprints and working drawings by means of lectures, discussion of drawing examples related to existing buildings or projects, CAD practice. Topics will include basic fundamentals of graphics and drafting principles, Auto-Cad fundamentals, architectural drawings, structural floor plan of building, detailing for typical reinforced concrete structural and steel members.

Pre-requisite: None

# CIVL1003 STATICS

It is a beginning level course for the preparation of other intermediate courses in solid and fluid mechanics. It introduces the basic concepts, tools and methods for rigid bodies, such as forces, moments, free body diagram, equilibrium, supports, reactions, internal forces and moments, truss, frame, shear force and bending moment diagram, etc. Pre-requisite: None

# CIVL1004 ENGINEERING GEOLOGY

The first part includes the major principles of physical geology covering the structure of the Earth, plate tectonics, volcanism and other mountain building processes, the surface erosion process, and the formation and properties of minerals and rocks. The second part concerns with the application of geological knowledge to civil engineering problems such as landslide, subsidence and earthquake etc. The third part includes the engineering classification of soils. Pre-requisite: None

# CIVL2000 KINEMATICS AND DYNAMICS

Kinematics of Particles; Kinetics of Particles; Newton's second law and energy and momentum methods, systems of particles, kinematics of rigid bodies, plane motion of rigid bodies: forces and accelerations and energy and momentum methods, kinetics of rigid bodies in three dimensions, mechanical vibrations.

Pre-requisite: ECEN1008 ; CIVL1003

# CIVL2001 MECHANICS OF MATERIALS

This course introduces fundamental concepts of deformable bodies. It serves as a bridge between mechanics of rigid bodies and structural analysis. It introduces the behavior of structural members, both qualitatively and quantitatively, under different types of external loadings. Pre-requisite: CIVL1003

#### CIVL2002 SURVEYING

This course covers the following topics: distance measurement, leveling, angle measurement, surveying errors and adjustments, field operations, traverse, construction surveying, curve measurement, measurement of area and volume, topography. Pre-requisite: None

# CIVL2003 FLUID MECHANICS

Properties of fluids; Fluid statics; Fluid in motion and the conservation of mass; Pressure

variation in flows; Momentum and energy principles; Dimensional analysis and similitude; Application in civil engineering: pipe flow, pipe networks, and open channel analysis. Pre-requisite: GEST1004 and ECEN1008

#### CIVL2004 MATHEMATICS FOR CIVIL ENGINEERING

This course covers: 1) linear algebraic equations and solution methods; 2) numerical methods. It aims at providing civil engineering students necessary mathematics tools in their course study and final year project work. Examples will be designed with civil engineering-related problems... Pre-requisite: MATH1003

#### CIVL2005 CONSTRUCTION MATERIALS

This course is designed to provide undergraduate civil engineering students fundamental principles of the behavior, physical and engineering properties of various common civil engineering materials, including natural stones, sands, aggregates, cement, concrete, steel, timber and bituminous materials. Selection and design of materials based on their intended use in design and construction are emphasized. The laboratory sessions are designed to provide students a hand-on experience on various material testing concepts and procedures. Written reports and oral presentation of experimental results will be required.

Pre-requisite: None

#### STRUCTURAL ANALYSIS CIVL2006

This first course in structures introduces structural design concept and process, analysis of statically determinate structures, analysis of indeterminate structures by flexibility method and stiffness method.

Pre-requisite: CIVL2001

#### CIVL2007 SOIL MECHANICS

This course covers the following topics: the index properties, plasticity and structure of soil, engineering classification of soil, soil compaction, permeability, seepage, effective stress, stresses in a soil mass, consolidation behavior and strength of soils. The first part of the course introduces fundamental engineering properties and the second part covers the concept of time dependent deformation behavior and the strength of soil.

Pre-requisite: CIVL1003

#### CIVL3000 STEEL DESIGN

This course covers the following topics: This course is designed to introduce the behaviour and design of steel structural members according to the limit states design concept. The behaviour and design of tension members, compression members, laterally restrained and unrestrained beams, beam-columns and design of connections will be discussed. Students are expected to obtain basic knowledge about the design and failure mode of steel structural members after finished this course.

Pre-requisite: CIVL2006

#### CONSTRUCTION MANAGEMENT AND PRACTICE CIVL3001

This course addresses various aspects of managing construction projects. Topics include: Organizational structure of construction companies; Project delivery systems: traditional, construction management, design-build, BOT; Project estimating and tendering; Project scheduling and tracking; Construction services during design and site administration; Safety considerations and quality control.

Pre-requisite: None

#### CIVL3002 ENVIRONMENTAL ENGINEERING I

This course is organized with the following chapters: introduction of environmental engineering; chemistry; biology; ecosystems; materials and energy balances; risk perception, assessment and management; hydrology; water characteristics involving physical, chemical and biological aspects; water quality analysis including principles and methods involved in natural water quality process; physical and chemical modelling for water environmental processes involving chemical equilibrium, reaction kinetics, and reactor principles. Pre-requisite: STGC1001

#### CIVL3003 **ENVIRONMENTAL ENGINEERING II**

This course is organized with the following chapters: water guality control in rivers; water and wastewater treatments: physical, chemical and biological processes; design principles for water and wastewater treatment facilities; water treatment processes and unit operations including coagulation and flocculation, sedimentation and flotation, filtration and clarification; reactor principles and wastewater treatments including bio-chemical treatments, secondary sedimentation operation, activated sludge treatment process, bio-film treatment process. Pre-requisite: CIVL3002

#### CIVL3004 REINFORCED CONCRETE DESIGN

This course covers the following topics: reinforced concrete material properties; limit state design concepts; introduction to European design standards (i.e. Eurocodes 1 and 2); analysis of frames and shear wall structures; analysis of sections in bending and/or axial loads; yield line and strip methods for slabs: behavior and design of reinforced concrete beams, one-way slabs and twoway slabs considering flexure, shear, anchorage, curtailment and serviceability requirements: behavior and design of short and slender columns under combined bending and axial loads. Pre-requisite: CIVL2006

#### CIVL3005 FOUNDATION ENGINEERING

The course introduces civil engineering students the fundamental concepts of foundation analysis and design. This course covers the following topics: Review of Soil Mechanics; Subsurface Exploration; Shallow Foundations; Pile Foundations, and selected topics of foundation engineering.

Pre-requisite: CIVL2007

#### CIVL3006 **CIVIL ENGINEERING HYDRAULICS**

Application of the basic laws of fluid mechanics to hydraulic problems. Analysis of simple and multiple steady pipe flows: branching pipes, pipes in series and parallel, and pipe network; flow measurement in pipe. Unsteady flow in pressure conduits: establishment of steady flow and water hammer. Analysis of pumps and turbines. Pump and system characteristics. Steady open channel flow: energy and momentum principles; critical and uniform flow development and their computation; best hydraulic section; gradually varied flow and its profile computation; flow measurement in open channel. Introduction to Hydrology.

Pre-requisite: CIVL2003

#### CIVL3007 ADVANCED TOPICS IN SOIL MECHANICS

This course is focused on the practical knowledge of soil behavior required by civil engineers for design and construction of geotechnical projects. Two most important topics of soil mechanics, consolidation and shear strength of soils, will be discussed in detail. In addition, other practical topics including soil compaction, slope stability will be covered. Pre-requisite: None

#### CIVL3008 ENVIRONMENTAL MODELING

This course is organized with the following chapters: Key Tool Skills; Mass Balance and Kinetics; Atmospheric Process; Carbon Dioxide Equilibria; Pesticides, Mercury, and Lead; Fates of Organic Compounds; PCBs, Dioxins, and Flame Retardants Pre-requisite: None

#### CIVL4000 **GRADUATION PROJECT I**

The graduation project (GP) for Civil Engineering Programme is a one-year independent study under the supervision of faculty member(s), which includes either analytical, experimental, computational, or case-study type work. A final report must be submitted near the end of the second semester accompanied with an A3 size poster. The GP will be assessed through continuous work, report writing and oral presentation. The mark will be given as a single unit for both the courses 'CIVL4000 GRADUATION PROJECT I' and 'CIVL4001 GRADUATION PROJECT I' and 'CIVL4001

Pre-requisite: Final year level

#### CIVL4001 GRADUATION PROJECT II

The graduation project (GP) for Civil Engineering Programme is a one-year independent study under the supervision of faculty member(s), which includes either analytical, experimental, computational, or case-study type work. A final report must be submitted near the end of the second semester accompanied with an A3 size poster. The GP will be assessed through continuous work, report writing and oral presentation. The mark will be given as a single unit for both the courses 'CIVL4000 GRADUATION PROJECT I' and 'CIVL4001 GRADUATION PROJECT II', with a total of 6 credits.

Pre-requisite: CIVL4000

# CIVL4002 INTEGRATED PROJECT DESIGN

The course focuses to provide design skills required to carry out real case projects from inception, feasibility, engineering, procurement, and implementation. Emphases will be placed on presentation of design project in the form of technical descriptive writings, verbal communications, calculations, and drawings. Professional ethic training will be provided by experienced engineer/professor. Before the end of this course, students need to finish and pass the assessment of engineering safety training which is provided either by the Macau Direccao dos Servicos para os Assuntos Laborais 澳門勞工事務局 (for local students) or by the department (for non-local students).

Pre-requisite: None

#### CIVL4004 ADVANCED MECHANICS OF MATERIALS

This course covers the following topics: plastic bending of beams, bending of beams with asymmetric cross sections, shear stress and shear center of thin-walled cross section, strain energy and energy method, calculation of beam deflection with moment diagram. Pre-requisite: CIVL2001

#### CIVL4005 ADVANCED STRUCTURAL ANALYSIS

This course is the second course in structural analysis and covers the general stiffness method, the matrix stiffness method, finite element method, virtual work method, plastic analysis of beams and frames.

Pre-requisite: CIVL2006

### CIVL4006 STRUCTURAL VIBRATIONS

This course introduces dynamic behaviour of structures and methods to obtain structural response under dynamic load and base excitation. Pre-requisite: CIVL2006

#### CIVL4007 ADVANCED REINFORCED CONCRETE DESIGN

This course covers the following topics: Introduction to Macao codes for loadings (including vertical loads, wind loads, and seismic loads) on structures and the reinforced concrete structural design; behavior and design of flat slabs and stair slabs; behavior and design of structural walls, foundations and earth retaining structures; prestressed concrete. Pre-requisite: CIVL3004

#### CIVL4008 STRUCTURAL SYSTEMS AND ANALYSIS

This course covers the following topics: structures and the behavior of various types of buildings; structures and the behavior of various forms of bridges; structures and the behavior of catenary cable systems; suitability of a structural type under give conditions. Pre-requisite: CIVL2006

# CIVL4009 SELECTED TOPICS IN GEOTECHNICAL ENGINEERING

Any specialized topic in Geotechnical Engineering chosen by the staff member who has experienced in that particular field. The topic will include new theories, design concepts and procedures.

Pre-requisite: CIVL2007

# CIVL4010 EARTH RETAINING SYSTEMS

Earth retaining systems form an important component of many civil engineering projects. In particular, it is a necessary element for deep excavations, which are commonly performed in modern cities to obtain underground space. This course will provide extensive discussions for the design and analysis of retaining systems including gravity walls, sheet-pile walls, and diaphragm walls. Students will learn to use computer software to analyze a retaining wall for deep excavation. The course will cover the following topics: lateral earth pressure, retaining wall types, analysis of backfilled walls and in-situ walls, stability of wall and base, settlements due to excavation, strut and anchor systems, diaphragm walls: slurry control, concrete technology, instrumentation for deep excavation.

Pre-requisite: CIVL2007

# CIVL4011 APPLICATION OF NUMERICAL METHODS IN GEOTECHNICAL ENGINEERING

This course introduces students the application of numerical methods in geotechnical engineering. Basic background of the finite element (FE) and finite difference (FD) methods are briefly introduced with emphasis on geotechnical applications. A finite element commercial programme (GeoStudio) is introduced to students to analyze geotechnical problems, especially using Sigma/W for stress and displacement modeling and Seep/W for seepage analysis. The course includes the following topics: Geotechnical analysis; Finite Element Theory for Linear Materials; Modeling of Shallow Foundations; Geotechnical Considerations; Finite Difference Method, Modeling of Construction and Excavations; Modeling of Seepage. Pre-requisite: CIVL2007

# CIVL4012 INTRODUCTION TO SOIL IMPROVEMENT

This is the introductory course of ground improvement techniques for marginal and problematic soil. The content includes the basics of laboratory and in situ tests for geotechnical projects. Then, surface compaction, admixture stabilization and deep densification are covered. Ground modification by consolidation and vertical drains are then covered. Various types of insitu reinforcement techniques such as stone columns, soil soils are introduced. Pre-requisite: CIVL2007

# CIVL4013 ENGINEERING ECONOMICS AND ETHICS

This course aims to provide sound and comprehensive coverage of the concepts of engineering economics and ethics. Topics include: role of engineers in business, time value of money, major analysis methods, codes of ethics, rights and responsibilities of engineers and ethical issues in engineering practice.

Pre-requisite: None

# CIVL4014 CONSTRUCTION PLANNING, SCHEDULING AND CONTROL

This course applies modern management methods to planning and scheduling for construction projects. Topics include: presentation of planning information, developing a network model, precedence/arrow diagrams, critical path method, time-cost trade-offs, resource allocation and leveling, PERT & Monte Carlo techniques, project monitoring, control and update, linear scheduling and computer scheduling.

Pre-requisite: None

# CIVL4015 CONSTRUCTION METHODS, PROCEDURE AND EQUIPMENT

This course addresses various aspects of contemporary construction methods and equipment. Topics include: equipment economics, engineering fundamentals of moving earth, excavating, loading & hauling equipment, foundation and basement construction, concrete construction practices and formwork design.

Pre-requisite: None

# CIVL4016 ENVIRONMENTAL ENGINEERING III

This course is organized with the following chapters: Low-Concentration Particle Suspensions and Flows; Interactions of Small charged Particles; Adsorption, Partitioning, and Interfaces; Filtration and Mass Transport in Porous Media; Reaction Kinetics; and Mixing and Reactor Modeling.

Pre-requisite: CIVL3003

# CIVL4017 ESSENTIALS TO ENVIRONMENTAL BIOTECHNOLOGY

This course reflects the most current and exciting fields of environmental science engineering, as a combination of ET (Environmental Technology) and BT (Bio-Technology). Pre-requisite: None

# CIVL4018 WASTEWATER TREATMENT ENGINEERING

This course nourishes students with engineering knowledge of the comprehensive management for the collection and transport, and the treatment and disposal of sewage/wastewater. Pre-requisite: None

# CIVL4019 TRAFFIC ENGINEERING

This course deals with fundamental introduction of traffic engineering, such as human factor design, geometric design and section design, traffic flow theory analysis, capacity analysis, traffic count methods, signalized intersection analysis; introduction of ITS Pre-requisite: None

# CIVL4020 TRANSPORTATION PLANNING AND PUBLIC TRANSPORT SYSTEM

In the first part of the course, it deals with introduction of urban transportation planning system such as data collection, trip generation, trip distribution, mode choice and trip assignment. In the second part, it familiarizes the students with important issues of public transport system such as system, technology and quality of service. Various kinds of public transportation system like bus, bus rapid transit, light rapid transit, railway rapid transit will be discussed. Pre-requisite: CIVL4019

# CIVL4021 SPECIAL TOPICS IN CIVIL ENGINEERING

Members of the staff will arrange special courses on updated topics for properly qualified students.

Pre-requisite: None

# CISC1001 PROGRAMMING SCIENCE

This course introduces the notion of algorithms and teaches principles of problem solving. It also introduces fundamental concepts of programming, such as scalar data types, variables, functions, choice, iteration, recursion, arrays, strings, enumerations, record types, and file processing. These concepts are introduced through the C programming language. Pre-requisite: None

# CISC1002 DISCRETE STRUCTURES

This course introduces the fundamental ideas of discrete mathematics used in many basic computer-related concepts. These include Set Theory, Logic, Counting, Relations, and Graph Theory. Throughout the course, students will also be trained in developing skills in mathematics, such as Modeling, Abstraction and Proof Methods.

Pre-requisite: None

### CISC1006 PROBABILITY AND STATISTICS

Sample space and events, axioms of probability; Conditional probability, independence and the Bayes Rule; Random variables, discrete probability distribution, continuous probability distribution, joint probability distribution; Mean, variance, covariance and correlation; Some discrete probability distributions: uniform, binomial, hyper geometric, geometric, negative binomial and Poisson; Some continuous probability distributions: normal, exponential, gamma, chi-Squared, lognormal and Weibull; Sampling distributions; Confidence intervals; Hypotheses Testing; Regression and correlation analysis.

Pre-requisite: GEST004

# CISC1000 INFORMATION TECHNOLOGY FUNDAMENTALS AND PRACTICES

This foundational course introduces and explores the impact of information technology (IT) in our modern society. The course is designed to provide the fundamentals and practices for an effective use of IT in our daily lives. The course is divided in three modules:

- Module I introduces the fundamentals of IT, the Internet and the Web, connectivity and mobility, and important issues in computer privacy, security and ethics.
- Module II focuses on application software for computers and mobile devices.
- Module III explores computer hardware and computer software, mobile devices and apps, communication and networking.

Pre-requisite: None

#### CISC1004 INTRODUCTION TO COMPUTER SCIENCE

This is an introductory course on Computer Science (CS) for first year students. The course is designed to give an overview of CS, and its use in various applications, such that students will be more aware and engaged in their major. Details pertaining to the theoretical aspects of CS will be covered in other classes. This course is first divided into topics covering the fundamentals of CS, before shifting to its applications in the real world. Upon completion of this course, students will have a better understand of CS, and be more motivated to study its other aspects. Pre-requisite: None

#### CISC2001 COMPUTER ORGANIZATION

Introduction is given to the architecture and organization of a computer system, with a contemporary chip as a sample for introducing machine language, assembly language and Central Processing Unit (CPU). The contents include various parts of computers: CPU, Memory, Input/Output. The primary features and working principles in each part will be introduced in detail, including interrupts, direct memory access, virtual memory and memory management, algorithms and hardware implementation of integer and floating-point number operations. Pre-requisite: None

#### CISC2002 NUMERICAL METHODS AND COMPUTATION

Introduction to data representations and computer arithmetic; Basic techniques in MATLAB programming; Numerical solution of nonlinear algebraic equations; Approximating functions; Numerical differentiation and integration; Numerical solution of ordinary differential equations. Pre-requisite: Quantitative Reasoning for Science and Technology

#### CISC2003 OBJECT ORIENTED PROGRAMMING AND DATA STRUCTURES

This course aims to introduce basic features of objected oriented programming and data structures.

Pre-requisite: CISC1001

#### CISC2004 COMPILER CONSTRUCTION

Modern compiler design, use of automatic tools, compilation techniques and programme intermediate representations; scanner, recursive descent parser, bottom-up parser, code generation and optimization; semantic analysis and attribute grammars, transformational attribute grammars.

Pre-requisite: CISC1002

# CISC3000 INTRODUCTION TO DATABASE SYSTEMS

The course provides an overview of database management, database system architecture, and an in-depth study of relational database systems, including both the theoretical aspects of the relational model as related to relational data objects, relational data integrity, and relational data manipulation (using the relational algebra and relational calculus); and the practical aspects of relational implementations, using the SQL language and views. The course also includes a study of a commercially available database system and database application programming. Pre-requisite: None

# CISC2005 PRINCIPLES OF OPERATING SYSTEMS

This course is devoted to the study of the design principles and implementation issues of contemporary computer operating systems. The main topics include a detailed analysis of processes, multithreading, concurrency, memory, input/output, and file management. Pre-requisite: CISC2001

#### CISC2006 ALGORITHM DESIGN AND ANALYSIS

This course aims to introduce basic features of objected oriented programming and data structures.

Pre-requisite: CISC1002, CISC2003

### CISC2007 HUMAN-COMPUTER INTERACTION

This course provides an introductory level of human-computer interaction (HCI). The success in the development of highly usable interactive computing systems lies in the understanding of human factors in the process of design. To this aim, this course covers three different perspectives: human – the cognitive aspects, human perceptions and limitations, errors; computer – the current technology for presenting interactive information; and the interaction – from user requirement analysis, interface design, to interface evaluation. This course illustrates the fundamental concepts of human-computer interaction and user-centered design thinking. Specifically, the user-centered design process will be introduced in the lectures and practiced by students through a term-based group project. In addition, trendy HCI research topics will be assigned to individuals to read, research, and share in the class through formal presentations. Pre-requisite: None

#### CISC2008 OBJECT- ORIENTED ANALYSIS AND DESIGN PATTERNS

The course discusses object-oriented analysis and design using Unified Modeling Language (UML). The main contents are use case diagram, class diagram, sequence diagram, state diagram, activity diagram, and component diagram of UML. And several design patterns are also introduced. UML and its CASE tool are used to analyze and design the course project systems. Pre-requisite: None

#### CISC3001 COMPUTER NETWORKS

This course covers data communication techniques, data transmission, switching techniques, layered network architectures, data link layer protocols, medium access control sublayer and local area networks.

Pre-requisite: CISC2005

# CISC3002 MOBILE APPLICATION PROGRAMMING

The growth of mobile devices especially smart phones has led to the high demand of mobile programmers. This course will introduce mobile programming by hands-on experience on mobile application development for Android based mobile devices. Topics will include Android application development environment, user interface design, intents and services, data persistence, networking and messaging, sensors, and graphics. Students are expected to master basic knowledge to develop a working application on Android platform and demonstrate the capability to analysis, evaluate, and utilize different Android APIs to finish the task at hand. Pre-requisite: CISC1001

# CISC3003 WEB PROGRAMMING

This course teaches students the skills necessary for creating web applications, including programming for both the client and the server side. Given the fast pace of change in this highly dynamic field, the specific technologies taught will change over time. At present this will include popular technologies such as HTML5, CSS, JavaScript, several popular JavaScript libraries and frameworks, as well as server-side technologies such as PHP and Node.js. The course will focus heavily on developing standards-compliant, accessible web sites using cross-platform open technology.

Pre-requisite: CISC1001

#### CISC3005 ADVANCED DATABASE SYSTEMS

This course provides an in-depth study of: query optimization; transaction management; concurrency control; database recovery; database integrity; database security; distributed database systems and data normalization. In which, information retrieval and web search engines are also briefly introduced and discussed.

Pre-requisite: CISC3000

#### CISC3006 COMPUTER BASED SIMULATION

Application of modeling techniques to understanding the operation and design of complex systems such as manufacturing systems, data processing systems, transportation systems, and organizational systems. Coverage includes problem definition, system identification, and performance evaluation. Traditional discrete events simulation is essential to study the transient phenomena, through suitable analysis and prediction models. Software modeling of selected systems in terms of specific knowledge and action models should serve as the course project to be collaborated by students working in self-directed work teams. Pedagogy: project-based learning with students cooperatively working in professional research groups, whose group-based and individual profiles, should track the results for evaluation purpose.

# CISC3007 FORMAL LANGUAGES AND AUTOMATA

This course introduces the fundamental concepts of formal languages and automata. It emphasizes the general principles of formal languages, grammars and automata theory. Topics include finite automata, regular expressions, regular languages and their properties, context-free grammars, languages and their properties, pushdown automata, Turing machines and undecidability.

Pre-requisite: CISC1002

### CISC3009 COMPUTER GRAPHICS

This course is designed to provide students with a comprehensive introduction to 2D and 3D computer graphics techniques. Topics covered include graphics systems, input and interactive techniques, modeling and representation, shading and illumination, rendering and texturing. To be more practical, the knowledge will be learnt by using an industrial standard in computer graphics, called OpenGL.

Pre-requisite: MATH1003

# CISC3010 DISTRIBUTED COMPUTER SYSTEMS

This course is a senior-level elective course on Distributed Systems for Computer and Information Science. The key principles about distributed systems include: architecture, processes, communication, naming, consistency and replication, and security. Pre-requisite: CISC3001

#### CISC3011 DIGITAL IMAGE PROCESSING

This course introduces the fundamentals of digital image processing for senior undergraduate students. It emphasizes the general principles and techniques of image processing. Topics include digital image fundamentals, intensity transformations and spatial filtering, filtering in the frequency domain, image restoration, color image processing, image compression,

morphological image processing, image segmentation. Pre-requisite: MATH1001

# CISC3012 ARTIFICIAL INTELLIGENCE

Introduction to AI, definition of AI, disciplines of AI; the concept of agent in AI; problem solving agent, building search tree, local search; logical agent, knowledge base representation, logical reasoning. Application programming in PROLOG. Pre-requisite: CISC2006

## CISC3014 INFORMATION RETRIEVAL AND WEB SEARCH

This course covers basic and advanced techniques for text-based information systems: efficient text indexing, Boolean and vector space retrieval models, evaluation, web search techniques (crawling, link-based algorithms, web document clustering/classification, text mining, and recommendation).

Pre-requisite: None

### CISC3015 DATA AND INFORMATION VISUALIZATION

This course is to provide students with a comprehensive introduction to data visualization techniques. These techniques are taught in theoretical and technical learning. At the same time the students are learning the algorithms and methods, they have to make practice to learn how to visualize various kinds of data types, by using available software tools and/or programming. Pre-requisite: None

## CISC3016 MULTIMEDIA COMPUTING

This course will introduce general principles and techniques in multimedia programming. The main topics will cover multimedia data fundamentals and representation, digital image and drawing creation and modification, audio manipulation and modern music synthesis, animation and video processing. The programming language used in this course will be Java. The goal is to improve the students' insight in multimedia technology and skills on the multimedia programming, which will enable students to develop new and creative ways of using multimedia in the future.

Pre-requisite: CISC1001

# CISC3017 BIOINFORMATICS

Bioinformatics is the study of biological information through computer modeling or analysis. Its goal is to reveal relationships between sequences, structures, and functions of molecules. In this course, we intend to give an in-depth introduction of the algorithmic techniques used in bioinformatics. Topics which will be covered include sequence similarity analysis, suffix tree, genome analysis, biological database search, phylogenetic analysis, protein structure manipulation and modeling. This course is designed for undergraduate CS students and assumes no prior knowledge of molecular biology beyond the high school level. Basic concepts of molecular biology will be given in the first lecture, as well as in subsequent lectures before the computational problems are defined. The ultimate goal of this course is to prepare students with the knowledge and skills to conduct research in the area of bioinformatics. Pre-requisite: CISC2006

# CISC3018 CLOUD COMPUTING AND BIG DATA SYSTEMS

This course aims at providing students with a solid foundation of cloud computing technologies. The topics include cloud computing applications, cloud services, cloud computing platforms, and big data processing engines.

Pre-requisite: None

#### CISC3019 COMPETITION PROGRAMMING AND PROBLEM SOLVING

This course aims at providing students with creative problem solving and competitive programming skills. International programming competition-type problems will be used to motivate the study of algorithms, programming, and other topics in computer science. Enrollment

in the course requires approval of the course instructor. Pre-requisite: CISC2003

# CISC3020 FORMAL SOFTWARE SPECIFICATION

This course aims to introduce formal software specification. The main contents include formal specification language, requirements specification, pre and post conditions, formal software design modeling, formal verification and model checking tools with some practical case studies. Pre-requisite: None

# CISC3021 MULTIMEDIA FORENSICS AND SECURITY

The digital revolution has made a profound impact on our society and has changed the way we work and live. An increasing amount of information can now be acquired, processed, archived, and shared in electronic forms. A major hurdle holding back the wider deployment of services to make multimedia information broadly available to everyone in our society is the lack of security and forensic technologies to assure that content is used for its intended purpose and by its intended recipients. This graduate advanced-topic course focuses on the research and development on the forensic and security technologies for multimedia information. Pre-requisite: CISC3011

# CISC3022 SOFTWARE TESTING

This course aims to introduce software testing concepts and techniques, including software errors, failure, requirements specification, test case design, black box testing, white box testing, unit testing, integrated testing, system testing, automated testing, regressing testing, and testing tools. Students will apply their learned testing concepts and techniques to testing some software case studies.

Pre-requisite: None

# CISC3023 MACHINE LEARNING

This course introduces key machine learning techniques and their applications. The topics include overview of supervised learning, linear models, kernel methods, decision trees, neural networks, nearest neighbours, ensemble models, and unsupervised learning. Upon completion of this course, students should be able to apply various machine learning technique in develop intelligent data analysis systems.

Pre-requisite: None

# CISC3024 PATTERN RECOGNITION

This course introduces the fundamentals of pattern recognition for senior undergraduate students. It emphasizes the general principles and techniques of pattern recognition. Topics include classifiers based on Bayes decision theory, linear classifiers, nonlinear classifiers, feature selection, feature generation, unsupervised learning and clustering algorithms. Prerequisite: CISC1006

# CISC3025 NATURAL LANGUAGE PROCESSING

This course introduces fundamental concepts and skills associated with the design and implementation of different natural language processing systems covered from morphology, syntax and semantics. The main topics include regular expressions, (weighted) minimum edit distance, language modelling, Nävie Bayes (generative model), maximum entropy (discriminative model), text classification, sequence labelling, POS tagging, syntax parsing and computational lexical semantics. The course also includes an overview of practical natural language processing applications.

Pre-requisite: None

# CISC3026 SOFTWARE ENGINEERING PRINCIPLES

The course discusses the theories, methods and tools of software engineering for developing large and complex software systems. The main contents are requirement specification, system modeling, architectural design, object-oriented analysis and design, verification and validation.

The Unified Modeling Language (UML) and its CASE tool are used to analyze and design the course project systems. Pre-requisite: None

# CISC3027 SPECIAL TOPICS IN COMPUTER AND INFORMATION SCIENCE

Aim to introduce different advanced topics in computer science", the topic may change from year to year.

Pre-requisite: None

# CISC3028 ENTREPRENEURSHIP IN COMPUTER SCIENCE

The course aims to provide entrepreneurship skills to our computer science students. The course contrasts entrepreneurs with managers, contrasts the different kinds of entrepreneurship and discusses the several steps of the entrepreneurial process including starting, growing, managing, leading and exiting.

Pre-requisite: None

### CISC3029 COMPUTER VISION

This course introduces to students the basic concepts, fundamental principles and algorithms, and major applications in practice in computer vision area. It covers Digital Image Representation, Binary Image Analysis, Gray Level Image Segmentation, Edge detection Techniques, Digital Morphology, Color Image Processing Fundamentals, and Motion estimation, etc.

Pre-requisite: None

# CISC4000 GRADUATION PROJECT

An independent study under the supervision of a faculty member. Pre-requisite: None

#### CISC4001 PROFESSIONALISM AND ETHICS IN COMPUTER SCIENCE

This course aims to introduce professionalism and ethics for computer science. The common issues encountered by computer scientists and IT professionals are discussed, including intellectual property, privacy, reliability and security in IT, health and safety in IT, the major normative ethical theories that are applicable to computer science. The code of conduct in computer science including case studies is addressed.

Pre-requisite: None

#### CISC4002 SOFTWARE PROJECT MANAGEMENT

This course introduces project management as it relates to the software life cycle. Different software life cycle models, and the project management activities in each phase of the life cycle, are examined. Project planning activities are introduced, including activity planning, resource estimation and the use of software metrics, risk analysis, resource allocation and project scheduling. This course concludes with a study of project monitoring and control, and project team organization.

Pre-requisite: None

# CISC4003 INFORMATION SECURITY

The course introduces students to the fundamental issues concerning information security and applied cryptography. The areas covered are protecting information using symmetric and public key cryptography, cryptographic hash functions and standards, key exchange, authentication, digital signatures, digital certificates, secure electronic transactions, non-malicious programme errors, viruses and other malicious code, and firewalls.

Pre-requisite: CISC3000, CISC2005 and CISC3001

#### ECEN1001 INTRODUCTION TO ELECTRICAL AND COMPUTER ENGINEERING

Overview of Electrical and Computer Engineering; Basic concepts of ECE; Introduction to situation of ECE around the area; Basic knowledge used in the laboratory. Pre-requisite: None

# ECEN1003 INFORMATION TECHNOLOGY REVOLUTION AND ELECTRONICS

The main objective of this course is to provide students with a broad vision about the evolution of technology, in the modern age, since its early beginnings, by describing the significance of the 3 Industrial Revolutions throughout time, since the 1<sup>st</sup> initiated with the Steam Engine (James Watt-1763), followed by the 2<sup>nd</sup> started with the inventions of Electrical Power Generation (Michael Faraday-1831) and the Combustion Engine (Siegfried Marcus-1864), until the 3rd kicked-off with the discovery of the Transistor (John Bardeen, Walter Brattain and William Shockley-1947) that really marked the commencement of what is now known as the Information Technology Revolution, led by continuous and fast developments in Electronics, Computing and Telecommunications. Current state-of-the-art and well-known information technology platforms and gadgets will be briefly introduced at the system-level related with their human interfaces, in particular the internet, the mobile phone, the computer, the video game console, the media player, the global positioning system (GPS), and as a motivation for showing what is underlying inside such systems in terms of Electronics. Then, an evolution of silicon semiconductors from the original transistor until the present microchips and fiber-optics networks will be described with projections into the future in terms of unlimited circuit integration (processing capability related with the number of transistors on a chip) and bandwidth availability (speed of communications). Pre-requisite: None

# ECEN1004 EMBEDDED SYSTEMS

The goal of this course is to develop a comprehensive understanding of the technologies behind the embedded systems, particularly, those using computing elements (such as processor, DSP, or FPGA) and the supported software technology (OS, data structure, multi-tasking, etc.). The students develop an application of the technology capabilities and limitations of the hardware and software components for building embedded systems, and methods to evaluate design tradeoffs between different technology choices. Students are required to finish a design project. Pre-requisite: ECEN1000

# ECEN1005 CIRCUIT ANALYSIS

Elementary Resistive Circuit Theorems and Analysis Techniques: KCL. KVL, Nodal & Mesh Analysis and their Matrix formulation, Superposition, Source Transformation, Thevenin & Norton Equivalents, Maximum Power Transfer. Ideal OP AMP Model and its Circuit Analysis Methods. Energy Storage Elements, 1st- and 2nd-Order Circuit Analysis: Natural, Forced and Completed Response. Sinusoidal Steady-State Analysis: Phasor, Impedance and Admittance. AC Steady-State Power: Instantaneous and Average Power, Power Factor and RMS Values. Practice includes problem solving, PSPICE and Laboratory Works. Pre-requisite: GEST1004

# ECEN1006 ENGINEERING AND SOCIETY

This course aims to provide comprehensive coverage of the societal responsibilities and challenges for engineers. This course discusses the ethical codes for engineering profession. The influences of technology on society and global development and their interrelationships are explored. Topics including intellectual property rights, legal and business issues will also be discussed.

Pre-requisite: None

# ECEN1011 DIGITAL SYSTEMS

The objective is to provide the students with basic principles of Digital Logic Design. In this course, we study the Algebra of Logical Variables, Logical Functions, Basic Combinational Circuits, Flip-flops, Registers, Counters, Arithmetics Operations, the Memory Architecture, Sequential Circuits, Controllers, Elementary and more sophisticated Computer Architectures, and certain aspects of the I/O Operations. HDL with FPGA implementation will be included in Laboratory works. Pre-requisite: None

# ECEN1012 COMPUTER PROGRAMMING AND NETWORK FUNDAMENTALS

This course introduces the fundamental concepts and terminologies of computer programming,

and covers the skills in developing and writing computer programs to achieve different functions and network protocols. This course also introduces basic knowledge and fundamental architecture of data and computer networks, the principles of protocol design and the analysis of network performance. The topics cover C programming language, arithmetic and logic statements, data types, control structure, socket programming, the layer architecture and protocols of computer networks, packet switching, network layer routing, physical technologies, etc.

Pre-requisite: None

# ECEN1013 PHYSICS FOR ELECTRICAL AND COMPUTER ENGINEERING

This is a calculus-based general physics course for ECE students with a laboratory covering classical mechanics and its applications, fluids, oscillations, waves, fundamental optics and its applications.

Pre-requisite: None

# ECEN2001 MEASUREMENT AND INSTRUMENTATION

The course commences with a brief review of some basic terminology, systems of units, measurement standards, probability and statistical analysis, traceability and types of error in measurement. The course then covers different electronic and digital measuring instruments, e.g. oscilloscopes, signal generators, signal analysis instruments, etc. Transducers and signal conditioning circuit design are included.

Pre-requisite: GEST1004

## ECEN2002 ELECTRIC MACHINES

This course provides fundamental knowledge on electric machines. It includes three phase circuit analysis, principles and static models of transformers and different machines, and relay control.

Pre-requisite: ECEN1005

#### ECEN2003 FUNDAMENTAL ELECTRONICS

This course mainly introduces basic electronic devices namely operational amplifiers (Op-Amps), diodes, bipolar junction transistors (BJTs) and field effect junction transistors (FETs). In each device, the DC and AC analysis are firstly presented elucidating fundamental parameters of analogue electronic circuitry model like gain, input impedance, output impedance and so forth. An introductory PSpice simulation of these devices and some of their application circuits is included. The experimental validation of the elementary analogue circuitry using analogue and digital testers is also given. The course objective allows the students to acquire the basic engineering technique and ability to design and analyze the circuits of Op-Amps, diodes, BJTs and FETs using modern computing tools as wells as measurement and test facilities. Pre-requisite: ECEN1005

#### ECEN2005 ELECTROMAGNETISM

The basic relations for static electric fields in free space and material media, Coulomb's law, Gass' Law; The steady electric current and static magnetic field, Ohm's Law, Joule Law, Kichhoff's Law, Biot-Savart Law, Ampere's Law; The static magnetic field of ferromagnetic materials; Magnetic materials and hysteresis; comparison of electric and magnetic relations involving polarization and magnetization; Bounded fields and Laplace's equation; Time changing electric and magnetic fields; Faraday's Law. Maxwell's displacement current; Boundary relations for electric and magnetic fields; The relation between field and circuit Pre-requisite: None

#### ECEN2006 NUMERICAL METHOD AND COMPUTATION

Introduction to data representations and computer arithmetic; Basic techniques in MATLAB programming; Numerical solution of nonlinear algebraic equations; Approximating functions; Numerical differentiation and integration; Numerical solution of ordinary differential equations Pre-requisite: GEST1004

## ECEN2009 BIOLOGY

Basic principles of plant and animal biology, including cell biology, biochemistry, energetics, genetics, evolution, and ecology. Appreciation of scientific method in general and biological methodology. Lab component will emphasize the use of methodologies typical of biological studies.

Pre-requisite: None

#### ECEN2010 SEMICONDUCTOR DEVICE PHYSICS

The main goal is to provide the students with an understanding of the relation between physical structure and circuit behavior of semiconductor active devices. The emphasis is on simple models of the semiconductor, the discussion of the properties of potential barriers and field effect, with the MOSFET as the centerpiece of the course. Simple one-device circuits are used to introduce non-linear behavior, and make the connection to the device physics. The students will learn the relation between external circuit parameters (as used in SPICE) and the device internal structure. At the end of the course the students will know the basic mechanism of rectification, amplification and switching and their implementation with various types of semiconductor devices.

Pre-requisite: None

#### ECEN2011 INTRODUCTION TO ELECTRO-ROBOT DESIGN

The course introduces the fundamental knowledge on the design, implementation and evaluation of a robot and its sub-systems. It covers the basic principles of analog and digital circuits as well as robot sensing and control mechanisms. Students have to apply the knowledge and principles learned to design and build a functional robot by the end of the course. Pre-requisite: None

#### ECEN2015 APPLIED ELECTRONICS

This course is devoted to the design and analysis of the advanced analogue application circuits with the emphasis on differential and multistage amplifiers, feedback circuits, filters, oscillators and power amplifiers. Throughout the course, the basic parameters of application circuits of audio and video consumer electronic systems; for example frequency response, bandwidth, power conversion efficiency and so forth are studied. Using circuit theory based CAD, both the time- and frequency-domain simulations are also given. In addition, the experimental verification of these application circuitries using time- and frequency-domain testers is offered. The course objective allows the students to acquire the adequate engineering technique and ability to design and analyze the transistor circuits of audio and video applications using modern computing tools as wells as advanced measurement and test facilities. Pre-requisite: ECEN2003

#### ECEN2017 SIGNALS AND SYSTEMS

Basic Continuous-Time Signals and its Transformations. Basic System Properties. Linear Time-Invariant System Analysis: Properties, Convolution Sum and Convolution Integral, Impulse and Step Responses. C-T Fourier Analysis: Fourier Series and Fourier Transform. Time and Frequency Characterization of C-T Signals and Systems: Frequency Response, 1st- and 2nd-Order Systems, Bode Plots, Zero-State System Response. Introduction to Filtering, Modulation and Sampling. Laplace Analysis: Bi- and Uni-lateral Laplace Transform, Pole-Zero Plot and Stability, Transfer Function, Application in Circuit Analysis. Practice includes problem solving, MATLAB and Laboratory Works

Pre-requisite: ECEN1005

# ECEN2018 LINEAR ALGEBRA, PROBABILITY AND STATICS FOR ELECTRICAL AND COMPUTER ENGINEERING

The first part of this course gives an introductory treatment of linear algebra that is suitable for a first undergraduate course on the topic. Its aim is to present the fundamentals of linear algebra

in the clearest possible way sound pedagogy is the main consideration.. The course will focus on Systems of linear equations and matrices, Determinants, Vectors in 2-space and 3-space, Euclidean vector spaces, General vector spaces, Eigenvalues and eigenvectors, and Linear transformations. An introduction to probability theory and statistics, with an emphasis on solving problems in engineering. The second part of the course will focus on Probability and statistics. Topics in probability include discrete and continuous random variables, probability distributions, sums and functions of random variables, the law of large numbers, and the central limit theorem. Topics in statistics include sample mean and variance. Exercises and problems presented in the classes are tailored to help students to understand the key topics and their application to practical engineering problems.

Pre-requisite: None

#### ECEN2019 POWER SYSTEM ENGINEERING AND PROTECTION

This course introduces the fundamentals of power system engineering and protection including basic principle of transformer and transmission line, protective devices, fault, protective relay and control, as well as protection for distribution circuits and transmission lines It emphasizes on the basic understanding of protection concept in power system. Topics include introduction to power system components, protective devices, over-current protection and co-ordination, differential protection, distance protection. Protection for low voltage power distribution network. Pre-requisite: None

#### ECEN3000 CONTROL SYSTEMS

This course deals with the fundamental principles for analysis and design of control systems. Topics include dynamic modeling, dynamic response, basic properties of feedback, root-locus design method, frequency-response design method, and state-space design. Pre-requisite: ECEN2000

#### ECEN3001 DIGITAL SIGNAL PROCESSING

Discrete-time Signals and Systems; Sampling Theorem and Reconstruction; Transform Analysis for LTI Discrete-Time Signals and Systems: Discrete-Time Fourier Transform (DTFT), z-Transform, Discrete Fourier Transform (DFT), Fast Fourier transform (FFT); Fundamental Digital Filter Design Techniques: Infinite Impulse Response (IIR) and Finite Impulse Response (FIR) Filters; Introduction to the Applications of Digital Signal Processing; Practice includes problem solving, MATLAB based Project Works.

Pre-requisite: ECEN2000 and MATH2000

#### ECEN3002 ELECTRICAL ANDA COMPUTER ENGINEERING SEMINARS

Students are required to participant in ECE related seminars and conferences so they may have the chances to contact the progress of ECE in different disciplines. Pre-requisite: None

#### ECEN3003 INTRODUCTION TO BIOMEDICAL ENGINEERING

This is an introductory course to the fundamentals of Biomedical Engineering from the view point of Electrical and Electronics Engineering for senior undergraduate students. It emphasizes general concepts and techniques of biomedical engineering. Topics include overview of human body, biomedical electrodes, sensors and transducers, biomedical signals and its measurement techniques, biomedical electronics, electrical safety, and embedded system in biomedical equipment.

Pre-requisite: None

#### ECEN3004 FUNDAMENTAL BIO-ELECTRICITY

This course is designed to prepare senior undergraduate students with fundamental knowledge of the bioelectric phenomena. Topics include general principles of the electric and magnetic fields in the biological environments, and application of these principles to disease diagnosis. Pre-requisite: ECEN2009 and ECEN3003

#### ECEN3005 BIOMEDICAL ELECTRONICS

Introduction to biomedical signals; basic circuit analysis for biomedical signals; design of bioamplifier circuits; characteristics of linear and nonlinear circuit elements; design of basic electronic circuits, principles and practice of bioelectronic measurements. Pre-requisite: ECEN2003 and ECEN3003

#### ECEN3006 INTRODUCTION TO BIOMEDICAL SIGNAL ANALYSIS

Introduction to stochastic signal analysis methods used in biomedical signal processing and analysis. Fundamental techniques to analyze and process signals that originate from biological sources: ECGs, EMGs, EEGs, blood pressure signals, etc. Analog and digital filtering. Pre-requisite: ECEN2007 and ECEN3001

#### ECEN3007 POWER ELECTRONICS

The course includes operating characteristics of power semiconductor devices, such as Bipolar Junction Transistors, IGBTs, MOSFETs and Thyristors, and fundamentals of power converter circuits including dc/dc converters, ac/dc rectifiers, dc/ac inverters and ac/ac converters. Pre-requisite: ECEN1005

#### ECEN3008 POWER SYSTEMS ANALYSIS

This course provides fundamental knowledge on power system. It includes calculation on line parameters, line models, admittance matrix calculation, load flow calculation, symmetrical networks, machine model for short circuit calculation, symmetrical and asymmetrical short circuit calculation and state estimation

Pre-requisite: ECEN1005

#### ECEN3009 POWER QUALITY AND ENERGY SAVING

This course is designed to prepare senior undergraduate students with knowledge and manipulative skills for employment in the electrical industry. It emphasizes the theory and practice of the power quality and energy saving skills. Topics include power quality standards, Power Quality Monitoring, HV/MV/LV Power Quality Compensators, Energy Efficient Standards, Energy Measure and Energy Saving Equipment.

Pre-requisite: None

#### ECEN3010 POWER ELECTRONICS DESIGN AND IMPLEMENTATION

Fundamentals of power electronics drivers, components and controller are included and reviewed. Design considerations of power electronic rectification, controlled rectification, DC chopper power modulators, and DC-to-AC inverters are discussed. Fourier series analysis of inverter waveforms, power filter design and feedback control of a power electronics system are examined. Design and implementation of a power electronics system is performed. Pre-requisite: ECEN3007

#### ECEN3011 ELECTRIC DRIVE

This course will describe the structure of Electric Drive Systems and their role in various applications such as flexible production systems, energy conservation, renewable energy, transportation etc. This course will cover the basic principles of power electronics in drives using switch-mode converters and pulse width modulation to synthesize the voltages in dc and ac motor drives, the operation of dc motor drives to satisfy four-quadrant operation to meet mechanical load requirements, design torque, speed and position controller of motor drives, space vectors control, speed control of induction motor drives in an energy efficient manner using power electronics, the power quality issues in powering electric drives. Pre-requisite: None

#### ECEN3012 PRINCIPLES OF COMMUNICATION SYSTEMS

This course is the basic discipline of telecommunication theory and relevant techniques. In addition to an information theory introduction, it includes the study of signal and architecture of communication systems, amplitude and angle modulation, modulation and demodulation techniques and so forth. The important concepts like noise, interference, channel distortion, intersymbol interference and entropy are also elucidated with the help of system simulator. Example transmitter and receiver of broadcasting communication systems and cellular communication systems are also highlighted. The course objective allows the students to acquire the basic engineering understanding to the modern communication systems and; the relevant theory and technique.

Pre-requisite: ECEN2000

## ECEN3013 RADIO FREQUENCY AND MICROWAVE TECHNIQUES FOR WIRELESS SYSTEMS

This course deals with the basic RF and microwave circuit design techniques for receivers and transmitters used in modern wireless analog and digital communication systems. The distributed circuitry theory is studied including transmission line, impedance transformation, impedance matching, smith chart, S-parameters, filters, couplers, mixers, oscillators, low noise amplifiers and so forth. The study also includes linear and nonlinear microwave circuitry simulation together with the elementary RF/microwave measurement techniques using scalar and vector network analyzers. The course objective allows the students to acquire the basic engineering technique and ability to design and; analyze the RF and microwave circuits using modern high frequency simulation softwares as wells as advanced RF and microwave testers. Pre-requisite: ECEN2005

ECEN3014 ANTENNA THEORY AND APPLICATIONS IN WIRELESS COMMUNICATIONS

This course is devoted to the antenna fundamentals and its wireless applications. The study includes basic concepts of antennas, dipole, arrays, microstrip patch antennas, adaptive antennas, full wave analysis and optimized antenna design by full wave electromagnetic solvers like MoM. Narrowband and wideband antennas for practical wireless communication systems - GSM, WCDMA, WLAN, RFID and UWB are also studied. Throughout the course, the students acquire the basic engineering technique and ability to design and; analyze the antennas together with the relevant simulation and measurement techniques. Pre-requisite: ECEN2005

#### ECEN3015 CELLULAR COMMUNICATION NETWORK DESIGN AND OPTIMIZATION

This course brings students fully up to date with the myriad of system developments in latest cellular communication networks namely GSM, WCDMA and so forth. Topics include basic network architecture and design issues, evolution of the wireless industry, characterization of radio propagation, modeling and simulation of narrowband signal characteristics and radio channel characteristics, fading, diversity, spread-spectrum technique, standards of GSM, GPRS, EDGE and WCDMA and so forth. The basic network optimization technique for 2G and 3G cellular networks is also studied. Throughout the course, the students acquire the basic engineering understanding to modern cellular network design issues and optimization. Pre-requisite: ECEN3012

#### ECEN3016 INTRODUCTION TO WIRELESS TECHNOLOGY FOR DIGITAL GAME

This course brings students a straightforward introduction of the use of computer interactive game for entertainment, teaching and learning. The new paradigm of integration of wireless technology and motion, vision, acoustic sensors for interactive game is studied. Coverage includes introductory theory of modern digital game, the game characteristics, rationale for digital game in learning and entertainment, technologies for digital games, case studies, operating system platform, short range communication technologies; sensor design, signal conditioning circuits, user interface, application software and so forth. Throughout the course, the students acquire the introductory engineering understanding to emerging multimedia game application using wireless technology.

Pre-requisite: ECEN2015 and ECEN3012

#### ECEN3017 ANALOG INTEGRATED CIRCUIT DESIGN

This course is designed to introduce analog IC design fundamentals including single/multiple-

transistor amplifiers, current mirrors, current/voltage reference, output stages, frequency response, feedback, stability, and the operational amplifier design. Students will gain the basic understanding of analog IC design and become familiar with circuit analysis, layout designs and simulation tool flow. Pre-requisite: None

ECEN3018 INTRODUCTION TO DATA CONVERTERS

This course will provide an introduction to the various type of Data Conversion System, which is of the most key components in the electronics system. The performance characterization of Data Converters will be presented, and various type of data converters (including Analog-to-Digital and Digital-to-Analog) will be discussed. This course can be served as the beginning course in the field of Data Conversion and Signal Processing System in the area of Analog IC Design. Pre-requisite: None

#### ECEN3019 INTRODUCTION TO RADIO-FREQUENCY CIRCUITS AND SYSTEMS

This course covers the circuit and system design of modern wireless receivers and transmitters. The system performance metrics, circuit performance metrics and figure-of-merits are introduced. Design examples from practical applications such as GSM, WCDMA, WLAN, GPS are included. The course includes design and simulation projects based on Matlab and Cadence with CMOS technologies.

Pre-requisite: None

#### ECEN3020 ADVANCED TOPICS IN ANALOG AND MIXED-SIGNAL INTEGRATED **CIRCUIT DESIGN**

The purpose of this course is to investigate advanced analog circuit integrated circuit design. The student will be exposed to analog design at the system level, and learn how design specifications are achieved and design tradeoffs are made in modern analog and mixed-signal integrated circuits.

Pre-requisite: ECEN3017

#### ECEN3021 MULTIMEDIA TECHNOLOGY

This course aims at providing students with understanding of multimedia technology from both the theoretical and practice perspective. The course covers the multimedia data types such as image, video, audio, and also introduces emerging multimedia applications such as virtual reality and augmented reality. Programming languages and computer tools for multimedia technology will be introduced to the students.

Pre-requisite: ECEN1006 and ECEN3001

#### ECEN3022 ADVANCED INTEGRATED CIRCUIT DESIGN FOR INTERNET OF THINGS SYSTEMS

This course targets to provide an overview of the enabling integrated circuit design techniques for the development of energy constrained Internet of Things (IoT) systems. The fundamental building blocks in an IoT system will be systematically introduced, including the analog interface, power management circuits, energy harvesting modules, analog-to-digital converters, shortrange radios, digital architecture, non-volatile memory, hardware security and battery/packaging. Advanced circuit design techniques targeting for ultra-low power consumption to fulfill the application level requirements will also be introduced.

Pre-requisite: None

#### INTELLIGENT METHODS FOR ELECTRICAL AND COMPUTER ECEN3023 ENGINEERING

This is an introductory course in machine learning and computational intelligence tailored for ECE students. It covers topics from statistical learning including linear regression and classification, clustering, Bayesian learning, to more recent techniques such as evolutionary computing, support vector machines, convolutional neural network and deep learning, with special attention to hardware aspects and ECE applications. The course aims to offer students a set of modern intelligent solutions as well as the basic ideas and intuition behind, with more emphasis on hands-on experience through practical examples such as intelligent hardware system implementation and case studies with MATLAB and Python. Pre-requisite: ECEN2007

#### ECEN3024 FUNDAMENTALS OF INTERNET OF THINGS

This course introduces the fundamentals of real time embedded systems. It covers the basic ingredients of complete IoT systems in terms of real time software development based on a practical embedded system utilizing a real time operating system. Embedded hardware systems (e.g. Raspberry Pi, Beagle Bone, TI Sensor Tag etc.) together with in-depth case studies on intelligent sensor based embedded systems will also be introduced. Students will also have the chance to work on lab/tutorials essential for the development of practical real-world IoT systems. Pre-requisite: None

#### ECEN3025 INTERNET OF THINGS WORKSHOP

This course introduces the application and essential peripherals (e.g. sensors, actuators, displays etc) for real time embedded systems. Students should apply their knowledge in IoT systems to design a practical real world IoT implementation using commercial embedded hardware systems (e.g. Raspberry Pi, Beagle Bone, TI Sensor Tag etc.). Students will also attend lab/tutorials, and develop their own practical real-world IoT projects. Pre-requisite: None

#### ECEN3026 DATA ANALYTICS FOR ELECTRICAL AND COMPUTER ENGINEERING

This course is an introductory course on data analytics and its application in smart energy systems. It covers three major topics: 1) Primary data analytics theory including classification, regression, principal component analysis, etc.; 2) Hands on data analytics experiences with NumPy, Pandas, Matplotlib, & Scikit-learn packages; and 3) Applications in smart energy systems (with a focus on buildings energy systems), in which comprehensive experiments with real building energy data will be included.

In this course, students will learn systematic knowledge on data analytics and Python. They will also gain solid hands-on experiences in using Python to analyze smart meter data in energy systems.

Pre-requisite: None

#### ECEN4000/ ECEN4001 GRADUATION PROJECT I AND II

This course aims to give the students experience in solving real engineering problems and the opportunity to apply the knowledge they have gained during their study. Through the project the students will gain experience in project planning, in teamwork and in communication with management and support staff. The project will also develop their design and research skills. Pre-requisite: Final Year Student

#### ECEN4002 DIGITAL CONTROL

Digital control systems; open-loop discrete-time systems; closed-loop systems; system time response characteristics; stability analysis techniques; PID controller design; and the control system simulations

Pre-requisite: ECEN3000

#### ECEN4003 SPECIAL TOPIC IN ELECTRICAL AND COMPUTER ENGINEERING

The course will introduce a selected special topic in the ECE area. Pre-requisite: Final Year Student

#### ECEN4004 BIOMEDICAL MEASUREMENT AND INSTRUMENTATION

Design of measurement systems and biomedical instrumentation; architecture of electronic instruments used to measure physiological parameters, analysis of major process functions integrated in these instruments

Pre-requisite: ECEN3003

#### ECEN4005 INTRODUCTION TO BIOMEDICAL IMAGING

This course is an introduction to the current methods and applications of biomedical imaging. We focus on major imaging techniques, including Magnetic Resonance, Ultra Sound and Computed Tomography. For each technique, we will study the image acquisition (how images are created), the corresponding image processing (how images are analyzed), and their usage in major biomedical applications (what the image analysis says about cancer, brain, heart, or cells).

Pre-requisite: None

#### ECEN4006 RENEWABLE ENERGY CONVERSION

This course introduces the engineering and technical aspects of renewable energy conversion systems utilizing biomass, solar, wind, hydro power and others. It emphasizes basic generation and power conversion technologies of renewable energy generation systems. Topics include different available sources of sustainable energy and power, their applications, their limitations, energy conversion, integration circuits and storage for renewable technologies. Pre-requisite: ECEN3007

#### ECEN4007 POWER SYSTEM DESIGN AND IMPLEMENTATION

This course is designed to prepare senior undergraduate students with knowledge and manipulative skills for employment in the electrical industry. It emphasizes the theory and practice of the basic electrical installation and maintenance skills. Topics include introduction to HV/MV/LV equipments, power consumption in Macau, installation and maintenance of transformer, MV/LV distribution and Un-interruptible Power Supply, batteries & chargers. Pre-requisite: ECEN1005

#### ECEN4008 INTRODUCTION TO WIRELESS SENSING NETWORK

This course is about the study of contemporary issues in wireless sensing networks. Coverage includes short range communications namely WLAN, RFID, Bluetooth, Zigbee and; sensor design, signal conditioning circuits, detection, energy minimization, connectivity, security, storage management in wireless sensor networks, middleware, applications and so forth. Design examples for RFID and WLAN are also provided. Throughout the course, the students acquire the advanced engineering technique and ability to emerging wireless sensing network design issues and applications.

Pre-requisite: ECEN3012

#### ECEN4009 MICROWAVE AND MILLIMETER WAVE SYSTEM DESIGN

This course is devoted to the microwave and millimeter wave integrated circuit design from wireless system perspective with focus on broadband applications. Coverage includes OEM system integration, high frequency simulation tools, design of microwave and millimeter wave wireless frontend circuits including low noise amplifier, mixer, oscillator, filter, power amplifier, antenna, characterization and implementation of microwave and millimeter wave integrated systems in CMOS technologies. Throughout the course, the students acquire the advanced engineering technique and ability to emerging broadband systems and applications. Pre-requisite: ECEN3013

#### STGC3000 WORK-INTERGRATED EDUCATION

Work-Integrated Education allows students to gain experience in areas relevant to their fields of study. The student will be encouraged to attend internship training first. If the students cannot attend the internship training due to any reasons, the student should engage in a research project under the supervision of a faculty member assigned by his/her home department. Pre-requisite: None

#### EMEN1001 ENGINEERING DRAWING I

This course aims at preparing undergraduate engineering students to be able to understand and create technical drawings as a basic technique in engineering and scientific communication. The course seeks to develop the students' effective utilization of computer-aided drafting software

package for producing engineering drawings according to the international conventions and drawing standards.

Pre-requisite: None

#### EMEN1002 ENGINEERING DRAWING II

Introduction to auxiliary views, mechanical working drawing, gears, cams, intersection and developments, building services drawings and floor plan design. Pre-requisite: EMEN1001

#### EMEN1003 ENGINEERING MATERIALS

Interatomic bonding and crystalline structures, imperfections and diffusion in solids, mechanical properties, strengthening mechanisms, failure of materials, phase diagrams and phase transformations, heat treatment of ferrous and non-ferrous alloys, types of engineering materials: metallic, ceramic, polymeric and composite materials. Pre-requisite: None

#### EMEN1004 STATICS

Force systems and equilibrium conditions with emphasis on engineering problems. Statics of particles and rigid bodies. Equivalent system of forces. Centroids and centers of gravity, Analysis of structures. Forces in beams and cables. Friction. Moments of inertia. Method of virtual work. Pre-requisite: None

#### EMEN2000 STRENGTH OF MATERIALS

Fundamental concepts of mechanics of deformable solids (static equilibrium, compatibility of deformation, and material constitutive behavior etc.) Stress and strain, uniaxial tension test, statically indeterminate structures, temperature effects and thermal stress, torsion of circular shafts, simple bending of beams, shear stresses in beams of different cross-sectional shapes, shear centre, combined stresses due to bending, torsion, shear and axial loads, transformation of stresses, failure criteria and stability and buckling.

Prerequisite: EMEN1004

#### EMEN2001 THERMODYNAMICS

Fundamental principles of thermodynamics, foundation in fundamental thermodynamic phenomena including the first and second laws of thermodynamics, thermodynamic properties, equations of state in real and ideal gases. Analysis of engineering systems, such as: gas turbine, compressor, propulsion systems, vapor and gas power cycle, refrigeration cycle, and automobile engines.

Prerequisite: None

#### EMEN2002 MANUFACTURING TECHNOLOGY

Introduction to manufacturing industry. Manufacturing system, basic machine tool elements, metal cutting, turning, drilling, boring, milling, grinding, welding, hot and cold working, pressworking, thread and gear working, and nontraditional processes. Prerequisite: None

#### EMEN2003 ELECTRICAL ENGINEERING

Introduction to electrical engineering. Fundamentals of electric circuits. Analysis of electric networks. Computer-aided circuit analysis. AC power. Residential wiring and distribution of AC power. Introduction to electromechanics. Introduction to electric machines. Pre-requisite: None

#### EMEN2004 DYNAMICS

This course will introduce to students the fundamentals and principles of kinematics and kinetics of particles and rigid bodies. The topics covered include kinematics of particles and rigid bodies, kinetics of particles and rigid bodies, energy and momentum methods, systems of particles,

plane motion of rigid bodies, and basics of mechanical vibrations. Pre-requisite: None

#### EMEN2005 COMPUTER-AIDED DESIGN

Introduction to the fundamentals of computational and numerical geometry for product design. Topics to be covered include design specification, representation and manipulation of curves and surfaces, solid modeling, geometric transformations, graphical visualization, tolerance analysis, and standards for data exchange. The lab practice with prevailing CAD packages enable students to intelligently use them for solving engineering design problems. Pre-requisite: None

#### EMEN2006 MACHINE ELEMENTS

Introduction to machine elements. Screws, fasteners and the design of nonpermanent joints. Welding and the design of permanent joints. Mechanical springs. Rolling-contact bearings. Lubrication and journal bearings. Gears. Clutches, brakes and couplings. Shaft design. Flexible mechanical elements. Mechanical design and assembly. Pre-requisite: None

#### EMEN2007 MECHATRONICS

Introduction to the knowledge of mechatronics, control and automation in industrial applications. Sensors and transducers. Signal conditioning. Digital signals. Switches, relays and power-control semiconductors. Motors and motor control. Microprocessor-based control. Programmable logic controllers.

Pre-requisite: None

#### EMEN3000 PRODUCTION MANAGEMENT

Basic management principles. Production and operation management. Production planning. Production control. Project management. Basic quality management and control. Facility planning. Job design. Business angle for product design and TQM concept. Pre-requisite: None

#### EMEN3001 FLUID MECHANICS

Introduction to basic fluid laws and their applications, fluid statics, conservation equations, continuity and linear momentum equations for control volumes, dimensional analysis, dynamic similarity, flow of incompressible fluids in pipes; boundary-layer concepts, effects of friction, measurement techniques.

Pre-requisite: EMEN1004

#### EMEN3002 CONTROL ENGINEERING

Introduction to control system. Dynamic models and dynamic response. Models of industrial control devices and systems. Feedback control, Routh stability. Root locus plots. The Nyquist stability criterion. Matlab simulation for control systems. Pre-requisite: EMEN2003

#### EMEN3003 HEAT TRANSFER

Fundamental of heat transfer, including one and two dimensional steady state heat conduction, transient heat conduction, numerical solutions for heat conduction problem, basic convective heat transfer and thermal radiation. Applications of heat transfer in engineering system. Pre-requisite: EMEN2001

#### EMEN3004 COMPUTER ENGINEERING

Computer organization, memory systems, input and output systems, buses, interfacing, communication mechanisms, interrupt mechanisms, computer networks, distributed systems, communication in distributed systems, D-A conversion, A-D conversion, computer process controls, building automation systems & controls.

Pre-requisite: None

#### EMEN3005 SOCIETY AND THE ENGINEER

Industrial health and safety, Washington Accord and the gualification and criteria of professional engineers, professional ethics, bribery and corruption, social responsibilities of engineers. Technical writing skills.

Pre-requisite: None

#### EMEN3006 ADVANCED MANUFACTURING

Introduction to the fundamental concepts of manufacturing systems, computer-aided process planning, CNC programming, group technology, facility layout, flexible manufacturing system, concurrent engineering, rapid prototyping, and automation, etc. Using of computer-aided manufacturing software and advanced machine tools.

Prerequisite: EMEN1002 and EMEN2005

#### EMEN3007 ADVANCED MATERIALS FOR ENGINEERING

Specialisation of materials used in industry such as lightweight materials, corrosion and thermal resistance materials, shape memory alloys, conductors, semiconductors and dielectric, magnetic materials, liquid crystals, superconductors, optical fibers, biomaterials, and nanomaterials. Electrical, thermal, magnetic, optical and corrosion properties, and case studies. Pre-requisite: EMEN1003

#### EMEN3008 AIR CONDITIONING AND REFRIGERATION

Fundamentals of air conditioning and refrigeration. Psychometrics, cooling and heat load calculations, air conditioning systems, duct design, vapor compression and absorption systems, and the principles of cooling towers.

Pre-requisite: EMEN3003 and EMEN3001

#### EMEN3009 APPLICATIONS OF VIBRATION AND NOISE CONTROL

Introduction to the guidance in the practice of vibration and noise control. Fundamentals of mechanical vibration and sound waves. Industrial noise and vibration control, interaction between sound wave and solid structures, and statistical energy analysis in noise and vibration. Measurements and signal analysis of noise and vibration.

Pre-requisite: None

#### EMEN3010 COMPUTER TECHNOLOGY IN ENGINEERING

The purpose and role of variables, constants, and procedures in application programming, control programme execution with decision control and looping structures. Concepts of objectoriented programming (OOP).

Prerequisite: None

#### EMEN3011 CORROSION, WEAR AND DEGRADATION AND MATERIALS

Costs of corrosion and wear, forms of corrosion, electrochemistry, corrosion thermodynamics and kinetics, high temperature oxidation, metallurgical and environmental factors, corrosion protection, coatings and inhibitors, degradation of polymers, friction and lubricants, wear mechanisms, measurement and testing, analysis and correction of corrosion and wear failures, materials selection and safety.

Pre-requisite: EMEN1003

#### EMEN3012 ELECTRICAL SERVICES- WIRING AND INSTALLATIONS

Overview of electrical services in building, introduction to wiring regulations, fundamental principles and design applications of electrical wiring installations, electricity distribution in buildings, interconnection facilities, protective devices, protection against direct & indirect contacts, cable management, lightning protection, metering, earthling, bonding and reliability of electricity supply.

Pre-requisite: EMEN2003

#### EMEN3013 ELECTROMECHANICAL ENERGY CONVERSION

AC power, magnetic circuits, principles of electro-magnetism and electro-mechanics, principles of motors and generators, dc machines, synchronous machines, induction machines, dc-dc converters, dc-ac inverters, electric drive systems, variable voltage variable frequency drive systems.

Pre-requisite: EMEN2003

#### EMEN3014 ELECTRONICS AND INSTRUMENTATION

Basic principles of electronics components and operations of measuring instruments, transducers and signal conditioning techniques. Voltmeter, ammeter, ohmmeters, multi-meters, oscilloscopes, probes, bridges, diodes, bipolar junction transistors (BJT), operational amplifiers (Op Amp), transducers, noise, and filters.

Pre-requisite: EMEN2003

#### EMEN3015 FINITE ELEMENT TECHNIQUES IN ENGINEERING

Basics of formulating problems in statics, dynamics and heat transfer into finite-element (FE) models. Data pre-processing and post-processing. Use of commercial FE software (ANSYS). Various types of elements: spring element, bar element, Bernoulli and Timoshenko beam elements, truss element, frame element, 3-noded and 6-noded triangular elements, 4-noded quadrilateral element, axisymmetric element and plate element. Isoparametric transformation. Strengths and weaknesses of the various elements. Derivations of elements will be based on different methods, such as the direct stiffness method and the principle of potential energy. Pre-requisite: EMEN2000 and EMEN2004

#### EMEN3016 FUNDAMENTALS OF AUTOMOTIVE ENGINEERING

Fundamentals of internal combustion engines. Emission control. Ancillaries. Electronic control units. Transmissions and driveline. Steering systems. Suspensions. Brakes and tires. Engine and vehicle performance tests. Fundamentals of motor vehicle diagnosis and service. Introduction to electric/hybrid vehicles, alternative fuels and fuel-cell technology. Pre-requisite: None

#### EMEN3017 INDUSTRIAL DATA MANAGEMENT

Introduction to data management in the modern industry. Designing and specifying information systems, including data modeling techniques and entity-relationship diagrams; Relational database design using the theory of normalization; Building and manipulating databases, including relational algebra, SQL, and graphical user interfaced database manipulations; World wide web based data systems, including an introduction to HTML, web applications, and MySQL. Pre-requisite: None

#### EMEN3018 INTELLIGENT BUILDINGS

Principles of sensors, controllers and actuators, building electronics, signal conditioning, networks and communication systems, instrument communication and telemetry, microprocessor based controllers and digital controls; overall systems planning and integration; sustainability and economics; energy conversion technologies, energy use in domestic/non-domestic buildings, design guides, energy management and energy auditing. Pre-requisite: EMEN2003

#### EMEN3019 INTERNAL COMBUSTION ENGINES

Engine classification. Engine components. Operating characteristics. Engine cycles. Fuels. Air and fuel induction. Combustion. Modelling of engines. Exhaust flow. Engine cooling. Friction and lubrication. Emissions and air pollution. Engine management systems. Pre-requisite: EMEN2001

#### EMEN3023 COMPUTATIONAL FLUID DYNAMICS

Introduction to Computational Fluid Dynamics. Introduction of finite difference method, finite element method, and Lattice Boltzmann method. Macroscopic, microscopic and mesoscopic

length scales. Isothermal and Non-Isothermal incompressible fluid flows. Multi-phase and multicomponent flows. Computational fluid dynamics for porous media. Pre-requisite: None

#### EMEN3024 ENGINEERING MANAGEMENT

Overview of the techniques of applying management principles to professional positions held by engineers and engineering technologists. Management functions of planning, organizing, leading, and controlling and their roles in managing technology. Pre-requisite: None

#### EMEN3025 FIRE PROTECTION ENGINEERING

Fire Engineering is concerned with the applications of scientific and technical principles to the growth, mitigation, and suppression of fire. This includes the effects of fire on people, on structures, on commodities, and on operations. The identification of fire hazards and their risk, relative to the cost of protection, is an important aspect of fire safety design. The fire engineering course mainly covers the fundamental knowledge of fire dynamics and fire modeling. Moreover, the modern fire protection technology such as fire sprinkler and alarm systems, exit and smoke control systems, and the active and passive protection systems is also included in the course. Besides, the plumbing services for fire suppression systems and buildings are also introduced. Pre-requisite: None

#### EMEN3026 ROBOTICS

Introduction. Robot terminology. Spatial descriptions and transformations. Manipulator kinematics. Jacobians and static forces. Trajectory generation. Linear and nonlinear control of manipulators. Application of various robots.

Pre-requisite: None

## EMEN3027 MECHANICAL BEHAVIOUR OF ENGINEERING MATERIALS AND BASIC FAILURE ANALYSIS

Introduction to the most important mechanical properties of materials (principally metals). Stress and strain, elastic and plastic behaviours, hardening behaviour, ductility and fracture, creep, fatigue, residual stress, etc. Interactions among different failure-inducing mechanisms (e.g., between corrosion and fatigue) will also be covered. Real case studies of failures in engineering will be used to consolidate the theories introduced in this course. Pre-requisite: EMEN1003

## EMEN3028 OPTIMIZATION TECHNIQUES AND THEIR APPLICATIONS IN ENGINEERING

Modelling of engineering problems and introduction of algorithms/methods for obtaining their optimal solutions. The topics include constrained and unconstrained objective functions, simplex method for linear programming, duality analysis, integer programming, mixed programming, linear and non-linear programming, sensitivity analysis, steepest decent method, conjugate gradient method, conjugate direction method, newton's method, and Lagrange multiplier method. The use of computer software programmes (e.g., LINDO and MathCAD) for solving optimisation problems will be covered in this course also.

Pre-requisite: None

#### EMEN3029 PRODUCTION SYSTEMS, PLANNING AND CONTROL

Elements of production systems. Different types of production systems; Principles and concepts in the design and control of production systems, including organization, production, and advanced quality control, work methods and measurement; Mathematical and computer models for planning and control of facilities, human resources, projects, materials, and information in production systems.

Pre-requisite: None

#### EMEN3030 SPECIAL TOPICS IN ELECTROMECHANICAL ENGINEERING I

Any specialized topic in Electromechanical Engineering chosen by the staff member who has

experienced in that particular field, but the topic is not covered by other undergraduate courses in the Electromechanical Engineering Programme. Pre-requisite: None

#### EMEN3031 SPECIAL TOPICS IN ELECTROMECHANICAL ENGINEERING II

Any specialized topic in Electromechanical Engineering chosen by the staff member who has experienced in that particular field, but the topic is not covered by other undergraduate courses in the Electromechanical Engineering Programme. Pre-requisite: None

#### EMEN3032 SPECIAL TOPICS IN ELECTROMECHANICAL ENGINEERING III

Any specialized topic in Electromechanical Engineering chosen by the staff member who has experienced in that particular field, but the topic is not covered by other undergraduate courses in the Electromechanical Engineering Programme. Pre-requisite: None

EMEN3033 THEORY OF MECHANISMS

Synthesis of linkage-type mechanisms using graphical and computer methods. Introduction to mechanisms and simple machines. More on machines and mechanisms. Planar and spatial mechanisms. Kinematics and dynamics of mechanisms. Links. Frames and kinematic chains. Skeleton outline. Pairs. Higher pairs. Lower pairs and linkages. Kinematic analysis and synthesis. Basic kinematics of constrained rigid bodies. Planar linkages. Cams. Gears. Other mechanisms. Pre-requisite: None

#### EMEN3034 CREATIVE INDUSTRY

The course focuses on creative professional identity, creative career development and entrepreneurship, creative ideation and innovation, project development and management, industry partnerships and networking, and interdisciplinary creative work. Students will explore the advantages and challenges of interdisciplinary study and begin to develop strategies for benefitting the most from their creative industries studies. Pre-requisite: None

#### EMEN3035 ELECTRIC VEHICLES

Electric vehicle (EV) is a collective term for battery-powered EV, hybrid EV, plug-in hybrid EV and fuel-cell EV. At present, almost all automobile manufacturers and many electric power utilities have their individual EVs or development programs on EVs. Therefore, the demand for well-trained engineers serving this EV sector has already been significant. With the increasing acceptance of EVs n Macau, this demand will be greatly increased in the coming years. The purposes of the course are:

To provide students with up-to-date and comprehensive knowledge on various EV technologies

• Provide the necessary skills for students to serve the accelerating EV industry and a good foundation for further research on these technologies

Understanding the concept of system considerations, system level design and optimization.
Pre-requisite: EMEN2003

#### EMEN3036 EXTRA-LOW-VOLTAGE ELECTRICAL SYSTEMS IN BUILDINGS

This course focuses on typical extra-low-voltage electrical systems, their applications in buildings and applications in property management. Pre-requisite: EMEN2003

#### EMEN3037 FACILITY MANAGEMENT

Facilities management blends the technical demands of building services with managerial responsibilities. The course will build up core competencies that make up the facility management profession, including planning, design, maintenance and sustainability. It ensures the efficient functioning of buildings through integrating people, space, processes and technology.

Facility management covers facility location and layout design, intelligent maintenance management, Sustainable facilities management, Service management, guality assessment, and information technology. The students will be trained to gain an understanding of the diverse technologies and decision-making processes in facility management.

Pre-requisite: None

#### EMEN3038 LIGHTING TECHNOLOGY

This course covers a wide range of lighting systems and their applications in illuminating buildings indoors and outdoors. The subject aims at enabling students to identify, analyze and evaluate basic components and features in lighting systems; and then to apply these components appropriately in building lighting design.

Pre-requisite: EMEN2003

#### EMEN3039 MECHANICAL PROCESSING OF MATERIALS

The course focuses on the fundamentals and analytical analysis methods for mechanical processing of materials. Its application on bulk and sheet metal forming, shearing and metal cutting are also covered.

Pre-requisite: EMEN2002

#### EMEN3040 NONLINEAR DYNAMICS AND CHAOS

Introduction to nonlinear dynamics and chaos. Strange attractors; Discrete and continuous chaotic systems: Bifurcation theory and universality: Sensitivity on initial conditions: Stability analysis of nonlinear systems; Lyapunov exponents; Poincaré maps; Fractal dimensions; Phase space reconstruction; Control and synchronization.

Pre-requisite: MATH2001

#### EMEN3041 SELECTION OF MATERIALS FOR ENGINEERING DESIGN

To make products components that are safe, economical and technically-sound, engineers have to be aware of the importance of materials selection in the design process. Also, to make improvements to and to make failure investigation of existing products, engineers must possess a deep understanding of the material selection process.

This course provides a general overview of the functions/constraints/objectives of the material selection processes (metals, polymers, ceramics, and composites) in design. How processing/manufacturing routes affect material properties and how property/function-based methods are utilised to systematically choose materials for engineering design will also be covered.

Pre-requisite: EMEN1002

#### EMEN3042 SENSORS AND ACYUATORS

The integration of sensing and actuation is one of the key issues in the implementation of mechatronic systems. Sensing enables the measurement of environmental conditions and actuation affects the surrounding environment through a controlled response. In this course, advanced concepts in sensing and actuation for mechatronic systems are introduced, including both traditional sensors and actuators and advanced topics in micro electromechanical system (MEMS) and smart material sensors and actuators.

Pre-requisite: EMEN2007 and EMEN3002

#### EMEN3043 STATICS AND PROBABILITY FOR ENGINEERING

An introduction to probability theory and statistics, with an emphasis on solving problems in engineering. Topics in probability include discrete and continuous random variables, probability distributions, sums and functions of random variables, the law of large numbers, and the central limit theorem. Topics in statistics include sample mean and variance, estimating distributions. correlation, regression, and hypothesis testing and engineering applications. Pre-requisite: None

#### EMEN3044 SURFACE ENGINEERING AND COATING TECHNOLOGY

Engineers face with a wide variety of choices when selecting a surface treatment for a specific corrosion or wear application. This course provides practical information for the selection of the best possible surface treatment. It focuses on the topics including materials degradation, various surface treatments and their comparison; characterization of coatings, application of control techniques.

Pre-requisite: EMEN1003

#### EMEN3045 THERMAL ENERGY TRANSPORTATION IN POROUS MEDIA

Thermal energy transportation in porous media is of interest in a number of engineering applications such as water purification and energy storage systems. As an introduction course to the topic of fluid flow and heat transfer in porous media, this course will introduce modeling approaches for heat and fluid flow in porous media. These models are applicable to a wide variety of media, including sand, soil, tube bundle heat exchangers, and open cell metal foams, which have gained attention in recent years as potentially excellent candidates for meeting the high thermal energy dissipation demands in energy storage and electronics industry. Pre-requisite: EMEN3001 and EMEN3003

#### **EMEN4000 GRADUATION PROJECT**

An independent study under the supervision of one or more faculty members. Professional ethics, health, safety and environmental considerations in the engineering project. Pre-requisite: Final year level

#### STGC3000 WORK-INTERGRATED EDUCATION

Work-Integrated Education allows students to gain experience in areas relevant to their fields of study. The student will be encouraged to attend internship training first. If the students cannot attend the internship training due to any reasons, the student should engage in a research project under the supervision of a faculty member assigned by his/her home department. Pre-requisite: None

#### MATH0001 PRE-CALCULUS

This is an elementary mathematics course for science & engineering students. The goal of this course is to reinforce students' knowledge in elementary mathematics which is needed in calculus. Offered students with their mathematic subject score below a specific score decided by the Faculty are required to take and complete this course in the Summer Term before admission. If a student cannot pass the test, he/she can redo the test during the first semester after admission.

Pre-requisite: None

#### MATH1000 DISCRETE MATHEMATICS

This course aims at providing students with a solid foundation of basic techniques in discrete mathematics. The topics include elementary set theory, functions, elementary number theory and methods of proof, recursion, counting principle, and graph theory. Pre-requisite: None

#### MATH1001 LINEAR ALGEBRA I

Systems of Linear Equations and matrices. Gaussian elimination. Determinants. Cramer's rule. Euclidean Spaces. Addition and scalar multiplication of vectors. Linear transformations. Vector Spaces. Linear independence and linear dependence. Pre-requisites: None.

#### MATH1002 LINEAR ALGEBRA II

Vector Spaces. Basis and dimension. Matrices, row spaces, column spaces and null spaces. Rank and nullity. Inner product spaces. Inner products and orthonormal bases. Gram-Schmidt process. Least square problems and orthogonal matrices. Eigenvalues and eigenvectors. Diagonalization, orthogonal diagonalization. Linear transformations. Kernel and range. Inverse linear transformations. Similarity. Additional topics include quadratic forms, unitary, normal, Hermitian matrices, and canonical forms. Pre-requisites: MATH1001

#### MATH1003 INTERMEDIATE CALCULUS

Definite integrals. Fundamental theorem of calculus. Applications of definite integrals. Approximations of definite integrals. Sequence and series. Power series and Taylor series. Pre-requisite: GEST1004

#### MATH1004 GEOMETRY

Euclidean geometry, Euclidean space, inner product, distance, and angle. Isometries. Vectors in planes and spaces. Lines and planes and surfaces in 3-dimensional space. Linear transformations, projections, orientations and determinants, isomorphisms, and general linear groups. Symmetries and regular polyhedrons. Affine geometry. Affine spaces and affine transformations. Brief discussion on the development of various geometries such as Euclidean and non-Euclidean ones.

Pre-requisite: None

#### MATH2000 ENGINEERING MATHEMATICS I

Functions of two or more variables and their derivatives. Applications of partial derivatives. Multiple integrals. Vector fields and line integrals. Surface integrals. Analytic functions of a complex variable pro requisite: CEST1004

Pre-requisite: GEST1004

#### MATH2001 ENGINEERING MATHEMATICS II

Introduction to linear algebra. Linear differential equations. Fourier series and integrals. Laplace transform. Introduction to partial differential equations Pre-requisite: MATH1003

#### MATH2002 MULTIVARIABLE CALCULUS

Vectors and analytic space geometry. Norms, convergence of vector sequences, open and closed sets, compact sets. Curves, Frenet frames, surfaces. Functions of several variables. Partial derivatives and their applications, linear approximation, differential, Taylor's formula. Method of Lagrange multiplier. Inverse function theorem, implicit function theorem. Multiple integrals. Green's Theorem. Line and surface integrals. Gauss and Stokes' Theorems. Pre-requisite: GEST1004

#### MATH2003 MATHEMATICAL ANALYSIS I

The axioms for the real number system. Countable and uncountable sets. Sequence of real numbers. Nested intervals theorem. Bolzano-Weierstrass theorem, Cauchy criterion and Heine-Borel Theorem. Limits and continuity of functions. Properties of continuous functions. Pre-requisite: GEST1004

#### MATH2004 MATHEMATICAL ANALYSIS II

Differentiation. Mean value Theorem. L'Hopital's Rule. Inverse function theorem. Integration. Upper and lower integrals. Riemann integrals. Fundamental theorem of calculus. Elementary functions. Series of numbers. Tests for convergence. Series of functions. Uniform convergence. Power series and Taylor series.

Pre-requisite: MATH2003

#### MATH2005 PROBABILITY

Sample space, random events, and probability. Discrete and continuous random variables. Distributions, densities, joint distribution, and marginal distributions. Conditional probability and independence, Moments, mean, variance, covariance, Chebyshev's inequality, and moment-generation functions. Special probability distributions, densities, and their applications. Pre-requisite: GEST1004

#### MATH2006 APPLIED STATISTICS

Sampling distributions: Chi-square distribution, t-distribution, and F-distribution. Laws of large number and Central limit theorems. Estimation: theory and application. Hypotheses testing: theory and application. Linear regressions, correlation analysis, linear statistical model. The analysis of variance: theory and application. Introduction of statistical computing software. Pre-requisite: MATH2005

#### MATH2007 NUMERICAL ANALYSIS

Introduction to algorithm. Error analysis. Interpolation. Remainder of interpolation. Error estimate. Spline function. Numerical integration. Pre-requisite: MATH1003

#### MATH2008 OPERATIONS RESEARCH

Linear programming and simplex method. Revised simplex method. Duality of linear programming. Sensitivity analysis. Transportation and assignment problems. Network flow problems. Game theorv.

Pre-requisite: MATH1001

#### MATH2009 LINEAR STATISTICAL ANALYSIS

This course is used to study the way a response variable depending on an unknown, linear combination of explanatory and/or classification variables. This course focuses on the theory of linear models and the topics include: linear regression model, general linear model, prediction problems, sensitivity analysis, analysis of incomplete data, robust regression, multiple comparisons, introduction to generalized linear models. Pre-requisite: MATH2006

#### MATH2010 COMPUTATIONAL STATISTICS

Statistical computing is an essential part of modern statistics. Students will learn the core of ideas of programming-functions, objects, data structures, input and output, debugging, logical design and abstraction-through writing code to assist in numerical and graphical statistical analyses. Students will learn how to write maintainable code, as well as debug and test code for correctness. They will learn how to set up and run stochastic simulations, how to fit basic statistical models and assess the results, and how to work with and filter large data sets. Since code is an important form of communication among scientists, students will also learn how to comment and organize code.

Pre-requisite: MATH2006

#### MATH3000 ORDINARY DIFFERENTIAL EQUATIONS

First-order differential equations. Second-order linear differential equations. Higher order linear differential equations. Systems of differential equations. Power series solutions of linear differential equations. Sturm-Liouville problems, Laplace transforms, Existence and uniqueness theorem of first-order differential equations. Simple modeling problems. Pre-requisite: MATH1003

#### MATH3001 COMPLEX ANALYSIS

Complex numbers. Polar coordinates. Functions of a complex variable. Limits. Derivatives of complex functions. Cauchy-Riemann equations. Harmonic functions, harmonic conjugates. Elementary complex functions, Mobius transformations. Contour integrals. Cauchy-Goursat Theorem. Cauchy integral formula. Liouville's theorem. Maximum moduli of functions. Taylor series. Laurent series. Residue theorems. Evaluation of improper integrals. Rouche's theorem. Pre-requisite: MATH1003

#### MATH3002 INTRODUCTION TO STOCHASTIC PROCESS

Conditional expectation, conditional probability, and convergences of random variables. Poisson process and compound Poisson process. Markov chain and Markov processes. Stochastic processes with independent increments, stationary process, and the ergodic theorem. Brownian

motion and diffusions. Pre-requisites: MATH2005

#### MATH3003 ABSTRACT ALGEBRA

Groups. Cyclic groups and permutation groups. Cosets and Lagrange theorem. Homomorphisms. Normal subgroups and factor groups. Group action and counting. Rings. Integral domains. Ring homomorphisms. Ideals and quotient rings. Field of quotients. Rings of polynomials. Introduction to Fields.

Pre-requisite: MATH1001

#### MATH3004 PARTIAL DIFFERENTIAL EQUATIONS

Characteristics, classification of PDE, separation of variables, Fourier transform, and Laplace transform. Well-posedness of the wave and the heat equations. Boundary value problems for the Laplace and Poisson equations. Separation of variables. Pre-requisites: MATH2002 and MATH3000

.

#### MATH3005 MATHEMATICS EXPERIMENTS

Introduction to MATLAB programming, function graphing, data analysis, and modular arithmetic. Multiplication and decomposition of matrices. Selected topics includes computer simulations, numerical differential equations, numerical nonlinear equations, numerical integration in approximating integrals, application of wavelet transformation, FFT, and cases studies in optimization.

Pre-requisite: MATH1003

#### MATH3006 MATHEMATICAL ANALYSIS III

Metric spaces. Open sets and closed sets. Limit points. Completeness. Compactness and connectedness. Functions on metric spaces. Normed linear spaces. Fixed-point theorem. Functions of several variables. Implicit and inverse function theorems. Additional topic includes Riemann mapping theorem.

Pre-requisite: MATH2004

#### MATH3007 HISTORY OF MATHEMATICS

We will explore some major themes in mathematics-calculation, number, geometry, algebra, infinity, formalism--and their historical development in various civilizations, ranging from the antiquity of Babylonia and Egypt through classical Greece, the Middle and Far East, and on to modern Europe. We will see how the earlier civilizations influenced or failed to influence later ones and how the concepts evolved in these various civilizations. Pre-requisite: None

#### MATH3008 INTRODUCTION TO STOCHASTIC CALCULUS

Conditional expectation, Brownian motion, diffusions, and martingales. Ito's stochastic integral, Ito's formula, and stochastic calculus. Stochastic differential equations and their applications. Pre-requisites: MATH3002

#### MATH3009 TIME SERIES ANALYSIS

Time series and stationary processes. Autocovariance and partial autocorrelation functions. Tests for stationarity. Linear stationary models, autoregressive models, moving average models, and mixed autoregressive-moving average models. Model identification, estimation and testing. Seasonal models. Applications of times series forecasting. Pre-requisites: MATH2006

#### MATH3010 APPLIED LINEAR ALGEBRA

The topics of this course include inner and outer products, sensitivity and conditioning, matrix and vector norms, LU factorization, QR factorization, singular value decomposition, least squares problems, direct sums and orthogonal subspaces.

Pre-requisite: MATH1002

#### MATH3011 NUMERICAL MATRIX ANALYSIS

Matrix factorizations. Perturbation and error analysis. Operation cost and convergence rate. Direct Methods for linear systems. LU and Cholesky factorizations. Perturbation and error analysis. Vector and matrix norms. Perturbation analysis for linear systems. Error analysis. Classical iterative methods. Jacobi and Gauss-Seidel method. Convergence analysis. SOR method. Krylov subspace methods. Steepest descent method. Conjugate gradient method. Practical CG method and convergence analysis. Preconditioning, GMRES method. Pre-requisites: MATH1002 and MATH2002

#### MATH3012 INTRODUCTION TO COMPUTATIONAL INTELLIGENCE

The artificial neuron and its learning. Supervised learning neural networks. Back propagation algorithm. Feedforward multilayer ANN. Approximation theorem of ANN. Genetic algorithms. Travelling salesman problem and applications of computational intelligence methods in finance and engineering.

Pre-requisite: MATH1003

#### MATH3013 MATHEMATICAL MODELING

Modeling techniques for analysis or decision-making. The detailed content in this course can vary from extending students' training and understanding in applied mathematical knowledge to further study in specific areas in applied mathematics.

Pre-requisite: MATH1003

#### MATH3014 TOPICS IN APPLIED MATHEMATICS

Content and reading materials are to be determined by the instructor. Students have to give presentations on the reading materials.

Pre-requisite: Final year students only

#### MATH3015 INTRODUCTION TO FINANCIAL MATHEMATICS

Financial derivatives, vanilla options, and exotic options. Binomial financial model and Cox-Ross-Rubinstein option pricing formula. Black-Scholes financial model and Black-Scholes option pricing formula. No-arbitrage, risk-neutral probability, and the completeness of financial market. Pre-requisites: MATH3002

#### MATH3016 FOURIER AND SIGNAL ANALYSIS

Introduction to analog and digital signal processing, the course presents and integrates the basic concepts for both continuous-time and discrete-time signals and systems. It addresses the following topics: Fourier series. Convergence of Fourier series. Fourier and inverse Fourier transformations. Fourier spectrum, discrete and continuous signals. Shannon sampling theorem, filter and convolution. Z-transform, linear time-invariance, filter, and system. Impulse (delta-) function, Hilbert transformation, and analytic signal. Physically realizable signals, Hardy spaces, Phase derivative and instantaneous frequency.

Pre-requisite: MATH1003

#### MATH3017 DATA-DRIVEN SAMLPING METHODS

The course will deal with sampling methods under various statistical frameworks. The course will present principles in the design and analysis of clinical trials, limitations of observational studies and possible solutions, and principles of sampling from finite populations. The purpose of the course is to introduce sampling methods and data analysis emphasizing key statistical aspects of the experiment design; to present the advantages and limitations of different methods, and to choose an appropriate method to each statistical problem.

Pre-requisite: MATH2006

#### MATH3018 MULTIVARIATE DATA ANALYSIS

This course focuses on the classical theory and methods of multivariate statistical analysis. Topics include: distribution theory, multivariate normal distribution, Hotelling's T-square and Wishart distributions, inference on the mean and covariance, principal components and canonical correlation, factor analysis, discrimination and classification. Pre-requisite: MATH2002 and MATH2009

#### MATH3019 APPLIED REGRESSION ANALYSIS

This course covers the basic ideas of Applied Regression Analysis including: Simple Linear Regression; Residual Analysis; Autocorrelation; Multiple Regression; Parameter Estimation and Testing; Model Selection Procedures; Polynomial Regression; Indicator Variables; Multicollinearity; Outliers and Influential Observations. Generally, statistical regression is collection of methods for determining and using models that explain how a response variable (dependent variable) relates to one or more explanatory variables (predictor variables). Pre-requisite: MATH2006

#### MATH3020 BAYESIAN METHOD IN DATA ANALYSIS

The aim of this course is to introduce students to the Bayesian statistical modelling and inference and to the related computational strategies and algorithms. The course starts with the treatment of simple models, such as those based on normal and binomial distributions. Some advanced models will be treated, including hierarchical models, linear regression models and generalized linear models. Bayesian computational methods (MCMC), including Gibbs sampler and Metropolis-Hastings algorithms, are presented with an emphasis on the issues related to their implementation and monitoring of convergence.

Pre-requisite: MATH2006

#### MATH3021 DATA MINING AND STATISTICAL LEARNING

The course covers statistical techniques and tools such as kernel methods for estimating the density and regression functions, machine learning, hidden Markov Chain, Expectation-Maximization algorithm, classification, cluster analysis and support vector machines for analysing large data sets and for searching for unexpected relationships in the data. It also covers model selection for searching through a large collection of potential local models that describe some aspects of the data in an easily understandable way. Pre-requisite: MATH2009

#### MATH3022 DESIGN AND ANALYSIS OF EXPERIMENTS

The objective of this course is to understand the basic principles of good design and how to efficiently analyze the data from the resulting experiments. Both randomized and nonrandomized designs will be considered. The non-randomized designs will be conceptually mapped to a randomized design to efficiently analyse the data from the observational studies. Pre-requisite: MATH3017

#### MATH3023 OPTIMIZATION FOR BIG DATA INFERENCE

Computational optimization is ubiquitous in statistical learning and machine learning. This module covers several current and advanced topics in optimization, with an emphasis on efficient algorithms for solving large-scale data-driven inference problems. Topics include first and second order methods, stochastic gradient type approaches and duality principles. Many relevant examples in statistical learning and machine learning will be covered in detail. Pre-requisite: MATH2005

#### MATH3024 STATISTICAL TECHNIQUES IN LIFE SCIENCE

This module introduces students to the basic principles and methods of biostatistics, and their applications and interpretation. A computer package is used to enhance learning and to enable students to analyse real life data sets. Topics include probability, probability distributions, sampling distributions, statistical inference for one and two sample problems, nonparametric tests, categorical data analysis, correlation and regression analysis, multi-sample inference. This module is essential to students in life sciences.

Pre-requisite: MATH2006

#### MATH3025 TOPICS IN STATISTICS AND DATA SCIENCE

The course will introduce some other topics besides the contents covered by other courses. The main topics include actuarial statistics, analysis of longitudinal data, categorical data analysis, etc.

Pre-requisite: None

#### MATH4000 ELEMENTARY NUMBER THEORY

Divisibility theory of the integers, primes, unique factorization, congruence. Fermat's little theorem, Diophantine equations. Quadratic residues and quadratic reciprocity laws, primitive roots. Pell's equations and continued fractions. Pre-requisite: None

#### MATH4001 INTORDUCTION TO REAL ANALYSIS AND HILBERT SPACES

Real number system, open and closed sets. Lebesgue measure theory. Measurable functions. Lebesgue integration theory. Normed linear spaces. Inner products. Convergence and completeness. Orthonormal basis. Continuous linear functionals and dual spaces. Pre-requisites: MATH2004

#### MATH4002 RESEARCH IN MATHEMATICS

The students will study selected topics in mathematics under supervision of a faculty member. The student has to submit a report and give a presentation of the study for assessment. Pre-requisite: Final year students only

#### MATH4003 NONPARAMETRIC STATISTICS

This course focuses on the theory and methods of making statistical inference based on nonparametric techniques. Students will see the analyses of real data from various areas of applications. Topics include properties of order statistics, statistics based on ranks, distribution-free statistics, inference concerning location and scale parameters for one and two samples, Hajek's projection.

Pre-requisites: MATH2006

#### MATH4004 GRADUATION PROJECT

Under the supervision of a faculty member, a student will carry out a focus study of a research topic in statistics or do some case studies based on collected data sets. The students are required to submit a report and give a presentation of the study for assessment. Pre-requisite: Final year students only

#### STGC1001 GENERAL CHEMISTRY

This course addresses the basic concepts of chemistry and tests theories through experiments. The course covers topics, ranging from basic properties of gases, liquids & solids, chemical kinetics, chemical equilibria, to basic organic molecules, which form a foundation for concepts that will be later developed in Environmental Engineering I & II. Pre-requisite: None

## PROGRAMMES OF STUDY Faculty of Social Sciences

## **Doctoral Degree Programmes**

### AREAS OF STUDY

- Communication
- Economics
- Political Science
- Psychology
- Public Administration
- Sociology

## **Doctor of Philosophy**

Communication

Doctoral Thesis		Credits
COMM8999	Doctoral Thesis	18
•		<b>o</b> 114
Courses		Credits
SSGC8809	Research Ethics	
SSGC8807	Academic Writing and Scholarship	3
COMM8854	Academic Writing for Communication Research	3
0		
	the following courses:	
SSGC8802	Quantitative Research Methods	3
SSGC8803	Qualitative Research Methods	3
SSGC8806	University Teaching and Practice	3
SSGC8808	Social Theory	3
Total Credits	s:	30

## **Doctor of Philosophy**

• Communication (Visual Communication)

Doctoral Thesis		Credits
COMM8099	Doctoral Thesis	18
Courses		Credits
SSGC8809	Research Ethics	
SSGC8807	Academic Writing and Scholarship	3
COMM8000	Academic Writing for Visual Communication Research	3
Choose 2 of	the following courses:	
COMM8801	Visual Communication Theory and Research Methods	3
SSGC8803	Qualitative Research Methods	3
SSGC8806	University Teaching and Practice	3
SSGC8808	Social Theory	3
Total Credits	s:	30

### **Doctor of Philosophy**

• Economics

Doctoral Thesis		
ECON8999	Doctoral Thesis	18
Courses		Credits
SSGC8809	Research Ethics	
SSGC8807	Academic Writing and Scholarship	3
Choose 1 of	f the following courses:	
SSGC8802	Quantitative Research Methods	3
SSGC8803	Qualitative Research Methods	3 3 3
SSGC8808	Social Theory	3
SSGC8806	University Teaching and Practice	3
Choose 2 of	f the following courses*:	
ECON8807	Advanced Topics in Microeconomics	3
ECON8806	Advanced Topics in Macroeconomics	3 3 3
ECON8805	Advanced Topics in Econometrics	3
Total Credit	s:	30
In addition	s admitted without a relevant Master's degree to the above, students are required to take 2 of by FSSGSC:	the following courses
ECON7700	Microeconomic Theory	3

Total Credits:		36
ECON7761	Econometric Analysis I	3
ECON7760	Methods of Economic Research	3
ECON7730	Macroeconomic Theory	3
ECON7700	Microeconomic Theory	3

as

#### iotal oroante

Notes:

\* "Advanced Topics in Microeconomics", "Advanced Topics in Macroeconomics" and "Advanced Topics in Econometrics" can be substituted by another FSS PhD course upon recommendation of the student's supervisor and/or Advisory Committee.

### **Doctor of Philosophy**

• Political Science

Doctoral Thesis		
GPAD8199	Doctoral Thesis	18
Courses		Credits
SSGC8809	Research Ethics	
SSGC8807	Academic Writing and Scholarship	3
GPAD8100	Seminar on Selected Topics on International Relations*	3
Choose 2 of	the following courses:	
SSGC8802	Quantitative Research Methods	3
SSGC8803	Qualitative Research Methods	3
SSGC8808	Social Theory	3 3
SSGC8806	University Teaching and Practice	3
Total Credits:		30
	s admitted without a relevant Master's degree o the above, students are required to take 2 of the followir	ng courses:
GPAD7303	Seminar on International Relations	3
GPAD7313	Seminars on Current Issues	3
GPAD7314	Seminars on Selected Topics of International Relations	3
Total Credit	S:	36

#### Notes:

\* Seminar on Selected Topics on International Relations course can be substituted by another FSS course upon recommendation of the student's supervisor and/or Advisory Committee.

## **Doctor of Philosophy**

• Psychology

Doctoral Thesis		Credits
PSYC8999	Doctoral Thesis	18
Courses		Credits
SSGC8809	Research Ethics	
SSGC8807	Academic Writing and Scholarship	3
Choose 1 of	f the following courses:	
SSGC8802	Quantitative Research Methods	3
SSGC8803	Qualitative Research Methods	3
SSGC8808	Social Theory	3
SSGC8806	University Teaching and Practice	3
Choose 2 of	f the following courses:	
PSYC8805	Advanced Topics in Psychological Research Methods	3
PSYC8810	Seminar in Psychological Sciences	3
PSYC8811	Seminar in Personality and Social Psychology	3
PSYC8812	Seminar in Applied Psychology	3
PSYC8813	Seminar in Selected Topics in Psychology	3
Total Credit	s:	30

### **Doctor of Philosophy**

Public Administration

Doctoral Thes	is	Credits
GPAD8099	Doctoral Thesis	18
017120000		10
Courses		Credits
SSGC8809	Research Ethics	
SSGC8807	Academic Writing and Scholarship	3
GPAD8000	Selected Topics in Public Administration*	3
Choose 2 of th	e following courses:	
SSGC8802	Quantitative Research Methods	3
SSGC8803	Qualitative Research Methods	
SSGC8808	Social Theory	3 3 3
SSGC8806	University Teaching and Practice	3
Total Credits:		30
	idmitted without a relevant Master's degree the above, students are required to take 2 of the follow	ing courses:
GPAD7100	Public Administration: Theory and Practice	3
GPAD7101	Public Policy Analysis	3 3 3 3
GPAD7102	Public Finance	3
GPAD7103	Human Resources Management	3
Total Credits:		36

#### Notes:

\* Seminar on Selected Topics in Public Administration course can be substituted by another FSS course upon recommendation of the student's supervisor and/or Advisory Committee.

## **Doctor of Philosophy**

• Sociology

Doctoral Thesis		Credits
SOCY8999	Doctoral Thesis	18
Courses		Credits
SSGC8809	Research Ethics	
SSGC8807	Academic Writing and Scholarship	3
SOCY8805	Selected Topics in Advanced Sociological Research	3
Choose 2 of	the following courses:	
SSGC8802	Quantitative Research Methods	3
SSGC8803	Qualitative Research Methods	3
SSGC8806	University Teaching and Practice	3
SSGC8808	Social Theory	3
SOCY8801	Selected Topics in Specialized Theories	3
SOCY8802	Selected Topics in Advanced Research Methods	3
Total Credit	s:	30
	mitted without a relevant Master's degree are required to courses in addition to the above.	take 1 of the
SOCY7700	Criminology and Criminal Justice	3
SOCY7703	Applied Statistics	3
SOCY7710	Research Methods	3
SOCY7720	Special Topics in Criminology and Criminal Justice I	3
Total Credit	S:	33

## **Doctor of Public Administration**

Doctoral Thesis		Credits
SSGC8099	Doctoral Thesis	18
Courses		Credits
SSGC8000	Governance: Politics, Policies and Networks	3
SSGC8001	Public Policy Analysis	3
SSGC8002	Public Administration Theory and Practice	3
SSGC8003	Public Administration in Macao and Hong Kong	3
SSGC8004	Public Administration in China	3
SSGC8005	Research Writing and Ethics	3
SSGC8006	Ethics and Public Affairs	3
SSGC8007	Public Administration and Policy Research	3
Choose 2 of	the following courses:	
SSGC8010	Current Issues in Public Administration and Public Policy	3
SSGC8011	Current Issues in Economics and Finance	3
SSGC8012	Current Issues in Public Security	3
SSGC8013	Current Issues in Social Security and Social Welfare	3
SSGC8014	Current Issues in Urban Planning	3
Total Credits	:	48

## FACULTY OF SOCIAL SCIENCES Master's Degree Programmes

## **Master of Arts**

## • Communication (Communication and New Media)

Year I		Credits
Compulsory	Courses	
COMM7702	Research Methods of Communication	3
COMM7706	New Media and Communication Studies	3
COMM7721	Academic Writing and Scholarship	3
5 Elective Co	ourses from the following:	15
COMM7701	Theories of Communication	
COMM7703	Communication Patterns and Culture in Greater China	
COMM7704	International and Intercultural Communication	
COMM7705	Public Opinion	
COMM7707	Special Topics in Journalism and Digital Media	
COMM7708	Special Topics on Advertising	
COMM7709	Special Topics on Public Relations	
COMM7711	Communication and Social Change	
COMM7712	Media Function and Management	
COMM7714	Professional Writing in English	
COMM7715	Digital Media	
COMM7716	Special Topics on Communication and Society	
COMM7717	Special Topics on Communication and Culture	
COMM7718	Special Topics on Communication Research	
COMM7719	Creative and Cultural Industries: A Media Studies Approach	
Tatal One dite		04

#### Total Credits:

24

Year II		Credits
COMM7998	Project Report	6

## FACULTY OF SOCIAL SCIENCES Master's Degree Programmes

## Master of Arts

## • Communication (Visual Communication)

Year I		Credits
Compulsory	Courses	
COMM7000	Visual Communication History Seminar	3
COMM7702	Research Methods of Communication	3
COMM7706	New Media and Communication Studies	3
5 Elective Co	urses from the following:	15
COMM7001	Visual Communication Theory	
COMM7003	Visual Communication: Practice and Critique	
COMM7004	Research and Creative Activities	
COMM7704	International and Intercultural Communication	
COMM7715	Digital Media	
COMM7719	Creative and Cultural Industries: A Media Studies Approach	
Total Credits:		24

Year II		Credits
COMM7098	Project Report	6

### FACULTY OF SOCIAL SCIENCES

## **Master's Degree Programmes**

## **Master of Social Sciences**

• Criminology and Criminal Justice

Year I		Credits
Compulsory		
SOCY7700	Criminology and Criminal Justice	3
SOCY7701	Criminological Theories	3
SOCY7703	Applied Statistics	3
SOCY7710	Research Methods	3
	Courses from the following:	12-15
Academic Th	ving courses are required for students who choose to work on the esis; 5 of the following courses are required for students who choose to applied Thesis	
SOCY7704	Policing	
SOCY7705	Corrections	
SOCY7711	Comparative Criminology	
SOCY7712	Substance Abuse and Addiction	
SOCY7713	Advanced Statistics	
SOCY7714	Crime Prevention	
SOCY7715	Criminal Psychology	
SOCY7720	Special Topics in Criminology and Criminal Justice I	
SOCY7721	Special Topics in Criminology and Criminal Justice II	
Total Credits	:	24-27
Year II		Credits
SOCY7996	Applied Thesis	3
	or	
SOCY7999	Academic Thesis	6
Total Credits	:	3-6

## FACULTY OF SOCIAL SCIENCES Master's Degree Programmes

## **Master of Social Sciences**

• Economics

Year I		Credits
Compulsory	v Courses	
ECON7700	Microeconomic Theory	3
ECON7730	Macroeconomic Theory	3
ECON7760	Methods of Economic Research	3
ECON7761	Econometric Analysis I	3
4 Elective C	ourses from the following:	12
ECON7731	International Trade and Finance	
ECON7732	Development Economics	
ECON7701	Public Economics	
ECON7702	Labour Economics	
ECON7703	Industrial Organization	
ECON7733	Monetary Economics	
ECON7780	The Chinese Economy	
ECON7781	Regional Economies (Asia-Pacific/European Monetary Union)	
ECON7762	Econometric Analysis II	
ECON7763	Advanced Topics in Economic Theory	
Total Credits	S:	24

Year	II
------	----

ECON7998 Project Report

Credits

6

## FACULTY OF SOCIAL SCIENCES **Master's Degree Programmes**

## **Master of Social Sciences**

• European Studies

Year I		Credits
Module 1	General	
GPAD7521	Public Policy and Politics	1.0
GPAD7522	Governments and EU Governance	1.0
GPAD7523	Social Policy and European Identity	1.0
GPAD7524	History of European Integration	1.0
GPAD7504	Research Methods	1.0
GPAD7505	Academic Writing	1.0
GPAD7525	Seminar on Selected Topics about European Politics, Governance,	1.5
	Social or Public Policies	
Module 2	Economics	
GPAD7526	Introduction to Macroeconomics	1.0
GPAD7527	Theory of European Integration	1.0
GPAD7528	Economic Policies of The EU	1.5
GPAD7529	The European Monetary Union in the World Context	1.0
GPAD7510	Globalization and EU's Foreign Direct Investment	1.0
GPAD7514	EU and Sustainable Development	1.0
GPAD7530	Seminar on Selected Topics about European Economy	1.0
Module 3	Legal Framework	
GPAD7531	EU Law I: Institutions and Treaties	1.0
GPAD7532	EU Law II: Four Freedoms	1.5
GPAD7533	Seminar on Selected Topics in the Legal & Institutional Aspects of	1.0
	the EU	
Module 4	EU and the world	
GPAD7534	Theory of International Relations	1.0
GPAD7535	EU and the World I: The Neighbourhood	1.0
GPAD7536	EU and the World II: EU-Asia Relations	1.5
GPAD7520	EU and the World III: The Rest of the World	1.0
GPAD7537	Seminar on Selected Topics About EU's Common Foreign &	1.0
	Security Policies	
Total Credits:		24

#### **Total Credits:**

Year II		Credits
GPAD7598	Project Report	6

FACULTY OF SOCIAL SCIENCES

**Master's Degree Programmes** 

## **Master of Social Sciences**

## • International Relations and Public Policy

Year I		Credits
Compulsory	/ Courses	
GPAD7300	Public Administration: Theory and Practice	3
GPAD7301	Public Policy Analysis: Theory and Practice	3
GPAD7302	Seminar on Political Science	3
GPAD7303	Seminar on International Relations	3
4 Elective C	ourses from the following:	12
GPAD7304	Seminar on Contemporary Political Theory	
GPAD7305	Seminar on International Political Economy	
GPAD7306	International Organizations and Global Governance	
GPAD7307	International Law	
GPAD7308	Constitutional Law	
GPAD7309	Administrative Law	
GPAD7310	Public Finance: Theory and Practice	
GPAD7311	Comparative Human Resources Management	
GPAD7312	Research Methods in Public Administration	
GPAD7313	Seminars on Current Issues	
GPAD7314	Seminars on Selected Topics of International Relations	
GPAD7315	Seminars on Selected Topics of Public Management	
Total Crodit	e'	24

#### Total Credits:

#### Year II

GPAD7398 Project Report

24

Credits

6

## FACULTY OF SOCIAL SCIENCES **Master's Degree Programmes**

## **Master of Philosophy**

Macao Studies •

Year I		Credits
Compulsory	y Courses	
SSGC7001	Research Seminars on Macao Studies	3
SSGC7002	Macao History	3
SSGC7003	Contemporary Issues of Macao	3
SSGC7004	Research Methods	3
2 Elective C	courses* from the following:	6
SSGC7005	Culture and Society of Macao	
SSGC7007	Literature and the Arts in Macao	
SSGC7010	Urban Geography of Macao	
SSGC7011	Historical Heritage of Macao	
SSGC7012	Selected Topics I	
SSGC7013	Selected Topics II	
SSGC7015	The Macao Economy	
SSGC7016	Politics and Political System in Macao	
SSGC7017	Regional Studies	
SSGC7018	Research Practice	
Year II		Credits
SSGC7990	Thesis	12

Remarks: \* With prior approval of the Programme Coordinator, up to one of the required elective courses may be a master level course outside of the programme

### FACULTY OF SOCIAL SCIENCES Master's Degree Programmes

### **Master of Social Sciences**

### • Public Administration

Year I		Credits
Compulsor	y Courses	
GPAD7100	Public Administration: Theory and Practice	3
GPAD7102	Public Finance	3
GPAD7103	Human Resources Management	3
5 Elective C	courses from the following:	15
GPAD7101	Public Policy Analysis	
GPAD7104	Public Policy in China	
GPAD7105	Public Administration in Contemporary China	
GPAD7106	Organizational Behavior	
GPAD7107	Political Economy	
GPAD7108	Research Methods in Public Administration	
GPAD7109	Constitutional Law	
GPAD7110	Administrative Law	
GPAD7111	Decision Making: Theory and Practice	
GPAD7112	Research Design	
Total Credit	'S:	24

#### Year II

GPAD7198 Project Report

Credits

6

### FACULTY OF SOCIAL SCIENCES Master's Degree Programmes

### **Master of Social Sciences**

### • Public Security Management

This programme is jointly offered by University of Macau and Escola Superior das Forças de Segurança de Macau (ESFSM)

Year I		Credits
Compulsory	/ Courses	
SSGC7100	Research Methods on Police Affair	3
SSGC7101	Studies of Criminal Investigation	3
SSGC7102	Criminological Theory	3
SSGC7103	Policing Tactics and Combat	3
SSGC7104	Strategy and Practice of Crime Prevention and Control	3
SSGC7105	Theories and Practice of Criminal Law	3
SSGC7106	Theories and Practice of Community Policing	3
SSGC7107	Modern Policing Technology	3
SSGC7108	Social Issues and Governance	3
SSGC7109	Public Relations and Media Communication Skills	3
Total Credit	S:	30

Year II		Credits
SSGC7197	Internship and Report	3

29

# FACULTY OF SOCIAL SCIENCES Bachelor's Degree Programmes

### **Bachelor of Social Sciences**

Communication

Year I	Credits
COMM1000 Interpersonal Communication	3
COMM1002 Introduction to News and Journalism	3
Community and Peer Education Courses	2
3 General Education Courses	9
Languages & Skills – English Language Course or Free Electives	6
Languages & Skills – Chinese/Portuguese Language Course or Free Electives	3
Languages & Skills – Information Technology Course	3
	Ū.

### **Total Credits:**

Year II	Credits
COMM1001 New Media	3
COMM2001 Introduction to Public Relations	3
COMM2004 Introduction to Culture and Communication	3
COMM2011 English News Writing	3
COMM2012 Chinese News Writing	3
Community and Peer Education Courses	1
1 Communication Specialization Electives	3
1 General Education Course	3 3
Languages & Skills – English Language Course or Free Electives	
2 Free Elective Courses	6
Total Credits:	31

Year III	Credits
COMM2003 Fundamentals of Visual Culture	3
COMM2010 Intercultural Communication	3
COMM3002 Quantitative Methods	3
2 Communication Specialization Electives	6
3 General Education Courses	9
2 Free Elective Courses	6
Total Credits:	30

Year IV	Credits
COMM3003 Qualitative Research Methods	3
COMM4003 Field Internship	3
<b>2 Communication Capstone Projects from the following:</b> Students are required to take 2 relevant courses according to their choice	6 of Specialization:
Creative Media	
COMM4007 Workshop: Video I	
COMM4008 Workshop: Video II	
OR	
Public Communication	
COMM4005 Workshop: Event Planning and Implementation	
COMM4010 Integrated Communication Campaigns	
OR	
Journalism and Mass Communication	
COMM4006 Workshop: Chinese Publication	
COMM4009 Workshop: English Publication	
2 General Education Courses	6
4 Free Elective Courses	12
Total Credits:	30

#### Total Credits:

#### Communication Specialization Electives

Students are required to choose 2 Specialization Compulsory courses, plus any 1 other course from the Specialization Electives List of the SAME Specialization.

#### Creative Media:

Specialization Compulsorv COMM2006 Video Production COMM2007 Photography

Specialization Electives COMM2013 Animation I COMM3004 Digital Graphics COMM3005 Multimedia Design COMM3015 Advanced Video Production COMM3016 Documentary COMM3017 Scriptwriting COMM3024 Animation II COMM3025 Cinema Studies COMM3026 Cultural Industries and Policies COMM4015 Special Topics in Creative Media

#### Public Communication:

Specialization Compulsory COMM2005 Advertising COMM3020 Crisis Management Specialization Electives

COMM3006	Advertising Planning and Strategy	
----------	-----------------------------------	--

- COMM3007 Public Relations Planning and Strategy
- COMM3008 Public Opinion
- COMM3009 Persuasion: Theory and Practice
- COMM4000 Organizational Communication
- COMM4011 Media Management
- COMM4012 Special Topics in Public Communication
- COMM4013 Writing for Public Relations and Advertising

#### Journalism and Mass Communication:

Specialization Compulsory

COMM2002 Media & Society

COMM3010 Advanced News Writing and Reporting in Chinese

Specialization Electives

- COMM2009 Chinese Media History
- COMM3001 Communication Theory
- COMM3011 Advanced News Writing and Reporting in English
- COMM3012 Chinese News Editing
- COMM3013 English News Editing
- COMM3018 Broadcast News Writing in Chinese
- COMM3019 Gender, Media and Diversity
- COMM3021 Broadcast Journalism
- COMM3022 New Media Journalism
- COMM3023 Political Communication
- COMM3027 Macao Media and Culture
- COMM3028 Popular Culture and Communication
- COMM4001 Global Media Studies
- COMM4002 Media Law and Ethics
- COMM4004 Undergraduate Project

### FACULTY OF SOCIAL SCIENCES **Bachelor's Degree Programmes**

### **Bachelor of Social Sciences**

**Economics** •

Year I		Credits
ECON1000	Basic Microeconomics	3
ECON1001	Basic Macroeconomics	3
ECON1002	Mathematics I	3
ECON1003	Mathematics II	3
Community 8	& Peer Education Courses	2
Languages &	k Skills – English Language Courses or Free Electives	6
General Edu	cation Courses	15
Total Credit	S:	35

Year II		Credits
ECON2002	Intermediate Microeconomics I	3
ECON2003	Intermediate Microeconomics II	3
ECON2004	Intermediate Macroeconomics I	3
ECON2005	Intermediate Macroeconomics II	3
ECON2000	Statistics I	3
ECON2001	Statistics II	3
Community &	Peer Education Courses	1
Languages &	Skills – English Language Course or Free Electives	3
Languages &	Skills – Chinese/Portuguese Language Course or Free Electives	3
Languages &	Skills – Information Technology Course	3
General Educ	ation Courses	9
Total Credits	:	37

#### **Total Credits:**

Year III	Credits
ECON3002 Econometrics I	3
ECON3020 Research Project on Social Sciences I	3
Choose 6 credits from Required Elective: Economics Courses <sup>@</sup>	6
General Education Course	3
3 Free Elective Courses	9
Total Credits:	24

Year IV	Credits
Choose 18 credits from Required Elective: Economics Courses <sup>®</sup>	18
2 Free Elective Courses	6
Total Credits:	24

Remark: Out of the 24 credits for @ Required Elective: Economics Courses (RE), a student is required to take at least 5 courses (or at least 15 credits) from the list of economics required electives. For the rest 3 courses (9 credits), students may choose from the list of economics required electives or the list of no-pre-requisite or internship required electives.

A student is required to take at least 5 courses (or at least 15 credits) from the following 25 economics required electives:

List of Economics Required Electives

ECON3000 Managerial Economics ECON3001 Money and Banking ECON3016 History of Economic Thought ECON3006 International Trade ECON3007 International Monetary Economics ECON3010 Development Economics I ECON3011 Development Economics II ECON3013 Urban Economics ECON3012 Institutional Economics ECON3019 Applied Economics ECON3004 Mathematics for Economics ECON3003 Econometrics II ECON3005 Forecasting Methods in Economics ECON4000 Advanced Microeconomics ECON4004 Advanced Macroeconomics ECON4003 Welfare Economics ECON4005 Public Economics ECON4006 Labour Economics ECON4007 Industrial Economics ECON4012 Selected Topics in Economics ECON4013 Research Project on Social Sciences II ECON4008 Law and Economics ECON4014 Financial Economics ECON4001 Game Theory ECON4002 Economics of Information

A student can take at most 3 courses (or at most 9 credits) from the following 9 no-prerequisite or internship required electives:

List of No-pre-requisite or Internship Required Electives

ECON3017 Western Economic History (no-prerequisite) ECON3018 Chinese Social and Economic History (no-prerequisite) ECON3008 International Economic Law (no-prerequisite) ECON4009 The Modern Macao Economy (no-prerequisite) ECON4010 The Chinese Economy (no-prerequisite) ECON3014 Economy of Hong Kong, Macao and the Pearl River Delta (no-prerequisite) ECON3015 European Economies (no-prerequisite) ECON4011 Economies of the Asia-Pacific Region (no-prerequisite) ECON3009 Internship

### FACULTY OF SOCIAL SCIENCES **Bachelor's Degree Programmes**

### **Bachelor of Social Sciences**

#### • **Government and Public Administration with Specialization in Public** Administration

Year I		Credits
GEGA3001 Understanding Internatio	nal Politics*	3
GESB1008 Understanding Governme	ent*	3
GPAD1000 Introduction to Political S	cience	3
GPAD1001 Introduction to Political T	heory	3
Community and Peer Education Cours	es	2
Language and Skills – English Langua	ge Courses or Free Electives	6
Language and Skills – Chinese/Portug	uese Language Course or Free Electives	3
Language and Skills – Information Tec	hnology Course	3
1 General Education Course		3
Total Credits:		29

#### **Total Credits:**

Year II Credits GPAD2000 Public Sector Personnel Management 3 3 GPAD2001 Public Sector Organizational Behavior GPAD2002 Comparative Politics 3 GPAD2003 Social Sciences Research Methods 3 **Community and Peer Education Courses** 1 Language and Skills - English Language Courses or Free Electives 3 2 General Education Courses 6 3 Required Elective Courses in Public Administration\* 9 **Total Credits:** 31

Year III		Credits
GPAD3000	Administrative Law I	3
GPAD3002	Public Finance	3
GPAD3003	Public Policy Analysis	3
2 General E	ducation Courses	6
3 Required E	Elective Courses in Public Administration*	9
2 Free Elect	ive Courses	6
Total Credit	s:	30

Year IV	Credits
GPAD4000 Constitutional Law	3
GPAD4001 Research Project	3
3 General Education Courses	9
2 Required Elective Courses in Public Administration*	6
3 Free Elective Courses	9
Total Credits:	30

#### **Required Elective Courses in Public Administration**

Required Ele	cuve courses in Fublic Administration
GPAD2006	Public Sector Organizational Structure and Design
GPAD2007	Macroeconomic Policy of Development
GPAD2008	Government and Bureaucracy in Macao
GPAD2009	Politics of Hong Kong and Macao
GPAD2010	Politics of China
GPAD2012	Asian Politics
GPAD2015	An Introduction to Political Economy
GPAD3001	Administrative Law II
GPAD3007	Public Sector Strategic Planning
GPAD3008	Public Relations
GPAD3009	Statistics for Public Management
GPAD3010	European Union's Politics
GPAD3011	Chinese Foreign Policy
GPAD3018	Capitalism and Modernity
GPAD3021	Democracy and Democratization
GPAD3022	E-Government and E-Governance
GPAD3023	Game Theory Applications in Politics and Administration
GPAD3024	Governance Reform in Contemporary China
GPAD3025	Labor Politics
GPAD3026	Politics of the Tourism Economy
GPAD3027	Social Policy and Economic Development in Macao
GPAD3028	Internship
GPAD3029	Independent Studies on Political Science and Public Administration
GPAD3030	Public Choice
GPAD3031	Public Management in Asian States
GPAD4004	Administrative Accountability and Ethics
GPAD4005	Programme Evaluation and Performance Assessment
GPAD4006	Public Administration: Macao and Hong Kong
GPAD4007	Public Administration: China
GPAD4008	Selected Topics in Public Administration
GPAD4009	Research Project on Public Administration
GPAD4013	East Asian International Relations

Remarks:

\* Course can be only countered as Compulsory Major Course for student majoring in Government and Public Administration, it cannot fulfil GE requirement.

### FACULTY OF SOCIAL SCIENCES **Bachelor's Degree Programmes**

### **Bachelor of Social Sciences**

#### Government and Public Administration with Specialization in • **International and Public Affairs**

Year I		Credits
GEGA3001	Understanding International Politics*	3
GESB1008	Understanding Government*	3
GPAD1000	Introduction to Political Science	3
GPAD1001	Introduction to Political Theory	3
Community a	and Peer Education Courses	2
Language an	d Skills – English Language Courses or Free Electives	6
Language an	d Skills – Chinese/Portuguese Language Course or Free Electives	3
Language an	d Skills – Information Technology Course	3
1 General Ec	lucation Course	3
Total Credits	8:	29

#### Total Credits:

Year II		Credits
GPAD2002	Comparative Politics	3
GPAD2003	Social Sciences Research Methods	3
GPAD2014	The Rise of Asia	3
Community a	and Peer Education Courses	1
Language ar	nd Skills – English Language Courses or Free Electives	3
2 General Ed	ducation Courses	6
3 Required E	lective Courses in International and Public Affairs**	9
1 Free Electi	ve Course	3
Total Credit	S:	31

Year III		Credits
GPAD3004	International Relations Theory	3
GPAD3005	International Organization and World Governance	3
2 General Education Courses		6
4 Required E	Elective Courses in International and Public Affairs**	12
2 Free Elective Courses		6
Total Credit	S:	30

Year IV		Credits
GEGA4000	Global Politics and Wealth*	3
GPAD4002	International Security	3
GPAD4003	Graduation Project on International Relations	3
3 General Education Courses		9
2 Required E	lective Courses in International and Public Affairs**	6
2 Free Elective Courses		6
Total Credite	5:	30

#### Required Elective Courses in International and Public Affairs

- GPAD2004 History of Contemporary International Additional Relations GPAD2005 International Law GPAD2009 Politics of Hong Kong and Macao GPAD2010 Politics of China
- GPAD2011 American Politics
- GPAD2012 Asian Politics
- GPAD2013 Political and Sustainable Development
- GPAD2015 An Introduction to Political Economy
- GPAD3006 Foreign Policy Decision-making
- GPAD3009 Statistics for Public Management
- GPAD3010 European Union's Politics
- GPAD3011 Chinese Foreign Policy
- GPAD3012 American Foreign Policy
- GPAD3013 Sino-American Relations
- GPAD3014 China-European Relations
- GPAD3015 Foreign Policy of the European Union
- GPAD3016 China-East Asian Relations
- GPAD3017 International Political Theory
- GPAD3018 Capitalism and Modernity
- GPAD3019 Conflict and Cooperation in International Relations
- GPAD3020 Religion in International Relations
- GPAD3023 Game Theory Applications in Politics and Administration
- GPAD3025 Labor Politics
- GPAD3028 Internship
- GPAD3029 Independent Studies on Political Science and Public Administration
- GPAD3031 Public Management in Asian States
- GPAD4010 International Public Policy
- GPAD4011 International Environmental and Energy Policy
- GPAD4012 International Human Rights Policy
- GPAD4013 East Asian International Relations
- GPAD4014 Research Project on International Relations
- GPAD4015 Selected Topics in International Relations I
- GPAD4016 Selected Topics in International Relations II
- GPAD4017 Selected Topics in International Relations III
- GPAD4018 Selected Topics in International Relations IV

\* Course can be only counted as <u>Compulsory Major Course</u> for student majoring in Government and Public Administration, it cannot fulfil GE requirement.

\*\* Course can be only counted as <u>Required Elective Course</u> for student majoring in Government and Public Administration with specialization in International and Public Affairs, it cannot fulfil GE requirement.

### FACULTY OF SOCIAL SCIENCES **Bachelor's Degree Programmes**

### **Bachelor of Social Sciences**

• Psychology

Year I		Credits
PSYC1000^	General Psychology	3
PSYC1001^	Psychology Statistics I	3
Language and Sk	ills – English Language Courses or Free Electives	6
Language and Sk	ills – Chinese/Portuguese Language Course or Free Electives	3
Language and Sk	ills – Information Technology Course	3
Community and F	Peer Education Courses	2
3 General Educat	ion Courses <sup>2</sup>	9
Total Credits:		29

#### **Total Credits:**

Year II		Credits
PSYC2000^	Developmental Psychology	3
PSYC2001^	Sensation and Perception	3
PSYC2002^	Human Learning And Cognition	3
PSYC2003^	Social Psychology	3
PSYC2004^	Personality Psychology	3
PSYC2005 <sup>^</sup>	Psychology Statistics II	3
Language and	Skills – English Language Course or Free Electives	3
Community and Peer Education Courses 3 General Education Courses <sup>2</sup>		1
		9
Total Credits:		31

Year III		Credits
PSYC3000^	Abnormal Psychology	3
PSYC3002	Research Methods	3
PSYC3004^	Physiological Psychology	3
PSYC3021^	Experimental Psychology	3
2 General Educ	ation Courses <sup>2</sup>	6
2 Required Elec	ctives in Psychology	6
2 Free Electives	S	6
Total Credits:		30

Year IV		Credits
PSYC3022^	Psychology of Testing	3
PSYC4005^	Clinical Psychology	3
6 Required Electives in Psychology		18
2 Free Electives		6
Total Credits:		30

#### Required Electives in Psychology

Out of the 8 Required Electives, students are required to choose 1 course from the list A and 7 courses from the list B:

Required Elective List A – students are required to choose 1 course from the following list:

PSYC4000 Graduation Project

PSYC4002 Research Project II (Pre-requisite: PSYC4001 Research Project I)

Required Elective List B – students are required to choose 7 courses from the following list:

- PSYC2006 Close Relationships
- PSYC3001 Cultural Psychology PSYC3003 Psychology of Addiction
- PSYC3006 Cognitive Neuroscience
- PSYC3008 Psychology of Leadership
- PSYC3009 Consumer Psychology
- PSYC3013 Evolution. Human Nature and Behaviour
- PSYC3014 Health and Behaviour
- PSYC3016 Psychology of Learning and Motivation
- PSYC3017 Selected Topics I
- PSYC3018 Selected Topics II PSYC3020 Cognitive Development
- PSYC4001 Research Project I
- PSYC4003 Field Experience I
- PSYC4004 Field Experience II
- PSYC4006 Organizational Psychology
- PSYC4007 Global Mental Health
- PSYC4008 Intelligence and Creativity
- PSYC4012 Social Cognition
- PSYC4015 Great Ideas in Psychology
- PSYC4017 Advances in Psychological Science
- PSYC4018 Issues in Applied Psychology

#### Remarks:

Students who have completed PSYC1000 Introduction to Psychology cannot take the GE course GESB1010 Psychology of Everyday Life to fulfil the GE requirement.

#### <sup>1</sup>Languages and Skills:

Students who test out of some or all of the Languages and Skills course(s) are required to make up the credits by taking additional Free Elective(s).

#### <sup>2</sup>General Education:

Students are required to complete the following 4 compulsory GE courses and also complete the remaining 4 GE courses from the four GE areas (Global Awareness, Literature and Humanities, Science and Technology, Society and Behaviour);

- 1. GEGA1000 Macao and Chinese Civilization
- 2. GELH1000 Chinese Language and Culture
- 3. GEST1002 Quantitative Reasoning for Social Sciences

- 4. Ethics, Values, Law and Society
  - GESB1001 Applied Ethics (offered by FBA –1 credit)
  - GESB1002 Foundations of Moral Values (offered by FAH–1 credit)
  - GESB1003 Law and Society (offered by FLL –1 credit)

<sup>^</sup> The 12 fundamental psychology courses (course list no. 1-12 from the psychological therapist registration requirements) for 《治療師(心理治療)資格認定基準》 announced by the Health Bureau, Macao SAR:

《治療師(心理治療)資格		UM Courses			
認定基準》第二項第 1 至 12 門心理學相關科目		Course Code	Course Title in English	Course Title in Chinese	Arrangement
1	普通心理學	PSYC1000	General Psychology	普通心理學	1 <sup>st</sup> Academic Year
2	心理統計學	PSYC1001 & PSYC2005	Psychology Statistics I & Psychology Statistics II	心理統計學   & 心理統計學	1 <sup>st</sup> Academic Year & 2 <sup>nd</sup> Academic Year
3	心理實驗學	PSYC3021	Experimental Psychology	心理實驗學	3 <sup>rd</sup> Academic Year
4	心理測驗學	PSYC3022	Psychology of Testing	心理測驗學	4 <sup>th</sup> Academic Year
5	性格心理學	PSYC2004	Personality Psychology	性格心理學	2 <sup>nd</sup> Academic Year
6	發展心理學	PSYC2000	Developmental Psychology	發展心理學	2 <sup>nd</sup> Academic Year
7	生理心理學	PSYC3004	Physiological Psychology	生理心理學	3 <sup>rd</sup> Academic Year
8	知覺心理學	PSYC2001	Sensation and Perception	知覺心理學	2 <sup>nd</sup> Academic Year
9	人類學習與認知	PSYC2002	Human Learning and Cognition	人類學習與認知	2 <sup>nd</sup> Academic Year
10	社會心理學	PSYC2003	Social Psychology	社會心理學	2 <sup>nd</sup> Academic Year
11	臨床心理學	PSYC4005	Clinical Psychology	臨床心理學	4 <sup>th</sup> Academic Year
12	變態心理學	PSYC3000	Abnormal Psychology	變態心理學	3 <sup>rd</sup> Academic Year

### FACULTY OF SOCIAL SCIENCES Bachelor's Degree Programmes

### **Bachelor of Social Sciences**

• Sociology

Year I	Credits
SOCY1000 Introduction to Sociology	3
SOCY1003 Social Research Methods	3
1 Required Electives in Sociology	3
3 General Education Courses	9
Community and Peer Education Courses	2
Languages and Skills/Free Electives	12
Total Credits:	32

Year II	Credits	
SOCY2000 Sociological Theory	3	
SOCY2002 Political Sociology	3	
SOCY2010 Introduction to Criminology	3	
3 Required Electives in Sociology		
2 General Education Courses	6	
Community and Peer Education Courses	1	
Languages and Skills/Free Electives		
2 Free Electives		
Total Credits:	34	

Year III	Credits	
SOCY3000 Gender and Society	3	
4 Required Elective in Sociology	12	
2 General Education Courses	6	
3 Free Elective Courses	9	
Total Credits:	30	

Year IV	Credits
SOCY4000 Research Project <b>OR</b> SOCY3002 Internship	3
3 Required Elective in Sociology	9
1 General Education Course	3
3 Free Elective Courses	9
Total Credits:	24

## List A: Project-based/Seminar courses (students are required to complete 1 of the following 2 courses)

- SOCY3002 Internship
- SOCY4000 Research Project

## List B: Lecture-based and Project-based/Seminar courses (students are required to complete 11 courses among the following courses)

#### Lecture-based courses

- SOCY1001 Reading Sociology
- SOCY1002 Introduction to Anthropology
- SOCY2001 Social Statistics
- SOCY2003 Social Stratification and Inequality
- SOCY2005 Qualitative Social Research Methods
- SOCY2006 Sociology of Deviance
- SOCY2007 Sociology of Gaming
- SOCY2008 Environment and Society
- SOCY2009 Theory in Anthropology
- SOCY2011 Sociology of Addictive Behaviour
- SOCY2014 Chinese Society
- SOCY2015 Policing
- SOCY2016 Cultural Sociology
- SOCY3001 Survey Methods and Sampling
- SOCY3004 Religion and Society
- SOCY3005 Sociology of Education
- SOCY3006 Social Movements and Collective Behaviour
- SOCY3007 Fundamentals of Urban Studies
- SOCY3012 Health and Society
- SOCY3013 White-Collar Crime
- SOCY3015 Crime and Criminal Justice in China
- SOCY4004 Sociology of Consumption and Leisure

#### Project-based/ Seminar courses

- SOCY4001 Independent Study in Sociology
- SOCY4002 Selected Topics in Sociology
- SOCY4003 Selected Topics in Anthropology

### **Course Description**

#### COMM1000 INTERPERSONAL COMMUNICATION

This is an introductory course in the theory and practice of communications, focusing on interpersonal and small group communication. Topics include face-to-face communication, social roles, relationship development, non-verbal as well as verbal communication, perception, leadership, and problem-solving.

Pre-requisite: None

#### COMM1001 NEW MEDIA

This course introduces students to key aspects of new media and networked applications. Topics include new media landscape, multimedia content ad applications, and cross-media technologies.

Pre-requisite: None

#### COMM1002 INTRODUCTION TO NEWS AND JOURNALISM

This course is a foundation of journalism. It explores the significance of news and role of journalism in society by focusing on deciphering news in various media, such as television, radio, newspapers, magazines and the Internet, in relation to current affairs. It also examines journalism as a profession with specific values and functions. This course introduces basics of news writing and content analysis, and seeks to stimulate students' interest in the profession. Pre-requisite: None

#### COMM2001 INTRODUCTION TO PUBLIC RELATIONS

The course gives a general survey of the public relations discipline. It emphasizes the discipline's professional foundation in law and ethics, and focuses on fundamental theories of public relations management. It teaches strategic planning and execution of public relations campaigns, including campaign evaluation. It encourages hands-on experiences, develops research skills, and prepares students for advanced public relations courses. Pre-requisite: None

#### COMM2002 MEDIA AND SOCIETY

This introductory course concentrates on the complex relationships between media and society. Topics include uses and functions of mass communication, the social impact of mass media on knowledge, attitudes and behavior, mass media audiences, and feedback systems. The history, structure, development, and technological trends of various media formats and platforms are explored. Students will have an overview of advertising and public relations industries, international and comparative mass media systems, as well as media professions. Pre-requisite: None

#### COMM2003 FUNDAMENTALS OF VISUAL CULTURE

This interdisciplinary course integrates theory and practice, and focuses on the study and analysis of visual images. It applies critical thinking to prints, photographs and advertisements, fine arts, fashion and architecture, as well as film, television and new media. It introduces theories of representation and helps develop critical and analytical skills for application in media production and practices.

Pre-requisite: None

#### COMM2004 INTRODUCTION TO CULTURE AND COMMUNICATION

This course introduces students to analytical methods informed by critical communication and cultural studies, and exposes them to major research approaches in the field. It primarily draws on but not exclusive to Marxism, Critical Theory, British Cultural Studies and other intellectual traditions, theoretical frameworks, and analytical concerns. It teaches students to analyze a variety of communicative and cultural practices in Macao and international media contexts. Pre-requisite: None

#### COMM2005 ADVERTISING

Advertising has creative, business and research aspects. This course introduces students to the structure of advertising, as well as its history, problems, and challenges. It provides an overview of advertising industries and practices. It prepares students for advanced advertising courses in creative development, media planning, and media management. Pre-requisite: None

#### **COMM2006 VIDEO PRODUCTION**

This course integrates theory with practice, and prepares students for advanced video production. It teaches students how to operate the video camera and introduces them to digital editing software and other fundaments of video production: story board, composition, lighting, sound, and editing, as well as histories and genres of moving images. It uses various teaching formats: lectures, discussions, hands-on exercises, workshops, and screenings. Students will be required to complete small video projects. Completed works may be exhibited publicly. Pre-requisite: COMM2003

#### COMM2007 PHOTOGRAPHY

In this course students will learn photography through hands-on instruction and exercises. Students will learn to think critically about visual culture, subject/object relationships, and theories of representation. Such genres as photojournalism, picture editorial, and portrait photography may be introduced.

Pre-requisite: None

#### COMM2009 中國新聞傳播史 CHINESE MEDIA HISTORY

本課程主要介紹中國傳播媒介、傳媒科技和傳播意識形態的發展歷程。過去和現今傳媒的蛻變。 通過不同時代的重要事件,探討傳媒科技的革新、意識形態的改變和傳媒與社會的影響。 先修科目:沒有

#### COMM2010 INTERCULTURAL COMMUNICATION

This is an introductory course to the key theories and the processes of intercultural communication. Students will develop an appreciation and understanding of the cultures other than their own, and be equipped with the skills necessary to become an effective communicator in intercultural and multicultural contexts.

Pre-requisite: None

#### COMM2011 ENGLISH NEWS WRITING

This course aims at teaching students the core skills of professional journalists. Through the combined module of theoretical inquiry and practical training, the course addresses such issues as the understanding of news values, the cultivation of journalistic observation, the development of interview skills, the structure and organization of news story genres, as well as rules of attribution and quotation. Field trips are part of the course offering. Pre-requisite: COMM1002

#### COMM2012 中文新聞寫作 CHINESE NEWS WRITING

本課程主要通過課堂講授與練習,介紹中文新聞採訪與寫作的基本方法。側重介紹中文新聞採訪 與報道的基礎知識、發現和判別新聞的方法、採訪的基本技巧、幾種主要新聞報道文體的特點, 消息的定義、種類、寫作特點、消息的基本格式與構成、新聞主題的選擇與深化、新聞報道材料 的鑒別與選擇、新聞語言的特徵等。 先修科目:沒有

#### COMM2013 ANIMATION I

This course is the first part of the animation course series. The production of digital animation is emphasized. The basic concepts, principles, and essential techniques of hand-drawn, twodimensional, and three-dimensional animation, as well as today's trends in the field, develop students' understandings about the fundamentals in storytelling, scripting, and delivery of animated imagery for different platforms. Pre-requisite: None

#### COMM3001 COMMUNICATION THEORY

This is an introductory course to major theories of human communication. It is designed to give students a critical understanding of key themes in the field and demonstrate how theories illuminate the nature of human interaction. Specifically, the course examines origins, evolutions, milestones, methods and findings of communication perspectives. It studies intellectual, institutional and socio-political factors that inform the development of the communication discipline.

Pre-requisite: None

#### COMM3002 QUANTITATIVE METHODS

It is designed to accomplish three closely related goals: (1) to introduce students to the basic logic, process and techniques in quantitative research; (2) to provide students with a critical framework to examine communication problems and evaluate communication research; and (3) to offer students opportunities to gain hands-on experiences in empirical projects. They will learn to apply statistic software such as SPSS for both descriptive and explanative analysis. Pre-requisite: None

#### COMM3003 QUALITATIVE RESEARCH METHODS

This course acquaints students with qualitative research methods in communication studies. It addresses philosophical and conceptual issues, and engages students in experimental activities in conceptualizing and carrying out a qualitative project including data collection, analysis and report presentation.

Pre-requisite: None

#### COMM3004 DIGITAL GRAPHICS

This course introduces students to the possibilities of digital graphics and provides them an education in the history of graphic design. Students will learn practical techniques in a variety of software; and they will concurrently be introduced to the history of graphic design and aesthetic theory. Emphasis will be placed on creatively experimenting with digital means of production. Pre-requisite: None

#### COMM3005 MULTIMEDIA DESIGN

This course teaches students graphic design software as well as related digital technologies. Students will examine the history of various media, from online applications to video games, with an eye toward aesthetics, critical thinking, and creativity. Students will study both the production and reception of contemporary multimedia as well as learning to produce it themselves. Pre-requisite: None

#### COMM3006 ADVERTISING PLANNING AND STRATEGY

This course acquaints students with advanced training on the development and execution of advertising projects through creative and motivating communication, strategic planning and effective assessment. The emphasis is on providing students opportunities to engage in a reallife advertising context, and to connect theories with practice in developing creative and effective strategies in advertising.

Pre-requisite: COMM2005

#### COMM3007 PUBLIC RELATIONS PLANNING AND STRATEGY

This course teaches advanced public relations, dealing with theories of management function and public relations practices. It covers media relations, issues management, and organizationpublic relationships. It investigates representative public relations cases, with a particular focus on explaining and evaluating theories, strategies, and tactics. Pre-requisite: COMM2001

#### COMM3008 PUBLIC OPINION

This course covers the fundamentals of public opinion in democratic environments and evaluates the role, nature and dimensions of public opinion in democratic liberalism. It investigates the role of mass communication in organizing, implementing, and controlling public opinion. By introducing methods of polling and survey research, it highlights the complicated issues related to media, society and citizenry.

Pre-requisite: None

#### COMM3009 PERSUASION: THEORY AND PRACTICE

This course considers the ethical aspects of persuasion from the perspective of the humanities, business, and social sciences. It challenges students to think critically about persuasive communication. Comparative approaches from Asian and Western perspectives will be deployed for studying various modes, styles and genres of persuasion. Pre-requisite: None

#### COMM3010 高級中文新聞寫作與採訪 ADVANCED NEWS WRITING AND REPORTING IN CHINESE

本課程主要通過課堂講授與練習,介紹新聞記者的獨特思維方式與獨家新聞報道、深度新聞報道、 通訊與特寫、各類專題新聞報道的採寫技巧,以及不同新聞媒介對採寫的不同要求等内容。 先修科目:沒有

#### COMM3011 ADVANCED NEWS WRITING & REPORTING IN ENGLISH

This course further expands the skills students acquired in News Writing and Reporting with an emphasis on beat reporting, special assignments and feature writing. It focuses on critical evaluation of evidence, development of investigative skills and improvement in computerassisted reporting techniques. Students will work on multi-source news stories, features and opinion articles which revolve around public issues of timely significance in society. Pre-requisite: None

#### COMM3012 中文編輯學 CHINESE NEWS EDITING

本課程主要通過課堂講授與練習,介紹編輯學的基本理論與基本知識,側重報刊新聞編輯,略述 書刊編輯與影視編輯等基本知識。課程內容包括:編輯演變與類型,編輯的職責與修養,文稿的 取捨、修改與配置,新聞標題的製作,報刊新聞版面的編輯技巧,報道或書稿選題的策劃與組織, 圖片編輯,專刊和副刊編輯,廣播新聞編輯與電視新聞編輯。 先修科目:沒有

#### COMM3013 ENGLISH NEWS EDITING

This course introduces students to the fundamentals of news editing and desktop publishing. Addressing the role and ethics of editors in media organizations, the course comprises practical training of basic copy-editing skills, such as proofreading, editing, making headlines. Other keys topics include principles of newspaper and magazine layout practices, particularly in a desktop publishing environment that uses multiple graphics software applications. Pre-requisite: None

#### COMM3015 ADVANCED VIDEO PRODUCTION

This course teaches students advanced video production skills, including two or more camera setup, interview techniques, special effects, as well as visual and narrative theories. The format of instruction includes lectures, discussions, presentations, exercises and screenings; it strongly encourages active participation and interaction. Critical and independent thinking is emphasized. Students are required to complete small video projects. Completed works will be exhibited publicly.

Pre-requisite: COMM2006

#### COMM3016 DOCUMENTARY

The course provides a theoretical and practical discussion of the history, aesthetics, genres, and

practice of documentary in contemporary society. By highlighting the director/producers' role in the process of production, students are encouraged to examine various visual elements of documentary and develop skills by engaging in documentary production. Pre-requisite: None

#### COMM3017 SCRIPTWRITING

Scriptwriting is an opportunity for students to study storytelling and narrative traditions. Students will read original works of fiction and scripts for television, film, and new media content. Students will also write original scripts that will be developed throughout the course via collaborative writing exercises and in class peer review. Pre-requisite: None

## COMM3018 BROADCAST NEWS WRITING IN CHINESE COMM1000 INTERPERSONAL COMMUNICATION

This is an introductory course in the theory and practice of communications, focusing on interpersonal and small group communication. Topics include face-to-face communication, social roles, relationship development, non-verbal as well as verbal communication, perception, leadership, and problem-solving.

Pre-requisite: None

#### COMM1001 NEW MEDIA

This course introduces students to key aspects of new media and networked applications. Topics include new media landscape, multimedia content ad applications, and cross-media technologies.

Pre-requisite: None

#### COMM1002 INTRODUCTION TO NEWS AND JOURNALISM

This course is a foundation of journalism. It explores the significance of news and role of journalism in society by focusing on deciphering news in various media, such as television, radio, newspapers, magazines and the Internet, in relation to current affairs. It also examines journalism as a profession with specific values and functions. This course introduces basics of news writing and content analysis, and seeks to stimulate students' interest in the profession. Pre-requisite: None

#### COMM2001 INTRODUCTION TO PUBLIC RELATIONS

The course gives a general survey of the public relations discipline. It emphasizes the discipline's professional foundation in law and ethics, and focuses on fundamental theories of public relations management. It teaches strategic planning and execution of public relations campaigns, including campaign evaluation. It encourages hands-on experiences, develops research skills, and prepares students for advanced public relations courses. Pre-requisite: None

#### COMM2002 MEDIA AND SOCIETY

This introductory course concentrates on the complex relationships between media and society. Topics include uses and functions of mass communication, the social impact of mass media on knowledge, attitudes and behavior, mass media audiences, and feedback systems. The history, structure, development, and technological trends of various media formats and platforms are explored. Students will have an overview of advertising and public relations industries, international and comparative mass media systems, as well as media professions. Pre-requisite: None

#### COMM2003 FUNDAMENTALS OF VISUAL CULTURE

This interdisciplinary course integrates theory and practice, and focuses on the study and analysis of visual images. It applies critical thinking to prints, photographs and advertisements, fine arts, fashion and architecture, as well as film, television and new media. It introduces theories of representation and helps develop critical and analytical skills for application in media

production and practices. Pre-requisite: None

#### COMM2004 INTRODUCTION TO CULTURE AND COMMUNICATION

This course introduces students to analytical methods informed by critical communication and cultural studies, and exposes them to major research approaches in the field. It primarily draws on but not exclusive to Marxism, Critical Theory, British Cultural Studies and other intellectual traditions, theoretical frameworks, and analytical concerns. It teaches students to analyze a variety of communicative and cultural practices in Macao and international media contexts. Pre-requisite: None

#### COMM2005 ADVERTISING

Advertising has creative, business and research aspects. This course introduces students to the structure of advertising, as well as its history, problems, and challenges. It provides an overview of advertising industries and practices. It prepares students for advanced advertising courses in creative development, media planning, and media management. Pre-requisite: None

#### **COMM2006 VIDEO PRODUCTION**

This course integrates theory with practice, and prepares students for advanced video production. It teaches students how to operate the video camera and introduces them to digital editing software and other fundaments of video production: story board, composition, lighting, sound, and editing, as well as histories and genres of moving images. It uses various teaching formats: lectures, discussions, hands-on exercises, workshops, and screenings. Students will be required to complete small video projects. Completed works may be exhibited publicly. Pre-requisite: COMM2003

#### COMM2007 PHOTOGRAPHY

In this course students will learn photography through hands-on instruction and exercises. Students will learn to think critically about visual culture, subject/object relationships, and theories of representation. Such genres as photojournalism, picture editorial, and portrait photography may be introduced.

Pre-requisite: None

#### COMM2009 中國新聞傳播史 CHINESE MEDIA HISTORY

本課程主要介紹中國傳播媒介、傳媒科技和傳播意識形態的發展歷程。過去和現今傳媒的蛻變。 通過不同時代的重要事件,探討傳媒科技的革新、意識形態的改變和傳媒與社會的影響。 先修科目:沒有

#### COMM2010 INTERCULTURAL COMMUNICATION

This is an introductory course to the key theories and the processes of intercultural communication. Students will develop an appreciation and understanding of the cultures other than their own, and be equipped with the skills necessary to become an effective communicator in intercultural and multicultural contexts.

Pre-requisite: None

#### COMM2011 ENGLISH NEWS WRITING

This course aims at teaching students the core skills of professional journalists. Through the combined module of theoretical inquiry and practical training, the course addresses such issues as the understanding of news values, the cultivation of journalistic observation, the development of interview skills, the structure and organization of news story genres, as well as rules of attribution and quotation. Field trips are part of the course offering. Pre-requisite: COMM1002

#### COMM2012 中文新聞寫作 CHINESE NEWS WRITING

本課程主要通過課堂講授與練習,介紹中文新聞採訪與寫作的基本方法。側重介紹中文新聞採訪 與報道的基礎知識、發現和判別新聞的方法、採訪的基本技巧、幾種主要新聞報道文體的特點, 消息的定義、種類、寫作特點、消息的基本格式與構成、新聞主題的選擇與深化、新聞報道材料 的鑒別與選擇、新聞語言的特徵等。 先修科目:沒有

#### COMM2013 ANIMATION I

This course is the first part of the animation course series. The production of digital animation is emphasized. The basic concepts, principles, and essential techniques of hand-drawn, two-dimensional, and three-dimensional animation, as well as today's trends in the field, develop students' understandings about the fundamentals in storytelling, scripting, and delivery of animated imagery for different platforms.

Pre-requisite: None

#### COMM3001 COMMUNICATION THEORY

This is an introductory course to major theories of human communication. It is designed to give students a critical understanding of key themes in the field and demonstrate how theories illuminate the nature of human interaction. Specifically, the course examines origins, evolutions, milestones, methods and findings of communication perspectives. It studies intellectual, institutional and socio-political factors that inform the development of the communication discipline.

Pre-requisite: None

#### COMM3002 QUANTITATIVE METHODS

It is designed to accomplish three closely related goals: (1) to introduce students to the basic logic, process and techniques in quantitative research; (2) to provide students with a critical framework to examine communication problems and evaluate communication research; and (3) to offer students opportunities to gain hands-on experiences in empirical projects. They will learn to apply statistic software such as SPSS for both descriptive and explanative analysis. Pre-requisite: None

#### COMM3003 QUALITATIVE RESEARCH METHODS

This course acquaints students with qualitative research methods in communication studies. It addresses philosophical and conceptual issues, and engages students in experimental activities in conceptualizing and carrying out a qualitative project including data collection, analysis and report presentation.

Pre-requisite: None

#### COMM3004 DIGITAL GRAPHICS

This course introduces students to the possibilities of digital graphics and provides them an education in the history of graphic design. Students will learn practical techniques in a variety of software; and they will concurrently be introduced to the history of graphic design and aesthetic theory. Emphasis will be placed on creatively experimenting with digital means of production. Pre-requisite: None

#### COMM3005 MULTIMEDIA DESIGN

This course teaches students graphic design software as well as related digital technologies. Students will examine the history of various media, from online applications to video games, with an eye toward aesthetics, critical thinking, and creativity. Students will study both the production and reception of contemporary multimedia as well as learning to produce it themselves. Pre-requisite: None

#### COMM3006 ADVERTISING PLANNING AND STRATEGY

This course acquaints students with advanced training on the development and execution of

advertising projects through creative and motivating communication, strategic planning and effective assessment. The emphasis is on providing students opportunities to engage in a reallife advertising context, and to connect theories with practice in developing creative and effective strategies in advertising.

Pre-requisite: COMM2005

#### COMM3007 PUBLIC RELATIONS PLANNING AND STRATEGY

This course teaches advanced public relations, dealing with theories of management function and public relations practices. It covers media relations, issues management, and organizationpublic relationships. It investigates representative public relations cases, with a particular focus on explaining and evaluating theories, strategies, and tactics. Pre-requisite: COMM2001

#### COMM3008 PUBLIC OPINION

This course covers the fundamentals of public opinion in democratic environments and evaluates the role, nature and dimensions of public opinion in democratic liberalism. It investigates the role of mass communication in organizing, implementing, and controlling public opinion. By introducing methods of polling and survey research, it highlights the complicated issues related to media, society and citizenry.

Pre-requisite: None

#### COMM3009 PERSUASION: THEORY AND PRACTICE

This course considers the ethical aspects of persuasion from the perspective of the humanities, business, and social sciences. It challenges students to think critically about persuasive communication. Comparative approaches from Asian and Western perspectives will be deployed for studying various modes, styles and genres of persuasion. Pre-requisite: None

#### COMM3010 高級中文新聞寫作與採訪 ADVANCED NEWS WRITING AND REPORTING IN CHINESE

本課程主要通過課堂講授與練習,介紹新聞記者的獨特思維方式與獨家新聞報道、深度新聞報道、 通訊與特寫、各類專題新聞報道的採寫技巧,以及不同新聞媒介對採寫的不同要求等內容。 先修科目:沒有

#### COMM3011 ADVANCED NEWS WRITING & REPORTING IN ENGLISH

This course further expands the skills students acquired in News Writing and Reporting with an emphasis on beat reporting, special assignments and feature writing. It focuses on critical evaluation of evidence, development of investigative skills and improvement in computerassisted reporting techniques. Students will work on multi-source news stories, features and opinion articles which revolve around public issues of timely significance in society. Pre-requisite: None

#### COMM3012 中文編輯學 CHINESE NEWS EDITING

本課程主要通過課堂講授與練習,介紹編輯學的基本理論與基本知識,側重報刊新聞編輯,略述 書刊編輯與影視編輯等基本知識。課程內容包括:編輯演變與類型,編輯的職責與修養,文稿的 取捨、修改與配置,新聞標題的製作,報刊新聞版面的編輯技巧,報道或書稿選題的策劃與組織, 圖片編輯,專刊和副刊編輯,廣播新聞編輯與電視新聞編輯。 先修科目:沒有

#### COMM3013 ENGLISH NEWS EDITING

This course introduces students to the fundamentals of news editing and desktop publishing. Addressing the role and ethics of editors in media organizations, the course comprises practical training of basic copy-editing skills, such as proofreading, editing, making headlines. Other keys topics include principles of newspaper and magazine layout practices, particularly in a desktop publishing environment that uses multiple graphics software applications. Pre-requisite: None

#### COMM3015 ADVANCED VIDEO PRODUCTION

This course teaches students advanced video production skills, including two or more camera setup, interview techniques, special effects, as well as visual and narrative theories. The format of instruction includes lectures, discussions, presentations, exercises and screenings; it strongly encourages active participation and interaction. Critical and independent thinking is emphasized. Students are required to complete small video projects. Completed works will be exhibited publicly.

Pre-requisite: COMM2006

#### COMM3016 DOCUMENTARY

The course provides a theoretical and practical discussion of the history, aesthetics, genres, and practice of documentary in contemporary society. By highlighting the director/producers' role in the process of production, students are encouraged to examine various visual elements of documentary and develop skills by engaging in documentary production. Pre-requisite: None

#### COMM3017 SCRIPTWRITING

Scriptwriting is an opportunity for students to study storytelling and narrative traditions. Students will read original works of fiction and scripts for television, film, and new media content. Students will also write original scripts that will be developed throughout the course via collaborative writing exercises and in class peer review. Pre-requisite: None

#### COMM3018 BROADCAST NEWS WRITING IN CHINESE

This course provides students with a critical understanding of television. It offers a range of themes: TV industry and institutions; TV audiences; news, documentary, entertainment programmes, drama and other TV genres. The intricate relationship between production and reception will be highlighted and critically examined. Students are expected to develop a historical and systematic overview of the function and impact of television, from the tube to online formats.

Pre-requisite: None

#### COMM3019 GENDER, MEDIA AND DIVERSITY

As a venue for civil discourse, media should fairly and accurately represent the various groups that comprise the society. However, the economics of media often contribute to underrepresentation or stereotypical profiling of minority groups. This course takes a critical approach to examining the causes and manifestation of such biases in the media, with emphases on such issues as class, race, gender, ethnicity, age, sexual orientation, and political viewpoints.

Pre-requisite: None

#### COMM3020 CRISIS MANAGEMENT

This course covers the basic elements of crisis communication and the procedures for creating and implementing communication plans when crisis occurs. It examines different types of crises in commercial corporations and non-profit organizations. It explores pitfalls of crisis communications, teaches crisis prevention and resolution, and addresses ethical issues. Pre-requisite: None

#### COMM3021 BROADCAST JOURNALISM

The course is designed to prepare students for responsible roles in the broadcast and television news production. It teaches position chart and trade terminology. It gives emphasis to broadcast news writing and shooting. Students learn lens operation, video recording and studio control, and postproduction editing skills. Lessons in lighting, sound and setting as well as visual and special effects will be held. Students will participate in anchor and presenter exercises that comprise the following genres: interview, discussion panel, weather reporting, special programme, year-end review, documentary and live news programme. Pre-requisite: None

#### COMM3022 NEW MEDIA JOURNALISM

Multimedia is an interactive composite of text, graphic, sound, video and animation elements. This advanced level course adopts a "multiple media" approach to journalism. Students will learn to present news verbally, visually and above all, interactively, using new media formats. Pre-requisite: COMM1001

#### COMM3023 POLITICAL COMMUNICATION

The course investigates the processes political candidates and the mass media employ to generate and disseminate political narratives. It explores how political communication and mass media shape the political process and political outcomes: do they contribute – positively or negatively – to the quality of democracy, or do they not make a difference at all? Pre-requisite: None

#### COMM3024 ANIMATION II

This course, the second part of the animation course series, walks students through the various stages of an animation project, which include planning, implementation, and management. Hands-on practice integrates students' knowledge of 2D and 3D digital animation into the realization of original narratives. Such storytelling is studied across various platforms from home entertainment, educational, museums, electronic media, advertising billboards, interactive channels, or apps for mobile devices.

Pre-requisite: COMM2013

#### COMM3025 CINEMA STUDIES

The course offers students a general knowledge about film history, genre and practices. It teaches analytical concepts for understanding film industry and cinema texts as cultural, artistic, industrial and political phenomena. It stimulates students' interest for film studies. Topics may comprise national cinemas, Third cinemas and Chinese language cinemas, including representations of gender and sexualities.

Pre-requisite: None

#### COMM3026 CULTURAL INDUSTRIES AND POLICIES

This course examines the social, political, economic, and institutional factors affecting the development and regulation of the arts and the media in the contemporary world. With reference to both Macao and international contexts, the course will discuss such topics as heritage, tourism, museums, leisure, sports, architecture, urban development, and the cultural industries, and their consequences for identity, community, and citizenship. Pre-requisite: None

#### COMM3027 MACAO MEDIA AND CULTURE

This course introduces student to the historical development of mass media of communication in Macao since the city's establishment more than 450 years ago. It explores issues such as the role of the media and their impact on Macao culture and society, as well as the formation and representation of Macao's unique culture and identity. Pre-requisite: None

#### COMM3028 POPULAR CULTURE AND COMMUNICATION

The course aims to engage with social, political, economic and historic meanings of popular culture. It examines a wide range of forms, styles, and practices through which popular culture is produced, performed and consumed. Popular culture genres covered in the course may include television, music, film, fashion, video games, comics, and subcultures. Students are expected to assess the significance of popular culture through their everyday life experience. Pre-requisite: None

#### COMM4000 ORGANIZATIONAL COMMUNICATION

This course focuses on theories and processes related to organizational communication. Students will acquire skills for assessing communication problems, designing communication

systems, and improving communication quality. Other key topics include managerial communication, teamwork and leadership, and conflict resolution. Pre-requisite: None

#### COMM4001 GLOBAL MEDIA STUDIES

This course provides students with a platform to consider their role in the future of global communication. It analyzes media communication across a wide variety of levels, from personal to local, corporate, and international. The theoretical and methodological approaches are drawn from an interdisciplinary tradition within the arts, humanities and social sciences that focuses on understanding the role of culture, gender, and power in public communication. With a focus on alobalization, topics may include specific media industries and markets, and the use of media technologies by both corporations and non-profit organizations. Pre-requisite: None

#### COMM4002 MEDIA LAW AND ETHICS

This course covers ethical principles for media practices, including journalism. It examines local and international laws governing media coverage and freedom of expression. Key topics include national security, defamation, privacy, and obscenity, with a particular focus on definitional and implementation issues with respect to laws, principles and ethics. Pre-requisite: None

#### COMM4003 FIELD INTERNSHIP

In cooperation with local corporations, agencies, and organizations, final year Communication Major students are assigned short-term work placements that allow them to apply communication knowledge and skills to real-life contexts, including problem solving. Interns will attend an internship class once a week. To pass the course, they must obtain satisfactory performance reports from both the faculty supervisor and internship site director. Pre-requisite: None

#### COMM4004 GRADUATION PROJECT

This course provides an opportunity for final year Communication Major students to carry out an original study on topics pertinent to communication studies. The final outcome is an academic or semi-academic thesis. Under the supervision of the thesis instructors, students will independently develop the research topic, review relevant literature, specify research methodology, gather data, analyze data and report findings. The undergraduate thesis may be an individual effort or completed as a small group project. Qualitative, quantitative, or combined research methods may be used.

Pre-requisite: None

#### COMM4005 WORKSHOP: EVENT PLANNING AND IMPLEMENTATION

Integrating theory and practice, this capstone course is designed for final year Communication Major students to design and implement a campaign event. It offers them hands-on experiences that include fund-raising, budget control, event planning and team-working. Finally it provides ample opportunities for applying academic learning to real-life contexts. Pre-requisite: None

#### COMM4006 WORKSHOP: CHINESE PUBLICATION

Integrating theory and practice, this capstone course is designed for final year Communication Major students to produce a Chinese publication, that includes photographic images and graphic material. It offers them hands-on experience, and puts an emphasis on connecting the magazine with real-life contexts. It sharpens their writing, editing and desktop publishing skills, and finally enhances journalistic professionalism.

Pre-requisite: None

#### COMM4007 WORKSHOP: VIDEO I

Integrating theory and practice, this capstone course is designed for final year Communication

Major students to produce video projects that are of high production quality. It uses the mentorstudent approach and gives students ample opportunities to apply their video production skills. Students may complete their video projects in one or two semesters. Completed work will be exhibited publicly. Pre-requisite: None

COMM4008 WORKSHOP: VIDEO II

This capstone course extends from Video I. It is mainly for students who have embarked on video projects that require two semesters to complete. Video II projects are expected to achieve professional or close-to-professional standards. Completed work will be exhibited publicly. Pre-requisite: None

#### COMM4009 WORKSHOP: ENGLISH PUBLICATION

Integrating theory and practice, this capstone course is designed for final year Communication Major students to produce an English publication. It enables them to acquire more hands-on experiences and further enrich academic knowledge in the area of journalistic publication, from news gathering, news and feature writing, photo journalism to editing, page layout, and website design and production.

Pre-requisite: None

#### COMM4010 INTEGRATED COMMUNICATION CAMPAIGNS

This advanced level campaign course absorbs the integrated approach to advertising and public relations. The instructor will work closely with students to develop campaign projects for the private and public sectors. It encourages students to hold creative campaigns, participate in college-level competitions and build a communication campaigns portfolio. It helps students use both conventional and unconventional methods to reach their targeted audiences. Campaigns designing and implementing with consideration of real-life contexts will be emphasized. Pre-requisites: COMM2001

#### COMM4011 MEDIA MANAGEMENT

This course combines business administration and media production. It focuses on the technical, artistic and entrepreneurial aspects of media industries. Students will learn different aspects of managing print media, electronic media and the integrated new media. Pre-requisite: None

#### COMM4012 SPECIAL TOPICS IN PUBLIC COMMUNICATION

This course offers special topics in Public Communication that includes in-depth studies of theoretical or practical issues in the public relations industry or public communication field. Topics may vary year to year.

Pre-requisite: None

#### COMM4013 WRITING FOR PUBLIC RELATIONS AND ADVERTISING

This is a writing-intensive course. Students will examine the intricate between organizations, publics, and the media. They will prepare, compose and write public relations/promotional messages for different media platforms including news releases, copy for company publications, direct mail, and Web sites.

Pre-requisite: None

#### COMM4015 SPECIAL TOPICS IN CREATIVE MEDIA

This course offers special topics in Creative Media at the advanced level that range from creative arts to creative industries. Topics may vary from year to year. Pre-requisite: None

#### COMM7000 VISUAL COMMUNICATION HISTORY SEMINAR

An in-depth understanding of the development of visual communication throughout history and in contemporary societies is fundamental for visual communication designers because it

contextualizes his/her creative practice in historical terms. This course provides students the framework for visual communication history and to research on and engage with the contemporary visual communication world through reading, research, discussion, and writing. Pre-requisite: None

#### COMM7001 VISUAL COMMUNICATION THEORY

This course aims to investigate visual communication theory, aesthetics, and philosophy related to the formal and perceptual aspects of art, design and creative media. It sheds light on how art and design communicate and what art and design express through different styles, genres and media. The goal is for students to develop a holistic understanding of visual communication and art making, which serves as fundamental training for artists and designers and visual communication researchers.

Pre-requisite: None

#### COMM7003 VISUAL COMMUNICATION: PRACTICE AND CRITIQUE

Visual Communication: Practice and Critique is a graduate seminar designed to help students develop his/her own body of visual communication work through studio practice, research, and critical analysis of the works as they progress. Students are encouraged to pursue a focused personal vision and creative activities through a combination of studio practice and group critique of the students' works as well as their artist statement and/or design concept. Pre-requisite: None

#### COMM7004 RESEARCH AND CREATIVE ACTIVITIES

Research and Creative Activities is a graduate course designed to help students develop his/her own body of visual communication work through studio practice and research in art, design, and creative media. Studio component and instruction are tailored to the student's individual investigations and research direction. The ultimate goal is to help students develop his/her own visually coherent and conceptually unified body of visual communication work. Pre-requisite: None

#### COMM7098 PROJECT REPORT

Project Report consist of two elements: 1) a formal presentation of a visually coherent and conceptually unified body of work in arts, design, and/or creative media in the forms of solo and/or group exhibitions and/or performances; and 2) a written report that focuses on the artist statement, design concept statement, and the theoretical analysis of his/her own thesis project. Pre-requisite: None

#### COMM7701 THEORIES OF COMMUNICATION

This course is designed to introduce the basic concepts and logic of communication theories with a specific emphasis on linking theoretical concepts to applied communication practices and issues. It serves three inter-related objectives. First, it aims at providing the students critical perspectives of communication problems. Second, it attempts to draw connections between theoretical concepts and practices in various applied areas, including news and entertainment production, advertising, public relations, and public information. Third, it prepares students to approach other courses in the programme and their final graduation project.

#### COMM7702 RESEARCH METHODS OF COMMUNICATION

Introduction to applied media research, research criticism, data interpretation, and fundamentals of audience analysis. Topics include: surveys, content analysis, experimental test of programmes, field research, and formative evaluation. Pre-requisite: None

#### COMM7703 COMMUNICATION PATTERNS AND CULTURE IN GREATER CHINA

This course focuses on the history of Chinese Communication developments, special features of Chinese communication structure, trends and issues of Chinese media, traditional and

modern. Both behavioral and historical approaches will be utilized in such analysis. Emphasis is on contemporary China. Pre-requisite: None

#### COMM7704 INTERNATIONAL AND INTERCULTURAL COMMUNICATION

This course examiners contemporary issues in international and intercultural communication and the driving political, sociological, cultural and economic forces behind the gathering and disseminating of news, data and entertainment content through various channels in the world, with an emphasis on communication systems. From an interdisciplinary point of view, it covers the basic theoretical concepts about intercultural communication and international relations, and deals with the impact of intercultural encounters on national economy, politics and culture. Pre-requisite: None

#### COMM7705 PUBLIC OPINION

The meaning, nature, and functions of public opinion within social and political contexts; measurement through polling; theories and research findings on the formation, dynamics and change of public opinion. Students conduct actual public opinion surveys and write reports. Pre-requisite: None

#### COMM7706 NEW MEDIA AND COMMUNICATION STUDIES

The popularity of the Internet and emerging interactive telecommunication services have made multimedia a topic of interest. This course is designed to take a serious look, from both academic and professional perspectives, at the foundations and principles behind development and production processes from inception (developing the concept) to completion (hands-on production, testing, and distribution) in this new entertainment and information medium. Pre-requisite: None

#### COMM7707 SPECIAL TOPICS IN JOURNALISM AND DIGITAL MEDIA

This course guides students to enrich their knowledge and skills for more in-depth news writing and reporting. Advanced techniques of news reporting, investigative reporting, and personality profiles will be covered including advanced skills in dealing with news sources, interviewing, library search, and computer assisted reporting (CAR). The course also places a significant emphasis on online news reporting and publishing, providing students with basic knowledge and skills of designing and managing news websites.

Pre-requisite: None

#### COMM7708 SPECIAL TOPICS ON ADVERTISING

This course develops students' ability to understand and effectively conduct research projects in advertising, such as audience analysis, message/media research, and marketing surveys. It is designed to bring together the theories and methods of communication and social sciences to deal with practical problems in advertising. Emphasis will be on a synthesis of theoretical studies in communication and professional practice in advertising. Pre-requisite: None

#### COMM7709 SPECIAL TOPICS ON PUBLIC RELATIONS

This course provides students with a comprehensive and in-depth understanding of all aspects of public relations, including public relations practices in business, education and government with an emphasis on public relations principles: identifying target publics, press relations, cost management and planning public relations programmes. Pre-requisite: None

#### COMM7711 COMMUNICATION AND SOCIAL CHANGE

Analysis of the role of communication in cultural, economic, political and social change. Integration and synthesis of theories concerning communication and change. Case studies will be examined.

Pre-requisite: None

#### COMM7712 MEDIA FUNCTION AND MANAGEMENT

This course provides in-depth case studies of the functions of different mass media, and conducts field observations and practice in technical operations. In addition, this course will discuss and analyze media organization and management, process and characteristics of media decision making, personnel management and training, planning and production, and sales and distribution.

Pre-requisite: None

#### COMM7714 PROFESSIONAL WRITING IN ENGLISH

This course provides advanced training in English journalistic writing and editing, promotional writing and other types of professional writing skills. Pre-requisite: None

#### COMM7715 DIGITAL MEDIA

In this course transdisciplinary approaches will be used to study digital media in everyday practices, that includes existing and emerging technologies. Students will create original content and gain practical skills in software and imaging technologies.

Pre-requisite: None

#### COMM7716 SPECIAL TOPICS ON COMMUNICATION AND SOCIETY

This course guides students to examine a range of theories and critical perspectives on communication and society. Covers a range of research contexts and outcomes. Content areas vary according to instructor and student interest.

Pre-requisite: None

#### COMM7717 SPECIAL TOPICS ON COMMUNICATION AND CULTURE

This course examines interactions between communication and culture as experienced in virtual. mediated and face-to-face contexts. Covers a range of perspectives and research outcomes. Content areas vary according to instructor and student interest. Pre-requisite: None

#### COMM7718 SPECIAL TOPICS ON COMMUNICATION RESEARCH

This course provides in-depth training on a particular research method. Content areas vary according to instructor and student interest.

Pre-requisite: None

#### COMM7719 CREATIVE AND CULTURAL INDUSTRIES: A MEDIA STUDIES APPROACH

This course will draw from a variety of disciplines that focus on popular media production and reception. Particular attention will be directed toward creative and cultural industries in Macao and beyond.

Pre-requisite: None

#### COMM7721 ACADEMIC WRITING AND SCHOLARSHIP

This master-level course aims to develop students' theoretical knowledge and practical skills required to undertake their research and writing. The course includes an introduction and discussion on academic scholarship and research writing in the field of communication, helping students identify their implicit theoretical hunches, articulate those ideas into a researchable question, and then relate this question to a certain theoretical framework to discover new knowledge in the relevant context. It is also designed to help students develop a solid proposal through practice, discussion, and mutual critique.

Pre-requisite: None

#### COMM7998 PROJECT REPORT

The Project Report should consist of an essay that addresses a topic that is of significance to the field of communication. It must be characterized by a comprehensive account of the topic

and the issues being analyzed and evaluated; and demonstrate a familiarity with and an ability to utilize different methodologies and scholarship. Pre-requisite: None

#### COMM8000 ACADEMIC WRITING FOR VISUAL COMMUNICATION RESEARCH

This course has two main areas of focus. Firstly, it concentrates on the techniques of writing associated with or required by the various disciplines within the wider field of visual communication: this will include writing for specific genes (dissertation writing, writing a journal article, writing a visual communication review, etc.). Secondly, it will deal with contextual issues, both general and specific to the field of visual communication, which inform academic writing. Through analysis and discussion of the formats and key issues of academic writing in visual communication, this doctoral-level seminar provides students the opportunities to practice writing publishable journal articles and essays.

Pre-requisite: None

#### COMM8001 VISUAL COMMUNICATION THEORY AND RESEARCH METHODS

This course aims to investigate visual communication theory, aesthetics, and philosophy related to the formal and perceptual aspects of visual communication. It sheds light on how visual elements communicate and what visual communication expresses through different styles, genres and media. The goal is for doctoral students to develop a holistic understanding of visual communication, which serves as fundamental training for visual communication researchers. Pre-requisite: None

#### COMM8854 ACADEMIC WRITING FOR COMMUNICATION RESEARCH

This course has two main areas of focus. Firstly it will concentrate on the techniques of writing associated with or required by the various disciplines within the wider field of communication (including media studies and cultural studies): this will include writing for specific genes (thesis writing, writing a journal article, writing a literature review). Secondly it will deal with contextual issues, both general and specific to the field of communication, which inform academic writing: this will include editing, proofing, referencing and ethical issues and requirements. Pre-requisite: None

#### ECON1000 BASIC MICROECONOMICS

An introduction to the principles of microeconomics. Topics discussed include fundamentals of the market system, determinants of consumer demand, output and pricing decisions of firms, the operations of competitive, monopolistically competitive, monopoly, and oligopoly product markets, labor and other factor markets, and the role of governments in economic activity. Pre-requisite: None

#### ECON1001 BASIC MACROECONOMICS

An introductory course in macroeconomic principles. Topics discussed include determination of national income; national income accounting; unemployment and inflation; stabilization instruments of fiscal and monetary policy; economic models developed by Classical and Keynesian economists and the monetarist school. Pre-requisite: None

#### ECON1002 MATHEMATICS I

The course is designed to prepare students to apply mathematical analysis to problems in economics. The course emphasizes the mathematics of differential calculus, including the concept of the derivative and its use in the analysis of functions. Concepts of matrices are also introduced. Illustrative applications to topics in social sciences are given throughout. Pre-requisite: None

#### ECON1003 MATHEMATICS II

A continuation of Mathematics I. The course discusses multivariable calculus and its application for solving optimization and analyzing comparative statics of economics. The course also

introduces economic dynamic and integral calculus, including dynamics and integration, definite integrals, improper integrals, and their applications. Pre-requisite: ECON1002

#### ECON2000 STATISTICS I

Topics discussed include descriptive statistics; probability theory; probability distributions, and sampling distribution. The course is also an introduction to estimation and hypothesis testing. Students are required to use a software package, specifically Microsoft Excel. Pre-requisite: None

#### ECON2001 STATISTICS II

The course is a sequence following Statistics I. The course includes topics in estimations and hypothesis testing for multiple populations, simple linear regression, non-parametric analysis, and time-series analysis.

Pre-requisite: ECON2000

#### ECON2002 INTERMEDIATE MICROECONOMICS I

The study of the behavior of individual participants in the economy. This intermediate-level course emphasizes optimal patterns of consumption and production, analysis of market equilibrium, and the structure of different types of product markets. Pre-requisite: ECON1000

#### ECON2003 INTERMEDIATE MICROECONOMICS II

A continuation of Intermediate Microeconomics I. The course analyzes different models of oligopolistic market and factor market equilibrium. Other topics discussed include welfare economics, general equilibrium analysis, externalities, public goods, intertemporal choice, uncertainty, imperfect information.

Pre-requisite: ECON2002

#### ECON2004 INTERMEDIATE MACROECONOMICS I

An intermediate-level course studying the operations of the aggregate economy. Subjects covered include national income accounting, IS-LM model, aggregate demand and supply, fiscal policy, monetary policy, economic growth and the dynamic AD-AS model. Pre-requisite: ECON1001

#### ECON2005 INTERMEDIATE MACROECONOMICS II

A continuation of Intermediate Macroeconomics I, subjects covered include economic growth, microfoundation of consumption and investment functions, demand and supply of money, problems of inflation and unemployment, deficit and inflation, and open economy macroeconomics. The theoretical foundations for formulating and implementing effective macroeconomic policies are also studied.

Pre-requisite: ECON2004

#### ECON3000 MANAGERIAL ECONOMICS

This course discusses the application of economic principles and methodologies to the decisionmaking process of firms or organizations. Rules and principles are introduced that aim at facilitating the attainment of the desired economic goals of management. Economic theory and the analytical tools of decision science are integrated to examine how an organization can achieve its goals most efficiently.

Pre-requisite: ECON2002

#### ECON3001 MONEY AND BANKING

This course provides an understanding of the economic role of money, focusing on discussion of different schools of thought relating to the significance of money and monetary variables. Pre-requisite: ECON1001

#### ECON3002 ECONOMETRICS I

Introduces elementary econometric techniques beginning with single- and multi-variable ordinary least squares regression models. Also discussed are generalized least squares methods, the problems of heteroskedasticity and autocorrelation, and the concept of multicollinearity.

Pre-requisites: ECON2000 and ECON2001

#### ECON3003 ECONOMETRICS II

A continuation of Econometrics I. The course explores more advanced topics in single and multivariate regression analysis, making use of matrix algebra. Empirical studies of econometric relationships make use of econometric software packages, such as EViews, STATA and others. Pre-requisite: ECON3002

#### ECON3004 MATHEMATICS FOR ECONOMICS

Introduces mathematical tools and techniques used in the study of economics at an advanced level. Subjects discussed include static analysis, comparative statics, optimization methods, dynamic analysis, and mathematical programming.

Pre-requisites: ECON1002 and ECON1003

#### ECON3005 FORECASTING METHODS IN ECONOMICS

Presents an overview of different economic forecasting methods, including judgmental, decomposition, exponential smoothing, seasonal ARIMA and econometric methods. Particular emphasis is laid on the use of forecasting methods in practical circumstances. Computer programmes such as Excel, EViews and STATA will be used. Pre-requisites: ECON1002, ECON1003 and ECON2000

ECON3006 INTERNATIONAL TRADE

A course combining a theoretical treatment of the basis for international trade, focused on comparative advantage, reciprocal demand, factor endowments, and other trade theories, with an examination of the economic effect of various trade policies including tariff and non-tariff trade barriers. The integration of economies through trade and the international movement of factors of production are also discussed. Applications of theoretical models for analyzing current affairs are discussed throughout.

Pre-requisites: ECON1000

#### ECON3007 INTERNATIONAL MONETARY ECONOMICS

Topics covered in this course include the monetary approach to the balance of payments; different exchange rate regimes; international capital mobility; international monetary organizations; markets for foreign exchange, including the Eurocurrency markets; the automatic adjustment mechanism; interest-rate and purchasing-power parities; speculative activity in money markets; and the setting of international macroeconomic policy. Pre-requisites: ECON1001

#### ECON3008 INTERNATIONAL ECONOMIC LAW

Discusses the legal aspects arising from international economic relations. Topics covered include laws covering international trade, technology transfer, international investment, taxation, and the resolution of disputes.

Pre-requisite: None

#### ECON3009 INTERNSHIP

This course intends to provide our students with the opportunities to apply their economics knowledge to solving real world problems when they receive internship training offered by local government departments, banks or other financial institutes. Through the internship opportunities, our students will acquire/enhance their social and practical skills that enable them to be better prepared for rapidly shifting needs from the Macao Society.

Pre-requisite: To enrol in this course, students need to have minimum cumulative GPA 2.0 and

the approval of the course instructor

#### ECON3010 DEVELOPMENT ECONOMICS I

Topics covered in this course include the concept of economic development, the measurement of levels of development, poverty and inequality, population, education and health, migration, agricultural and industrial development, the roles of the state and the market, financial and fiscal policies, foreign trade, and environmental issues in developing countries. Pre-requisites: ECON1000 and ECON1001

#### ECON3011 DEVELOPMENT ECONOMICS II

Extends the analysis in Development Economics I, with special treatment on development theories and growth models that are applied to the developing economies. Pre-requisites: ECON1000 and ECON1001

#### ECON3012 INSTITUTIONAL ECONOMICS

This course focuses on the comparative analysis of the economies of different countries. It develops a theoretical framework for comparing two polar types of economic system - capitalist and socialist - and examines the economies of the United States and the former Soviet Union as representative examples of these polar types. Other countries are studied to develop an appreciation of the broad range of economic systems found in the real world. Pre-requisites: ECON1000

#### ECON3013 URBAN ECONOMICS

Focuses on the application of economic principles to the understanding of the structure and functioning of urban areas. Topics discussed include the economic bases of urban growth; economic determinants of urban structure; economic aspects of locational choice; growth and decline in urban economies; and the use of economic principles in the analysis of urban problems.

Pre-requisite: ECON2002

#### ECON3014 ECONOMY OF HONG KONG, MACAO AND THE PEARL RIVER DELTA

This course provides basic knowledge on the economies of Hong Kong, Macao and the Pearl River Delta region. It focuses on the development of these economic entities in the past 10 -20 years and how these economies interact with each other and integrate into a regional economic bloc.

Pre-requisite: None

#### ECON3015 EUROPEAN ECONOMIES

This course surveys the ongoing process of economic integration in Europe and critically evaluates the performance from the early stage of integration to the current EMU. The increasing trade and economic relations between China and Europe and the role of Macao are also examined.

Pre-requisite: None

#### ECON3016 HISTORY OF ECONOMIC THOUGHT

An intensive survey of the development of economic thought. The course introduces the work of outstanding thinkers and theoreticians in economics through discussion of the varied traditions of thought that have developed in the discipline.

Pre-requisites: ECON2002 and ECON2004

#### ECON3017 WESTERN ECONOMIC HISTORY

A course examining the development of basic economic institutions in Western society. Emphasis is placed on key problems of historical interpretation. Pre-requisite: None

#### ECON3018 CHINESE SOCIAL AND ECONOMIC HISTORY

This course examines the traditional Chinese society and economy and their transformation in modern times. Emphasis is placed on the nature of basic socioeconomic structures, social stratification and mobilization, and the interrelationship of the state economy with local society. Pre-requisite: None

#### ECON3019 APPLIED ECONOMICS

A course on the application of economic principles to private and public decision making. Topics discussed include pricing decisions and microeconomic forecasting carried out by firms, and the policy consequences of the measurement, forecasting and interpretation of aggregate economic variables carried out by governments.

Pre-requisites: ECON1000 and ECON1001

#### ECON3020 RESEARCH PROJECT ON SOCIAL SCIENCES I

In this course students in economics develop and carry out individual research projects under the supervision of an economics staff member. Pre-requisite: Classified for third and fourth students in Economics.

Pre-requisite: Classification as A Fourth Year Student in Economics.

#### ECON4000 ADVANCED MICROECONOMICS

This course is a rigorous treatment of microeconomic theory making extensive use of mathematical tools, including differential calculus and constrained optimization. Topics discussed include public choice, risky assets, game theory, welfare, law and economics. Pre-requisite: ECON2002

#### ECON4001 GAME THEORY

This course is designed to study static games as well as dynamic games, and in each case imperfect information is allowed. As such, the core solution concepts of Nash equilibrium and its variants will be covered. Selected economic applications of game theory, especially to the broadly defined economics of information, will also be discussed. Pre-requisite: ECON2003

#### ECON4002 ECONOMICS OF INFORMATION

Topics include asymmetric information, adverse selection, moral hazard, signaling, screening, mechanism design and contracting.

Pre-requisite: ECON2003

#### ECON4003 WELFARE ECONOMICS

A course providing the theoretical knowledge necessary to understand the economics of public sector activity. Concepts discussed include Pareto optimality, public goods, externalities, public choice models, and cost-benefit analysis. Pre-requisite: ECON2003

#### ECON4004 ADVANCED MACROECONOMICS

A rigorous treatment of macroeconomic theory, developed from a standard general equilibrium framework. The course examines various modern macroeconomic models with microeconomic foundation, especially growth models and overlapping generation models. These models will be used to discuss the topics in long-term economic growth, taxation, inflation, and social security. This course will also serve as a preparatory course for graduate level study. Pre-requisite: ECON2004

#### ECON4005 PUBLIC ECONOMICS

This course aims to provide students with some basic understandings about the role of government and the reasons of government interventions in the economy. How households respond to the government interventions will also be discussed.

Pre-requisites: ECON2002 and ECON2004

## ECON4006 LABOUR ECONOMICS

An introduction to the concept of the labor market, and the elements that distinguish it from commodity or other factor markets. The economic theory of trade union behavior is discussed. as well as the effects of unions on labor markets and the economy as a whole. Economic statistics from Macao, Hong Kong, China and the United States are applied to understand problems of the labor markets in those countries.

Pre-requisite: ECON2002

## ECON4007 INDUSTRIAL ECONOMICS

This course is an analysis of competition and monopoly power in market economies. It discusses elements and determinants of market structure, the effects of market power on economic performance, the behavior of firms under different market structures, and policies for regulating markets including antitrust policies. The activities of public enterprises are briefly discussed. Pre-requisite: ECON2002

## ECON4008 LAW AND ECONOMICS

This course discusses the application of microeconomic and econometric theory to common legal problems: torts, contracts, property and crime, and the limitations of economic analysis. No previous familiarity with the law is assumed. Pre-requisite: ECON2003

## ECON4009 THE MODERN MACAO ECONOMY

This course provides students with an understanding of the modern Macao economy. Emphasis will be placed on the economic development in the past twenty years. Sectoral analysis includes the dominant tourism, manufacturing, construction, and banking. Current issues such as structural change of the economy will be discussed.

Pre-requisite: None

## ECON4010 THE CHINESE ECONOMY

The focus of this course is on reviewing and analyzing the economic performance of China. Topics include economic transition, reforms on agriculture and industry, fiscal and monetary issues, development of the non-state sectors, trade and foreign direct investment, social security system and others.

Pre-requisite: None

## ECON4011 ECONOMIES OF THE ASIA-PACIFIC REGION

A course focusing on the economies of nations and territories within the Asia-Pacific region. The economic relationships among different countries within the region are a focus of attention, as are the economic links between the region and other parts of the world. Pre-requisite: None

## ECON4012 SELECTED TOPICS IN ECONOMICS

The major goal of this course is to get students familiar with frontier research in selected areas in economics and to motivate them to begin their own research. Pre-requisite: approval from instructor

## ECON4013 RESEARCH PROJECT ON SOCIAL SCIENCES II

A continuation of Social Sciences Research Project I Pre-requisite: Classification as A Fourth Year Student in Economics.

#### ECON4014 FINANCIAL ECONOMICS

This course is an introduction to economics of financial assets and financial markets. Topics: inter-temporal choice, expected utility theory, security valuation, selected asset pricing models, market efficiency, and the term structure of interest rates. Pre-requisite: ECON2003

#### ECON7700 MICROECONOMIC THEORY

Methodological foundations of microeconomics. Theories of production and individual choice. Aspects of decision theory under certainty, risk and uncertainty. Introduction to game theory under complete and incomplete information, with applications to oligopoly. Perfect competition as a limiting case. General competitive equilibrium: existence and Pareto efficiency. Private information in markets. Basic auction theory. General theory of markets with adverse selection. Contract design in the context of moral hazard problems. Pre-requisite: None

### ECON7701 PUBLIC ECONOMICS

Measurements of changes in welfare; economy-wide incidence of taxes; taxation, risk-taking, and investments; corporate taxation; effects of taxation on financial markets; taxation of goods and services; taxation of income; taxation and savings; positive problems of redistribution; and tax arbitrage, tax avoidance, tax evasion, and the underground economy. Applied capital theory for public-sector investment decisions; social opportunity cost of capital, labor, and foreign exchange; social cost of unemployment; welfare cost of the inflation tax; issues of exchange rate policy.

Pre-requisite: None

#### ECON7702 LABOUR ECONOMICS

Neoclassical analysis of labour market and its institutions. Topics on labour demand, labour supply, compensating wage differentials, human capital theory, discrimination and earnings differentials. Theories of wage and wage determination. Worker motivation and behaviour. Recent developments in the distribution of wage and salary income and in key institutions and organizational structures. Education and training: earnings functions, effects of school quality. Unemployment, search and turnover.

Pre-requisite: None

#### ECON7703 INDUSTRIAL ORGANIZATION

Structure, behavior, and performance of firms and their interactions on social welfare, production, other economic decisions forms of investment and under various market the firm, structures. Organization of monopoly. oligopoly, price discrimination. auctions, Economic and social regulation, deregulation and privatization, patent, anti-trust, Principal agent theory, vertical and horizontal integration, contracts, firms' behavior under monopoly and oligopoly, government regulations.

Pre-requisite: None

## ECON7730 MACROECONOMIC THEORY

MSEC101 is the core macroeconomic course of the Master's programme. The aim of the course is to give an overview of some classic topics in macroeconomics, with a view to providing students with the skills required to read critically recent professional articles. The main focus is on the basic analytical structure of economic models, their empirical implications, and some policy applications.

Pre-requisite: None

#### ECON7731 INTERNATIONAL TRADE AND FINANCE

Applications of basic trade theory to real-world economic problems. Neoclassical trade theory of pattern of trade and gains from trade, strategic trade theory under imperfectly competitive markets, labour migration and capital mobility, market distortions and commercial policies, dynamic trade theory and economic growth. Adjustment in international exchange markets, balance of payments, and international monetary system. Application of recent theoretical analysis on macroeconomic fluctuations and growth within an open economy context. Pre-requisite: None

## ECON7732 DEVELOPMENT ECONOMICS

Applied economic theories to economic growth and development. Meaning of development,

economic growth, population and migration, capital flows, foreign aid, stabilisation and adjustment. Income distribution, poverty, hunger, household behaviour, agriculture, rural credit markets, institutions and the problem of corruption Models of growth and developing emphasizing migration, modernization, technological change. Static and dynamic model of political economy.

Pre-requisite: None

## ECON7733 MONETARY ECONOMICS

Survey of monetary and financial economics with an emphasis on macroeconomic elements. Models and theories of money and financial intermediation. Standard methods of introducing money into the neoclassical growth framework, overlapping generations models, and searchtheoretical foundations for money.

Pre-requisite: None

## ECON7760 METHODS OF ECONOMIC RESEARCH

Develops research ability of students through intensive discussion for preparing dissertation, individual and group research projects. Critical appraisal of modern economic research. Main techniques of empirical investigation and key issues in applying and testing theoretical models. Pre-requisite: None

## ECON7761 ECONOMETRIC ANALYSIS I

Review of conditional distributions, expectation, regression and principles of inference. Linear regression models, ordinary and generalised least squares, heteroscedasticity. Non-linear least squares. Hypothesis testing and confidence intervals. Maximum likelihood estimation and testing. Introduction to models and methods for discrete and censored data. Simultaneity, exogeneity, instrumental variables methods. Dynamic models: autoregressive and moving average processes, vector autoregressions. Causality, stationarity, unit root tests, and cointegration. Introduction to panel data methods and models.

Pre-requisite: None

## ECON7762 ECONOMETRIC ANALYSIS II

Study of econometric techniques using time series and spatially dependent cross section data. Generalized method of moments estimation, spatial dependence modeling, vector autoregression models. Applications of these techniques in finance, macroeconomics, marketing, industrial organization, development, and other fields as well. Empirical processes and asymptotic theory, nonparametric and semiparametric estimation, unit roots and cointegration, continuous time econometrics.

Pre-requisite: None

## ECON7763 ADVANCED TOPICS IN ECONOMIC THEORY

Topics on some frontier issues in economic theory. Macroeconomics: optimal fiscal and monetary policy, time inconsistency and incentive incompatibility of optimal policy, redistribution and political economics, real business cycle models, new Keynesian models, endogenous growth, recursive methods and robust control; Microeconomics: bounded rationality and complexity, evolution and learning, advanced game theory (in particular dynamic games), social learning, evolutionary/learning game theory and evolutionary financial economics. Papers on current topics of research in economic theory, mathematical economics, finance, and mathematical problems of interest to economists.

Pre-requisite: None

#### ECON7780 THE CHINESE ECONOMY

Applies economic analysis to the study of Chinese economy. Sectoral contribution to the growth of total output. Formation of the development strategies before and after the economic reform. Evaluation of various macroeconomic policies after the 1980s; and China's integration with the global economy.

Pre-requisite: None

## ECON7781 REGIONAL ECONOMIES (ASIA-PACIFIC/EUROPEAN MONETARY UNION)

Advanced economic analysis of the growing Asia-Pacific economies and the expanding European monetary union. Major issues such as economic liberalization and restructuring, regional integration and globalization. In-depth reading and individual research for selected regions.

Pre-requisite: None

#### ECON7998 PROJECT REPORT

A course focusing on developing and conducting individual projects under the supervision of an economics staff member, with the objective to motivate students become familiar with frontier research in selected areas in economics.

Pre-requisite: None

#### ECON8805 ADVANCED TOPICS IN ECONOMETRICS

The course investigates further current topics in theoretical and applied econometrics. Topics will vary and reflect current student and faculty's demand and instructors' interests. Selected advanced topics may include nonparametric and semi-parametric estimation, numerical optimization, simulation methods, time series, spatial, and panel data models Pre-requisite: None

## ECON8806 ADVANCED TOPICS IN MACROECONOMICS

The objective of this course is to provide an overview of some classic topics in macroeconomics, with a view to providing students with the skills required to read and write professional articles. The main focus is on the basic analytical structure of economic models, their empirical and policy implications.

Pre-requisite: None

## ECON8807 ADVANCED TOPICS IN MICROECONOMICS

This course is organized into 3 parts, covering consumer and producer theories (Part I), market equilibrium and welfare (Part II) and selected topics in applied game theory (including part of behavioral economics) and its applications in the economics of information and incentives (Part II).

Pre-requisite: None

## GPAD1000 INTRODUCTION TO POLITICAL SCIENCE

This course is designed to provide an introduction to political science. It will examine major concepts, issues, and methods of political science through an overview of the principal subjects in the discipline. Specific topics include political philosophy, power distribution, classification of political structures, political socialization, party systems and politics, types of representation, election models, and pressure group activities.

Pre-requisite: None

#### GPAD1001 INTRODUCTION TO POLITICAL THEORY

This course examines the development of different political ideologies in modern times that attempt to address the problem of governance raised by modern mass society. Topics include Classical Liberalism, Neo-Liberalism, Socialism, Marxism and its variations, and the decline and revival of democratic theory.

Pre-requisite: None

## GPAD2000 PUBLIC SECTOR PERSONNEL MANAGEMENT

This course examines the civil service structure with respect to human resources planning, recruitment and decruitment, selection, orientation, employee training, career development, and compensation and benefits. Emphasis will be placed on civil service reform, managing workforce diversity, employment equity, performance assessment, sexual harassment, and family concerns.

Pre-requisite: None

## GPAD2001 PUBLIC SECTOR ORGANIZATIONAL BEHAVIOR

A study of the theory, research and practice related to human behavior in public sector organizations. A number of topics will be examined within the context of the civil service structure, including: the causes and effects of interpersonal and group behavior, its dynamics and influences, organizational behavior relating to organizational climates, organizational culture, formal and informal organizations, conflicts and resolutions, and people-oriented management. Pre-requisite: None

## GPAD2002 COMPARATIVE POLITICS

This course examines the theory and practice of western democratic systems. Case studies include the governments of the United States, England, France, Germany, Japan and some small democratic nations in Europe. The socialist part covers such topics as the main features and patterns of socialism, the main principles of Marxism, democratic socialism, government structure, political culture, and political participation.

Pre-requisite: None

## GPAD2003 SOCIAL SCIENCES RESEARCH METHODS

This course provides an introduction to basic research concepts and various research methods. The course introduces concepts and methodologies for conducting both qualitative and quantitative research. Topics include: induction and deduction; hypotheses testing; research design and process; archival research; survey research; field research and historical research. Pre-requisite: None

#### GPAD2004 HISTORY OF CONTEMPORARY INTERNATIONAL RELATIONS

This course will examine important contemporary themes in international relations since World War I. We will focus on the causes of major wars, the development and retreat of imperialism, the rise of nationalism and the third world, the transformation of international institutions, and international diplomacy. Although we will pay special attention to how historians use historical methods to interpret these major events, we will also look at how international theorists explain them. Students will develop the ability to grasp key concepts in international relations history, to analyze historical events with the help of theoretical tools, and to conduct international relations research that is historically grounded.

Pre-requisite: None

#### GPAD2005 INTERNATIONAL LAW

This course introduces students to public international law, the systems of norms, rules, institutions, and procedures that regulate the interaction between states as well as states and individuals. This course investigates the building blocks of international system and the forces that are transformative or destructive (or both). We will also examine and debate the role that law plays in international conflicts and some of the pressing issues affecting us today. This course also incorporates various internet technologies to arrive at a better understanding of the practice of law in an increasingly "virtual" environment.

Pre-requisite: None

## GPAD2006 PUBLIC SECTOR ORGANIZATIONAL STRUCTURE AND DESIGN

This course examines the structure and design of public sector organizations. Topics include work specialization, departmentalization, chain of command, span of control, centralization and decentralization, formalization, mechanistic and organic organizations, bureaucracy, systems theory, boundary scanning, and learning organizations. Pre-requisite: None

## GPAD2007 MACROECONOMIC POLICY OF DEVELOPMENT

The course covers topics on the methodology of economic theory and policy, including the general equilibrium, the classical model and the Keynesian IS-LM Model, the recent development of macroeconomic theory. Basic growth and development theories will also be

examined. Pre-requisite: None

## GPAD2008 GOVERNMENT AND BUREAUCRACY IN MACAO

This course examines the legal, institutional, and functional interrelationships between the legislative, executive, and judicial branches of the Macao government, and the operation of the government bureaucracy. Topics include: finance and budgeting in the public sector; the policy-making process; roles of the press and interest groups; and current civil service practices and problems occurring in the civil service.

Pre-requisite: None

## GPAD2009 POLITICS OF HONG KONG AND MACAO

This course examines the development of Hong Kong and Macao, their unification with China, and their current political problems. It focuses on the political and socio-economic changes during and the period of transition and after the turnover. Topics such as the "one country, two systems" model, Sino-British and Sino-Portuguese negotiations, the joint declarations, the basic laws, representative government, political institutions, political participation and socialization, process of democratization, civil liberties and the rule of law will be examined. Pre-requisite: None

#### GPAD2010 POLITICS OF CHINA

This course provides an introduction to Chinese politics, beginning with the rise of the Chinese Communist Party to power in 1949. It examines the Yanan and Soviet models of socialist development, their modification during the 1950s and 1960s, and political development after the death of Mao Zedong in 1976.

Pre-requisite: None

## GPAD2011 AMERICAN POLITICS

The American political system is one of the most successful and influential in the world. It has been learnt and emulated by many countries in history. The purpose of this introductory course is to help students make sense out of the seemingly puzzling and sometimes even chaotic political phenomenon in the United States. In doing so throughout the course, students are expected to acquire a balanced and comprehensive understanding of theories and practices, institutions and processes, continuities and changes, merits and defects of the American political system. For students of international relations who are interested in United States' foreign relations and its role in the world, it is a highly recommended course as American foreign policy is closely related to the dynamics of its domestic politics.

#### GPAD2012 ASIAN POLITICS

This course examines the politics of key Asian countries such Japan, South Korea, and India. It will cover countries that, traditionally and presently, have strong connections with Macao, such as Thailand, East Timor, Burma, the Philippines and Indonesia. Main themes to be covered in this course may include: government structure, political culture, corruption and governance, ethnic politics, nationalism, globalization, development strategy, gender politics, social movements and democratization.

Pre-requisite: None

## GPAD2013 POLITICAL AND SUSTAINABLE DEVELOPMENT

What is political development? What explains development and underdevelopment in the global South? How can states achieve development? This course will introduce to students the major theories and issues in the field of political development. The main focus is on the political economy of development in developing countries. We will start with a critical review of the major theories and debates in development. Then we will shift to specific public policy issues in the field of development, with a focus on exploring solutions to current problems in development. Key issues include: nation-building, democratization, human rights, urbanization, political culture,

and so on. Students will learn how to critically evaluate key concepts and theories, to develop research skills that are necessary in the field of political development. Pre-requisite: None

## GPAD2014 THE RISE OF ASIA

This course reviews the process of social, political and economic modernization in Asia. It is a multi-disciplinary course that facilitates the students to acquire the foundational knowledge of Asian power politics and dynamic changes, covering topics of political history, political culture, political economy and foreign relations of major powers in the region. With an emphasis on comparative politics it will analyze the pattern of Asian democratization: the drivers and obstacles. The course will also assess key IR issues affecting regional security, e.g. US Asia pivot, China's rise and power transition and Japan's normalization drive.

Pre-requisite: None

## GPAD2015 AN INTRODUCTION TO POLITICAL ECONOMY

This course will introduce students to fundamental perspectives of political economy. It will provide a survey of the history of political economy, examining the free market perspective of Adam Smith, the free trade argument of David Ricardo, Karl Marx's critiques of capitalism, Veblen's focus on conspicuous consumption andthe leisure class, Keynes's ideas to bring capitalist economies out of the Great Depression, and more recent neoclassical and neo-Marxist perspectives.

Pre-requisite: None

#### GPAD3000 ADMINISTRATIVE LAW I

This is a survey course on the structure and operation of public administration and the body of norms that govern it (constitution and the laws) as well as those emanated therefrom (such as regulations, orders, and directions, etc.) It further examines the nature of administrative act and the principles of its legality and rationality. Finally, the remedies for administrative actions will be analyzed.

Pre-requisite: None

#### GPAD3001 ADMINISTRATIVE LAW II

This course is a continuation of Administrative I. The concepts covered in Administrative Law I will be further explored to provide a deeper understanding of relevant theory and practice. Pre-requisite: Administrative Law I

## GPAD3002 PUBLIC FINANCE

This course examines the use of fiscal and monetary policies to achieve socio-economic and political objectives. Topics include: the functions of public budgeting, Keynesian model and the monetary revision, budgetary process, revenue budgeting, expenditure budgeting, capital budgeting, concepts of taxation, protective strategies and counter strategies, interest and exchange rates issues, auditing and evaluation. Pre-requisite: None

#### GPAD3003 PUBLIC POLICY ANALYSIS

This course aims at developing critical understanding of public policy, especially in the context of social justice. It will focus on the introduction and examination of policy analysis frameworks and decision theories. Examples will be drawn from China, Macao, and Hong Kong to demonstrate the process of policy analysis.

Pre-requisite: None

#### GPAD3004 INTERNATIONAL RELATIONS THEORY

This course introduces and examines key theories and approaches in the study of international relations, including realism and neo-realism; theories about war, security and the use of force in international relations; classical liberalism, globalization, and transformation in world politics; theories about inter-state co-operation and transnationalism; the concept of international society;

constructivism and the impact of law and norms in international relations: neo-Marxist and critical theoretical approaches to international relations; and normative theory and international ethics. Pre-requisite: None

## GPAD3005 INTERNATIONAL ORGANIZATION AND WORLD GOVERNANCE

As international organizations have become an integral part of a complex hub of a multi-level governance structure, and that international organizations have proliferated its roles in world governance under the effect of globalization, this course will study the development of international organizations and its emerging network in world governance by examining the nature, role, impact, and potential of international organizations. This course will also examine various actors who operate at the global level, including nation states, international organizations. multi-national corporations (MNCs), non-governmental organizations (NGOs) and individuals, to better understand the perspectives these actors bring to global discussions and explore the mandate of these organizations through various issues: global and multilateral governance of public health, trade, energy, food safety, peace and security, global environmental governance, and settlement of transnational disputes.

Pre-requisite: None

## GPAD3006 FOREIGN POLICY DECISION-MAKING

This course examines definition and process of foreign policy and major theoretical approaches to Foreign Policy Analysis, including realism, liberalism and constructivism. It then introduces rational, bureaucratic, organizational and psychological models of foreign policy decision-making. It also addresses the role of media and public opinion, national security and economic issue in foreign policy. Case studies are conducted on major powers like the U.S., China, Russia, the U.K., France, Germany, Japan, and the EU.

Pre-requisite: None

## GPAD3007 PUBLIC SECTOR STRATEGIC PLANNING

This course examines the importance and the process of strategic planning. Emphasis will be placed on PEST environmental scanning and SWOT analysis. Strategic planning at different levels of public sector organizations will be examined, with emphasis on proactive decisionmaking, contingency planning, environmental adaptability, and turning threats into opportunities. Pre-requisite: None

## GPAD3008 PUBLIC RELATIONS

This course examines the theories and concepts underlying public relations principles, actions, and problem-solving. It provides study and practice in public relations and promotion to influence and persuade diverse audiences, using skills and techniques to promote organizations, their policies, actions, goods, services, and public missions to create and maintain favorable public opinion. The focus is on how images and messages enhance public persuasion. Students practice promotional writing with exercises in the preparation of memoranda, press releases, features, and copy design for internal and external communications. Pre-requisite: None

## GPAD3009 STATISTICS FOR PUBLIC MANAGEMENT

This course provides an introduction to statistical techniques which can be applied to public administration. The emphasis is on explaining statistical procedures and interpreting the resulting conclusions. Topics include: introduction to statistics, organization and presentation of data, frequency distribution, central tendency and dispersion, probability and probability distributions, central limited theorem, hypothesis testing, one-sample significance test, sampling concepts, correlation analysis, measurement of association, introduction to SPSS. Pre-requisite: None

## GPAD3010 EUROPEAN UNION'S POLITICS

This course is an introduction to the governmental structures, political cultures, and policymaking processes that characterize European countries and the European Union. Case studies include the European Union, its member states, as well as other countries. Pre-requisite: None

## GPAD3011 CHINESE FOREIGN POLICY

This course examines the determinants of China's foreign policy and her foreign relations since the founding of the People's Republic of China in 1949. The course will focus on China's new social conditions, directions, and foreign policies in the rapidly changing global environment. It will also discuss the new opportunities and challenges that China is facing as a rising power on the world stage. The course is designed to examine relevant issues from both Chinese and other perspectives in order to stimulate discussion among students of different disciplines and backgrounds.

Pre-requisite: None

## GPAD3012 AMERICAN FOREIGN POLICY

More than a half century ago, the United States emerged from the Second World War as the most powerful nation on the earth. At the beginning of the 21st century it remains the sole superpower in the world. Because of its unique position in international relations, the success or failure of American foreign policy not only affects the well-being of the American people, but also has a great impact on war and peace in the rest of the world. This course examines American foreign policy from three vantage points: the evolution of American foreign policy in the Cold War period, policy making process in the context of the American policial system, and the challenges the United States is facing in the post-Cold War and post-"9.11" era. By taking this course, students will acquire a more informed, balanced, and intellectual understanding of the main features of American foreign policy, the connection between American domestic politics and foreign policy, and the potential and limitation of the United States as a world power vis-a-vis other countries.

Pre-requisite: None

## GPAD3013 SINO-AMERICAN RELATIONS

Sino-American relations are characterized by the American President Obama as the "most important bilateral relations in the world." With China's rise to the level of world power, the state of this pivotal relationship is increasingly impacting the rest of the world for better or worse? This course introduces students to the geopolitical, domestic, and ideological factors that have shaped the Sino-American relationship in the past and the present. It examines the military, economic, and diplomatic dimensions of current interactions to arrive at a clearer understanding of the past trajectory, present state, and possible future direction of relations between the United States and China.

Pre-requisite: None

## GPAD3014 CHINA-EUROPEAN RELATIONS

This course examines the international interactions between China and Europe. Following a brief historical account of bilateral relations, it focuses on issues of major concern, including economic, security, energy, environment, human rights and cultural aspects. It then introduces China's relations with major European powers, including the U.K. France, Germany, Eastern European countries, and the EU. The unique role of Hong Kong and Macao in Sino-European relations is also discussed.

Pre-requisite: None

## GPAD3015 FOREIGN POLICY OF THE EUROPEAN UNION

European Union is both an international organization of 27 European states and a supranational polity governed by a legislative and judicial bodies guided by the EU law and its founding treaties. Its double nature – an international organization and a supranational polity - is reflected in its foreign policy. The course examines the competencies and functioning of the foreign policy-making bodies of the European Union – the Council, the European Commission and Parliament and the High Representative for Foreign and Security Affairs. In addition, it examines the processes and procedures of foreign-policy decision making, including the role of individual

Member States and their governments in the shaping and implementation of the EU foreign policy. Particular attention will be given to separate strands in the EU's foreign policy - its international trade policy, international humanitarian and development aid policies as well as its policies regarding international conflicts such as those in Iraq and Afghanistan. Pre-requisite: None

## GPAD3016 CHINA-EAST ASIAN RELATIONS

This course explores China's relations with some major players in East Asia such Japan, South Korea, Russia and ASEAN countries. Historically China's relations with these countries were far from being peaceful and cooperative. In recent decades, China has invented a new strategy of "peripheral diplomacy" which has significantly improved its relations with East Asian neighbors. However some outstanding problems and difficulties remain in China-East-Asian relations including territorial disputes, historical and cultural discord, and ideological and geopolitical conflicts. The course will analyze China's major bilateral relations as well as its diplomacy with multilateral institutions and organizations in the region.

Pre-requisite: None

## GPAD3017 INTERNATIONAL POLITICAL THEORY

The course aims to explore international relations from the perspective of political theory. We examine the meaning of morality and ethical judgment in the context of a number of issues and practices in international relations, including wars, terrorism, human rights, state sovereignty, globalization, role of international law and global inequality. Students will critically assess the ethical practices of states and non-state actors through theoretical analysis, case studies and simulation exercises.

Pre-requisite: None

## GPAD3018 CAPITALISM AND MODERNITY

This course examines the foundations of political economy. While these foundations were originally optimistic, promising human progress through economic progress, they were challenged in the 19th century by both reactionary pessimism and by radical critique. In our own time, growing awareness of the problems of generating unlimited growth and granting unrestricted capital mobility across nations have led some to question the idea of economic progress. The course demonstrates the historical novelty of capitalism and demonstrates that the human impulse to accumulation of capital is in no way a fundamental part of the human condition. By contrast with today, until the early 19th century in Europe, the needs of the society have historically taken precedence over the needs of the economy. The writings of classical thinkers in political theory or of economics is assumed. Pre-requisite: None

## GPAD3019 CONFLICT AND COOPERATION IN INTERNATIONAL RELATIONS

This course is an introduction to the causes, nature and processes of conflict and cooperation in international relations. Historical and modern cases will be combined with an overview of theoretical frameworks to provide students with a comprehensive understanding of conflict and cooperation in the contemporary world.

Pre-requisite: None

## GPAD3020 RELIGION IN INTERNATIONAL RELATIONS

This advanced course will examine the complicated relationship between religion and global politics. Topics will include the problem of defining religion as an analytical category, the religious origins of modern state sovereignty, the role of religion in violence and peacemaking, varieties of religious fundamentalism, the politics of sacred spaces and conflicts between religious practices and emerging human rights norms. Readings will draw broadly from political science, religious studies, sociology, and history. A prior course in international relations, comparative politics, or religious studies is required. Students not meeting this requirement will be admitted at the discretion of the instructor. Pre-requisite: None

## GPAD3021 DEMOCRACY AND DEMOCRATIZATION

This course aims to study democracy in theory and practice based a comparative approach. It looks into the transition and consolidation processes that began in the late 20th century. Is democracy the "best" institutional arrangement in modern or post-industrial society? With the collapse of communism in the 90s, has history "ended"? Are "Asian values" anathema to Western liberal democratic "values"? What are the conditions, both domestic and international, that help explain democratic development? What explains the resurgence of authoritarianism? How important is deliberative democracy? In addition to addressing the problems with democratic transition and consolidation, this course examines the concepts of democracy and democratization, deliberative process in making public policy, and their significance and relevance for academics. politicians. activists and citizens. Pre-requisite: None

## GPAD3022 E-GOVERNMENT AND E-GOVERNANCE

The government's use of Information and Communication Technologies (ICTs) is not only a tool to achieve better government but also aims at good governance. This course is divided into two parts. The first part covers issues on the establishment of e-government, including: reasons to embrace e-government, challenges to e-government, planning, implementation and management of e-government, and types and forms of e-services. The second part focuses on the use of ICTs to bring citizens to the government process for the sake of good governance; topics include e-participation, e-deliberation, e-voting and e-democracy Pre-requisite: None

## GPAD3023 GAME THEORY APPLICATIONS IN POLITICS AND ADMINISTRATION

This course is an introduction to game theory, concentrating on applications in politics and public management. Game theory is the formal method of examining interdependent decisions. An interdependent decision is one where what you do will depend on what someone else does. For example, a politician running for office may consider how voters will react to an issue stance. Topics include prisoner's dilemma, coordination games, signalling in politics, etc. Game theory provides tools for evaluating these situations. By the end of the course, students should be able to recognize strategic situations, apply formal models, and "solve" them. Pre-requisite: None

## GPAD3024 GOVERNANCE REFORM IN CONTEMPORARY CHINA

This course deals with governance reforms (and their limitations) in China during the transition to market socialism. It explores the factors necessitating the reforms, the impact of the reforms on state-society relations, the emergence of a civil society and the rising political aspiration of the people.

Pre-requisite: None

## GPAD3025 LABOR POLITICS

The class provides an overview of labor and employment relations, including the perspective of working people and their organizations. Some of the topics covered in this course include the changing nature of work, workers and workers' organizations; the impact of technology, the economic cycle, class, immigration, race, ethnicity and gender; the role of government in labor policy; the history of unions, their role in politics and challenges the labor movement faces today. Following this course, students will demonstrate an understanding of the policy and political issues relating to labour, and the political nature of work.

Pre-requisite: None

## GPAD3026 POLITICS OF THE TOURISM ECONOMY

Tourism has become an important engine of economic growth in many Asian societies. This turn to tourism however has generated a set of social, political and ecological conflicts between and within the guests and the host societies. This course aims to train students with a better understanding on the socio-political dynamics unleashed by this development strategy. It is divided into three sections. The first part introduces students to various theories accounting for the rise of tourism and its transformation into a core development strategy in the post-industrial world. The second part covers main political conflicts inside tourist economies involving ethnicity, gender, labour, environment and class. The final section devolves into detailed studies of thematic topics (for instance, heritage tourism, national parks, ecotourism, sex tourism, casino tourism) and/or country studies (for instance, tourism policy of China, Singapore, South Africa) in order to provide more nuanced illustrations of the political dynamics of tourism economies. Pre-requisite: None

## GPAD3027 SOCIAL POLICY AND ECONOMIC DEVELOPMENT IN MACAO

Industrial transformation and the change of demographic profile of Macao Special Administrative Region steer to revision of social policy in parallel to its economic development. This course focuses on the evolution of Macao's social policy corresponding to the changing socioeconomic-political circumstances. It aims to provide a comprehensive understanding of the impact of demographic profile, poverty, education/ health inequality and regional integration on social policy. Apart from the introduction of concepts and theories for the understanding of social policy, some advanced statistical methods, like the decomposition of the Gini Coefficient, cluster analysis and factor analysis, will be introduced and applied for analyzing the effect of social policy change.

Pre-requisite: None

#### **GPAD3028 INTERNSHIP**

In collaboration with relevant government departments and agencies, private and public companies, and other social organizations, this course provides short-term work placement opportunities in Macao and elsewhere for students in the Department so as to enhance their skills of applying academic knowledge to solve real world problems. Pre-requisite: None

# GPAD3029 INDEPENDENT STUDIES ON POLITICAL SCIENCE AND PUBLIC ADMINISTRATION

In this course individual students and instructors will work together to select a specific topic for intensive study. This study will be arranged in the form of weekly thesis workshop. The instructor will train the participants advanced method of research, including thesis design, data processing and analysis and writing skills. The students will present their research findings, project composition and thesis contents (structure, argument and conclusion) in the class and engage fellow students for meaningful discussion.

Pre-requisite: None

## GPAD3030 PUBLIC CHOICE

Essentially all public policies can be characterized as political equilibria among self-interested participants in political process. Public policies change when these equilibria change. Political and legal institutions affect those equilibria, because they create the rules of the political game. This course provides a survey of the public choice literature and explores the connections between political institutions, politics, and public policy. In particular, methodologies of neoclassical economic analysis as applied to political science will be explored. It is hoped that students will be able to use this toolkit.

Pre-requisite: None

## GPAD3031 PUBLIC MANAGEMENT IN ASIAN STATES

This senior level course traces development in the field of public administration based on a comparative approach in studying administrative reforms in Asian societies, such as Singapore, Hong Kong, Macao and China (at least two of these states). It takes into account the paradigmatic shift in the discipline in view of the challenges posed by the "new public management (NPM) paradigm" since the 1980s. In assessing public administration reform outcomes, this course encourages students to explore viable alternatives or approaches (e.g. neo-Weberian school, governance, participatory and networks) in tackling reform problems pertaining to the implementation of NPM in Asian states.

## GPAD4000 CONSTITUTIONAL LAW

This is an introductory course to familiarize the students with the inception of constitutional movements and the specific goals of having a constitution on the one hand and constitutional theories and practices on the other. The contents and classifications will be briefly surveyed. Of pivotal importance is the mechanisms of its working in a society; therefore, constitutional tribunals and its like, such as the ordinary reviewing courts, will be closely examined. Pre-requisite: None

## GPAD4001 RESEARCH PROJECT

Student is required to identify and conduct an individual research project under the supervision of a staff member. Topics are selected within the discipline of government and public administration.

Pre-requisite: None

## GPAD4002 INTERNATIONAL SECURITY

This course examines the fundamental elements and factors underlying global and regional security. The course will analyze the historical evolution of international security since World War II, from the Cold War to the current conflicts. Contending theoretical arguments, such as Realism, Trans-nationalism and Constructivism, will be presented and critically examined. Students will be encouraged to study the competing strategies employed by different players and to predict the potential ramifications. It will also study the evolution of security study as a subfield of international relations with a focus on the emergence of non-traditional security issues and its increasing importance.

Pre-requisite: None

## GPAD4003 GRADUATION PROJECT ON INTERNATIONAL RELATIONS

In this course, students are required to identify and conduct an individual research project on international relations independently under the supervision of the instructor. Topics are selected within the discipline of international relations broadly defined by students in consultation with the instructor. A substantive research paper with theoretical rigor and empirical richness is expected from students. The course also serves the function of assessment of overall knowledge, analytic skill, writing capability, and original thinking that students have acquired in the course of four-year study in the programme.

Pre-requisite: None

## GPAD4004 ADMINISTRATIVE ACCOUNTABILITY AND ETHICS

This course examines the different types of accountability and issues regarding ethical management. Topics include social responsibility, social responsiveness, professional ethics, value-based management, different views of ethics, factoring affecting managerial ethics, managing ethical conflicts, administrative transparency, sustainable development, and the "greening" of management.

Pre-requisite: None

## GPAD4005 PROGRAMME EVALUATION AND PERFORMANCE ASSESSMENT

This course examines the process and issues regarding performance measurement at the organizational, programme, and individual levels. A number of approaches to performance measurement will be introduced. The process of goal setting, establishing achievable objectives, setting performance targets and indicators, data collection, setting regular reviews, and providing feedback is examined from the perspective of organizational learning in the context of public sector management.

Pre-requisite: None

#### GPAD4006 PUBLIC ADMINISTRATION: MACAO AND HONG KONG

This course examines the development of Hong Kong and Macao, their unification with China, and their current political problems. It focuses on the political and socio-economic changes during the period of transition. Topics such as the "one country, two systems; model, Sino-British

and Sino-Portuguese negotiations, the joint declarations, the basic laws, representative government, political institutions, political participation and socialization, process of democratization, civil liberties and the rule of law will be examined. Pre-requisite: None

## GPAD4007 PUBLIC ADMINISTRATION: CHINA

This course examines the public administrative institutions and processes in China. Topics include the reform of the cadre system and its relationship with other institutional changes, the anti-corruption policy, social welfare policy, budgeting, and the relationship between the central and local governments.

Pre-requisite: None

#### GPAD4008 SELECTED TOPICS IN PUBLIC ADMINISTRATION

This course is designed to be highly flexible to allow examination and discussion of issues in public administration that warrant attention. Discussion topics will be selected by the instructor with emphasis on current events.

Pre-requisite: None

## GPAD4009 RESEARCH PROJECT ON PUBLIC ADMINISTRATION

This subject provides opportunity for students to do advanced research and to peruse academic scholarship in the field of public administration and management as well as to evolve as independent thinker. Different to the Research Project course, it allows students to explore their aptitude for research with theoretical concepts and individualized framework. Students are expected to address questions and issues for which no known or generally accepted answers exist. At the end, students have to present and defense their research findings in an examination committee.

Pre-requisite: None

## GPAD4010 INTERNATIONAL PUBLIC POLICY

This course aims to help students better understand the various important international public policy issues facing the world today. As globalization deepens around the world, states are challenged by pressing issues such as poverty, climate change, transnational migration, HIV and AIDS, and civil wars. On the one hand, states authority is weakened as a result of increasingly powerful NGOs, global firms, and individuals. On the other hand, certain global issues such as climate change cannot be resolved without the coordination among states. Thus we will pay close attention to the ways states and the global civil society interacts. This course will discuss these issues in details, and explore possible solutions to some of the problems. Theoretical frameworks in international relations (realism, liberalism, and constructivism) will be employed to analyze the issues.

Pre-requisite: None

## GPAD4011 INTERNATIONAL ENVIRONMENTAL AND ENERGY POLICY

This course examines the nature and emergence of international environmental problems, issue of energies and the response of the international community. Looking at a number of cases, including ozone depletion, desertification, bio-diversity, global warming, and competition for energy resources, the student will investigate international environmental and energy policies and the extent to which such policies and institutions provide effective governance, the extent to which international relations theory can explain such policies and also discuss the ethical dimensions of decision making.

Pre-requisite: None

## GPAD4012 INTERNATIONAL HUMAN RIGHTS POLICY

In the era of rapid globalization, human rights and their protection have increasingly become subject of international policies of governmental as well non-governmental actors. And yet, in spite of growing international protection of human rights, there are still many unresolved questions regarding their scope and implementation. For example, what rights are to be

recognized as universal human rights? And which institutions - international or domestic - are obliged or entitled to protect human rights of individuals and groups? These highly controversial guestions will be examined in the context of current theories of human rights and of the role of international institutions such as the UN. The course explores the history of international recognition and protection of human rights and the major international declarations and covenants regarding human rights (such as the UN and European covenants on human rights). The role of international organizations of states (the UN, African Union and the like) as well as non-governmental organizations such as Human Rights Watch and Amnesty International is to be discussed. The course also explores current developments in the theory and practice of international protection of human fight such as the R2P – Responsibility to Protect. Pre-requisite: None

## GPAD4013 EAST ASIAN INTERNATIONAL RELATIONS

Will China become a threat to international stability as its power continues to grow in the coming years? Will the twenty-first century be the century of the Asia-Pacific? Is the East Asian model of development sustainable? How does globalization affect security, political economy, human rights, and environment in East Asia? How should the international society deal with the North Korean nuclear crisis? This course aims to answer the above questions. We will start with a survey of major theories in international relations, including realism, liberalism, and constructivism. Our emphasis will be on the advantages and disadvantages of each theory in explaining major events in East Asia. We will pay special attention to East Asian histories, particularly since 1945. Topics to be addressed include: patterns of conflict and cooperation in East Asia, security arrangements, international political economy, globalization, human rights, and new security concerns. After completing this course, students should be able to apply international theories to analyze various political and economic issues concerning East Asia. Pre-requisite: None

## GPAD4014 RESEARCH PROJECT ON INTERNATIONAL RELATIONS

This subject provides opportunity for students to do advanced research and to peruse academic scholarship in the field of international relations as well as to evolve as independent thinker. Different to the Research Project course, it allows students to explore their aptitude for research with theoretical concepts and individualized framework. Students are expected to address questions and issues for which no known or generally accepted answers exist. At the end. students have to present and defense their research findings in an examination committee. Pre-requisite: None

#### GPAD4015 SELECTED TOPICS IN INTERNATIONAL RELATIONS I

This course is designed to be highly flexible to allow examination and discussion of important issues in international relations that may not be covered by other courses in international relations. Discussion topics will be selected by the instructor with emphasis on current events. Students are encouraged to apply learned concepts, theories and analytic approaches to critically understand and explain international events and phenomena in the real world. This course also provides an opportunity for students to independently investigate and explore international issues that intellectually interest them.

Pre-requisite: None

## GPAD4016 SELECTED TOPICS IN INTERNATIONAL RELATIONS II

This course is designed to be highly flexible to allow examination and discussion of important issues in international relations that may not be covered by other courses in international relations. Discussion topics will be selected by the instructor with emphasis on current events. Students are encouraged to apply learned concepts, theories and analytic approaches to critically understand and explain international events and phenomena in the real world. This course also provides an opportunity for students to independently investigate and explore international issues that intellectually interest them. Pre-requisite: None

## GPAD4017 SELECTED TOPICS IN INTERNATIONAL RELATIONS III

This course is designed to be highly flexible to allow examination and discussion of important issues in international relations that may not be covered by other courses in international relations. Discussion topics will be selected by the instructor with emphasis on current events. Students are encouraged to apply learned concepts, theories and analytic approaches to critically understand and explain international events and phenomena in the real world. This course also provides an opportunity for students to independently investigate and explore international issues that intellectually interest them.

Pre-requisite: None

#### GPAD4018 SELECTED TOPICS IN INTERNATIONAL RELATIONS IV

This course is designed to be highly flexible to allow examination and discussion of important issues in international relations that may not be covered by other courses in international relations. Discussion topics will be selected by the instructor with emphasis on current events. Students are encouraged to apply learned concepts, theories and analytic approaches to critically understand and explain international events and phenomena in the real world. This course also provides an opportunity for students to independently investigate and explore international issues that intellectually interest them.

Pre-requisite: None

## GPAD7100 PUBLIC ADMINISTRATION: THEORY AND PRACTICE

This course provides an introduction to the theories of public administration in the modern state. Moreover, theories are discussed and supported with reference to relevant ideas and actual practical cases.

Pre-requisite: None

#### GPAD7101 PUBLIC POLICY ANALYSIS

This course introduces the methods of public policy analysis by reviewing the main theoretical approaches in the field and examining key policy issues in Macao, Hong Kong and mainland China. The course has three main components: First, basic concepts in the analysis of the policy-making process and the political and institutional contexts of policy making. Second, the major theoretical approaches to the study of policy making, policy implementation and evaluation. Finally, several important policy issues in Macao, Hong Kong and mainland China will be illustrated as case studies.

Pre-requisite: None

#### GPAD7102 PUBLIC FINANCE

This course examines the nature, processes, causes and effects of public budgeting as a fiscal instrument to enhance economic growth, as a mechanism for the allocation of scarce resources, and as a management tool for executive planning and financial control. Pre-requisite: None

#### GPAD7103 HUMAN RESOURCES MANAGEMENT

This course examines the policies and practices of human resources management in the public sector from a comparative perspective. Specific topics include staffing, training and development, performance management, and staff relations. The course also considers recent human resources management developments in the public sector in the rest of China and overseas. Pre-requisite: None

#### GPAD7104 PUBLIC POLICY IN CHINA

This course focuses on the public policy-making system in mainland China and includes an examination of policy making in specific sectors, such as industry, agriculture and the open-door policy.

Pre-requisite: None

## GPAD7105 PUBLIC ADMINISTRATION IN CONTEMPORARY CHINA

This course examines the context of public administration in contemporary China: party and state institutions, central and local relations, the role of the state in the economy, and state and society relations.

Pre-requisite: None

## GPAD7106 ORGANIZATIONAL BEHAVIOR

This course focuses on the nature, types and characteristics of organizations as well as the tools and skills used in management. Emphasis is placed on problem solving. Topics include organizational structure and design, control and distortions, bureaucratic corruption, administrative leadership, motivation and work behavior, decision-making and resource management.

Pre-requisite: None

## GPAD7107 POLITICAL ECONOMY

This course surveys the objectives pursued by government in managing the economy, the means employed in pursuit of those objectives, and theories concerning economic behavior of governments.

Pre-requisite: None

## GPAD7108 RESEARCH METHODS IN PUBLIC ADMINISTRATION

This course covers theories of research, the structure and process of scientific inquires, modes of observation and data analysis, and basic statistics, which can apply to public administration. Pre-requisite: None

#### GPAD7109 CONSTITUTIONAL LAW

This is an introductory course to familiarize the students with the inception of constitutional movements and the specific goals of having a constitution on the one hand and constitutional theories and practices on the other. The contents and classifications will be briefly surveyed. Of pivotal importance is the mechanisms of its working in a society; therefore, constitutional tribunals and its like, such as the ordinary reviewing courts, will be closely examined. Pre-requisite: None

## GPAD7110 ADMINISTRATIVE LAW

This is a survey course on the structure and operation of public administration and the body of norms that govern it (constitution and the laws) as well as those emanated therefrom (such as regulations, orders, and directions, etc.) It further examines the nature of administrative act and the principles of its legality and rationality. Finally, the remedies for administrative actions will be analyzed.

Pre-requisite: None

## GPAD7111 DECISION MAKING: THEORY AND PRACTICE

As a foundational course in the MPA curriculum, this course will focus on theoretical and empirical analysis of decision making. The goals of the course are to introduce a variety of accepted theories in understanding decision making. The course seeks to help students familiarize themselves with decision making within organizations and collective choices with conflicting interests, as well as coordination and institutional solutions to problems related to collective choices. To help students think analytically about the ways decisions are made within organizations in the political, economic and security arena. The knowledge gained will be applied to several real-life cases in American foreign and security policies. Comparison will be made between America and China.

Pre-requisite: None

## GPAD7112 RESEARCH DESIGN

This course aims to improve students' ability to design feasible and theoretically sound research

projects. The course will introduce a variety of research designs for social sciences, from the commonly used approaches, such as survey, focus group, and case study, to the multidisciplinary approach of operations research, such as game theory and simulation. Heavier emphasis will be placed on the commonly used approaches. This course emphasizes improving the ability to find good solutions to research design problems, rather than introducing different research methods. Students enrolling in this course are required to have taken at least an introductory research method course at either graduate or undergraduate level. Pre-requisite: None

## GPAD7198 PROJECT REPORT

The Project Report is an extended research essay to report findings of an individual research project. Students should undertake a systematic study into a topic in the scope of international relations, broadly defined. They should apply substantive knowledge and develop analytical skills, acquired from the Programme and beyond. They are required to define a central research question, design a proper analytical process, and develop a reasonable argument. The body of the report should be organized into sections in a logical way and follow the standard format and styles. It must be written in English or Chinese.

Pre-requisite: None

## GPAD7300 PUBLIC ADMINISTRATION: THEORY AND PRACTICE

This course begins with a brief review of the development in public administration theories and provides a comprehensive coverage of relevant theories and concepts including: organizational management, personnel systems, public policy and finance, performance assessment, ethics, civil service reforms, and public sector development. The course examines the actual applications of the theories and concepts in Macao, Hong Kong and other governments and encourages students to analyze their effects and consequences. Emphasis will be placed on studying East Asia summits, international forums, and Asia-Europe meetings. Pre-requisite: None

## GPAD7301 PUBLIC POLICY ANALYSIS: THEORY AND PRACTICE

This course introduces the methods of public policy analysis by reviewing the main theoretical approaches in the field and examining key policy issues in Macao, Hong Kong and the mainland. The course has three main components: First, basic concepts in the analysis of the policy-making process and the political and institutional contexts of policy making; Second, the major theoretical approaches to the study of policy making, policy implementation and evaluation. Finally, important policy issues, such as public consultation, social justice and social harmony, in Macao, Hong Kong and the mainland will be illustrated as case studies. Pre-requisite: None

## GPAD7302 SEMINAR ON POLITICAL SCIENCE

This course introduces students to the political ideas, concepts, theories, models, and approaches to the study of political practice in the real world. It explains the essence of politics in the determination of resources allocation and in the distribution of benefits. Students will acquire the skills to relate to the real world of politics by employing the analytical concepts and theories gained from the course to study the interactions among informal participants, formal decision-makers, and institutions. In addition, the course also sensitizes students to the impact of globalization and the international environment in which national political systems or nation-states interact. Emphasis will be placed on issues related to public consultation, democratic development, social harmony and conflict management.

Pre-requisite: None

## GPAD7303 SEMINAR ON INTERNATIONAL RELATIONS

This course examines theories and approaches in the study of international relations, such as realism and neo-realism, classical liberalism, transnationalism, constructivism, Marxism and neo-Marxist, etc. Detailed analysis of current and historical events will be presented to enhance students' understanding of relevant concepts. Students are required to present their own critical

analysis of selected cases to demonstrate their understanding and ability. Pre-requisite: None

## GPAD7304 SEMINAR ON CONTEMPORARY POLITICAL THEORY

This course covers the main positions in contemporary political theory – liberalism, communitarianism, multiculturalism, deliberative democracy and feminism. Going beyond the various labels and isms, it addresses specific theorists and theories in some details. Students will learn to appreciate the critics of liberalism—its failure to take seriously the importance of community, cultural membership and democracy as well as its inability as a distributive paradigm for eliminating the oppression of women.

Pre-requisite: None

## GPAD7305 SEMINAR ON INTERNATIONAL POLITICAL ECONOMY

This course examines the political process of international economy, and the interaction between state and market, and power and wealth in international relations. Issues on trade, investment, development, globalization and regional integration will be examined in details. Different schools of thought and approaches will be explained. Regional cases, especially the implications of the rising China, will be examined. Students are required to present critical analysis to demonstrate their understanding and ability.

Pre-requisite: None

#### GPAD7306 INTERNATIONAL ORGANIZATIONS AND GLOBAL GOVERNANCE

The course will examine the central issues of global governance today. In particular, the issues of the protection of environment and global warming, global security, global financial and trade regulation, humanitarian and developmental aid. The role and impact of the major international organizations such as the UN, IMF, World Bank, WTO will be examined in this context. Emphasis will be placed on examining negotiation skills, the role of negotiators and representation, and Macao as a bridge between China and Europe. In addition, the impact of regional organizations such as the EU and ASEAN will be discussed. The challenges and opportunities that face these international organizations in the continuing globalization of politics and economy will also be addressed.

Pre-requisite: None

#### GPAD7307 INTERNATIONAL LAW

This course introduces and examines key theories and approaches in the study of international relations, including realism and neo-realism; theories about war, security and the use of force in international relations; classical liberalism, globalization, and transformation in world politics; theories about inter-state co-operation and transnationalism; the concept of international society; constructivism and the impact of law and norms in international relations; neo-Marxist and critical theoretical approaches to international relations; and normative theory and international ethics. Pre-requisite: None

## GPAD7308 CONSTITUTIONAL LAW

This is an introductory course to familiarize the students with the inception of constitutional movements and the specific goals of having a constitution on the one hand and constitutional theories and practices on the other. The contents and classifications will be briefly surveyed. Of pivotal importance is the mechanisms of its working in a society; therefore, constitutional tribunals and its like, such as the ordinary reviewing courts, will be closely examined. Pre-requisite: None

## GPAD7309 ADMINISTRATIVE LAW

This is a survey course on the structure and operation of public administration and the body of norms that govern it (constitution and the laws) as well as those emanated therefrom (such as regulations, orders, and directions, etc.). It further examines the nature of administrative act and the principles of its legality and rationality. Finally, the remedies for administrative actions will be analyzed. Pre-requisite: None

## GPAD7310 PUBLIC FINANCE: THEORY AND PRACTICE

This course examines theories of public finance from the perspectives of resources allocation, re-distribution of income and wealth, and economic stability and growth, with an emphasis on the impact of budget decisions on social justice and social harmony. The course will begin with examining relevant theories and conclude by studying actual practices in Macao, Hong Kong, the mainland and other governments. Specific emphasis will be placed on the budgetary process, budget assessment, and budget reforms. This course will also examine the implications of monetary policy, such as interest rate, exchange rate and money supply, on public finance. Pre-requisite: None

## GPAD7311 COMPARATIVE HUMAN RESOURCES MANAGEMENT

This course examines the policies and practices of human resources management in the public sector. Emphasis will be placed on comparing the differences between the private and public sectors. Specific topics include staffing, training and development, performance management, and staff relations. The course also considers recent human resources management developments in the public sector in the rest of China and overseas. Pre-requisite: None

## GPAD7312 RESEARCH METHODS IN PUBLIC ADMINISTRATION

This course covers theories of research, the structure and process of scientific inquiry, modes of observation, research design, sampling methods, threats to validity and reliability, and data collection and analysis. Both quantitative and qualitative research methods will be covered in this course. In particular, methods for policy and programme evaluations will be examined in details with practical cases.

Pre-requisite: None

#### GPAD7313 SEMINARS ON CURRENT ISSUES

This course examines theories and approaches in the study of international relations, such as realism and neo-realism, classical liberalism, transnationalism, constructivism, Marxism and neo-Marxist, etc. Detailed analysis of current and historical events will be presented to enhance students' understanding of relevant concepts. Students are required to present their own critical analysis of selected cases to demonstrate their understanding and ability. Pre-requisite: None

#### GPAD7314 SEMINARS ON SELECTED TOPICS OF INTERNATIONAL RELATIONS

The seminars aim at ensuring that students gain adequate knowledge of the recent developments in international relations theory, recent international policies, and new policy initiatives and programmes. For example, topics may include recent developments in one or several theoretical approaches to international relations (constructivism or neoliberalism). In addition, new international policies or initiatives of regional organizations or individual states may be examined, and their future development and impact discussed. Among possible topics are the EU initiatives in its relations with China, or Asia, or the new foreign policies of individual governments in the region (e.g. Australia).

Pre-requisite: None

#### GPAD7315 SEMINARS ON SELECTED TOPICS OF PUBLIC MANAGEMENT

The seminars aim at ensuring that students gain adequate knowledge of recent developments in public management theory and practice. Emphasis will be placed on public decision making process, public consultation process and crisis management (e.g., SARS, bird flu, Asian Financial Crisis). Among the topics selected include new theoretical approaches to public management, and recent initiatives for civil service reform. In relation to the latter, special attention will be paid to the interest and prospective employment of our students. In consequence, recent innovations or reforms of public management in Macao, Hong Kong and the mainland will be discussed in some details.

Pre-requisite: None

## GPAD7398 PROJECT REPORT

The Project Report is an extended research essay to report findings of an individual research project. Students should undertake a systematic study into a topic in the scope of international relations, broadly defined. They should apply substantive knowledge and develop analytical skills, acquired from the Programme and beyond. They are required to define a central research question, design a proper analytical process, and develop a reasonable argument. The body of the report should be organized into sections in a logical way and follow the standard format and styles. It must be written in English.

Pre-requisite: None

## GPAD7504 RESEARCH METHODS

This course aims to introduce a variety of research methods to assist the students in designing feasible and theoretically sound research studies. The course consists of two parts: lecture and proposal presentation.

Pre-requisite: None

## GPAD7505 ACADEMIC WRITING

This course, intensive in its nature, introduces students to the basics of academic writing. Aspects of focus include style, structure, grammar and punctuation. The course will also allow learners to explore issues regarding process of writing. Pre-requisite: None

## GPAD7510 GLOBALIZATION AND EU'S FOREIGN DIRECT INVESTMENT

It illustrates the growing importance of globalization and multinational enterprises in the world economy. The theories that explain the internationalization process of companies will be analyzed, as well as the evolving organizational structures according to the degree of multinationality of firms. The tendencies of multinational enterprises to enter into joint ventures and other collaborative agreements will also be studied. Special attention will be devoted to the outward direct investment of the EU.

Pre-requisite: None

## GPAD7514 EU AND SUSTAINABLE DEVELOPMENT

The 'Lisbon Strategy' was the EU's response to globalization in the first decade of this century and it is succeeded by the 'Europe 2020' for the second decade. The course introduces the economic, social and environmental dimensions of this ten year plan and examines how this agenda addresses the structural problems and issues about the sustainable development of the EU.

Pre-requisite: None

## GPAD7520 EU AND THE WORLD III: THE REST OF THE WORLD

It introduces the relations between EU and Africa and EU with the America. Europe has with Africa historical relations, from its colonial past. It is therefore a special relation with positive as well as negative outcomes. EU-African relations will be analyzes against the backdrop of recent developments of Africa in the international context, namely Africa-China relations and Europe reactions to the development of these relations. On the other hand ED has strong relations with some of the leading countries of South America, particularly those belonging to Mercosur. Region-to-region dialogue as well as bilateral relations will be analyzed. Lastly, the EU-US relations, is the comer stone, the most important single element of EU's external dimension. All implications of those relations from the bilateral perspective as well as multilateral implications will be covered, as well as the implications of this Atlantic connection to overall EU relations with the world in the various dimensions of the CSFP as well as CESDP.

## GPAD7521 PUBLIC POLICY AND POLITICS

This is an introductory course in the theory and practice of public policy wherein the problems, agendas and formulation of policy formation will be discussed. It also examines several theories

of public policy including theories of policy adoption and policy implementation. The course will conclude with discussions on topics such as policy impact, evaluation and change in public policy making.

Pre-requisite: None

## GPAD7522 GOVERNMENTS AND EU GOVERNANCE

This course discusses the institutional dimension of the EU as a multilevel civilian political entity, while addressing the socio-economic dimension of multilevel governance and the Lisbon Strategy (2000-2010). It also allows students to have understandings in the institutional framework of the EU external relations as well as the EU global governance and the concepts of multilateralism.

Pre-requisite: None

#### GPAD7523 SOCIAL POLICY AND EUROPEAN IDENTITY

The course approaches the welfare states and social model in the EU from the legislation phases with respect to the relevant economic policies under Europe's democratic background and also introduces the concepts about European Identity. There are needs for the reform in the social policies regarding its sustainability while the EU is facing globalization and other social and economic problems.

Pre-requisite: None

#### GPAD7524 HISTORY OF EUROPEAN INTEGRATION

This course introduces students to the process of the construction of the European Union since the end of the Second World War: it analyzes the essence of every stage in the integration processes; discusses the major driving forces and challenges in each stage, including socialeconomic, political, institutional and individual factors. In this course students should develop their abilities of theoretical and empirical analysis of processes and stages of the European integration. Through lectures and discussions, students should be able to distinguish between primary information and secondary one, to express one's own opinion clearly and support it with evidence and arguments. Students should also extend their knowledge by searching for relevant readings.

Pre-requisite: None

#### GPAD7525 SEMINAR ON SELECTED TOPICS ABOUT EUROPEAN POLITICS, GOVERNANCE, SOCIAL OR PUBLIC POLICIES

The integration process in Europe is an ever evolving and multi-dimensional one. This seminar provides flexibility for introducing the latest topics about EU's governance, politics social or public policies. The EU is facing several challenges and at times, conflicting socio-economic and political developments. Those issues need to be addressed with a complex conjunction of various policies from different angles that constitutes important features of the continuous process and progress of European integration.

Pre-requisite: None

## GPAD7526 INTRODUCTION TO MACROECONOMICS

The course is composed of theoretical and factual contents. Its objective is to provide the students with the Microeconomic theories at intermediate level and it is combined with the historical background of the European Union, the rise of the integration and also a general picture about the European Union today. The core of the theoretical part falls onto the IS-LM as well as the AD-AS model while the students should understand how the economic policies function.

Pre-requisite: None

#### GPAD7527 THEORY OF EUROPEAN INTEGRATION

It presents the different stages of integration (from the customs union, free trade area, common market... to the economic union), problems and benefits, policies and the movement for the completion of a single market, supported by empirical studies and theories from both the political

and economic point of view upon the dimensions of widening and deepening. Pre-requisite: None

## GPAD7528 ECONOMIC POLICIES OF THE EU

This course explains the economic policies for the internal market, the financing and institutional set-up of the policies, Agricultural Policy, Cohesion Policy (Structural Funds), and the structural reforms along with the dynamic integration process in Europe. Pre-requisite: None

## GPAD7529 THE EUROPEAN MONETARY UNION IN THE WORLD CONTEXT

The course includes an introduction about the European monetary unification in an historical perspective, the costs and benefits of a monetary union, the governance and the strategy of the European Central Bank, with the analysis of the enlargement process of both the European Union and the Eurozone. It also discusses the global role of the euro and the development of the single European capital market.

Pre-requisite: None

## GPAD7530 SEMINAR ON SELECTED TOPICS ABOUT EUROPEAN ECONOMY

The seminar serves as a platform for students to understand and discuss the up-to-date topics and trends of EU's economic growth and models of development. It is especially important to notice the EU experiences a series of economic challenges like the sovereign debt crisis, recession. Brexit ... etc. Reforms and new strategies at both the Union and national levels are necessary to ensure the solidarity of the integration process in Europe. Technological innovation, smart and inclusive cities, infrastructure development and structural investment, are just some of the major issues that will be featured in the course.

Pre-requisite: None

## GPAD7531 EU LAW I: INSTITUTIONS AND TREATIES

The course explains the legal foundation of the European Communities/Union, which is based on the treaties signed by the member states, and it introduces the decision-making procedures. roles and competences of the institutions, and especially the Commission, Council, Parliament, Court of Justice ... etc. in the process of construction of the European single market. Pre-requisite: None

#### GPAD7532 EU LAW II: FOUR FREEDOMS

The course's rationale is to further the students' understanding about the EU internal market and the rules governing it with the focus on the four freedoms and the principles regulating free movement within the EU. Its builds upon the foundation material in ECIEU taught earlier in the year and examines the substantive law of the ED. As such, the course provides combination of lectures on laws and rules regulating internal market followed by discussion. It also explains the free movement of goods, persons, services and capital and concludes with basic competition rules with reference to the case law.

Pre-requisite: None

#### GPAD7533 SEMINAR ON SELECTED TOPICS IN THE LEGAL & INSTITUTIONAL ASPECTS OF THE EU

The seminar leads the students into a discussion not just about the assessment and the reforms in the EU institutions after the 10 years of the post-Lisbon Treaty era but also the latest issues in the legal and institutional aspects as well as democracy and judicial matters at both the national and Union levels.

Pre-requisite: None

## GPAD7534 THEORY OF INTERNATIONAL RELATIONS

By an overview of IR theories, the course aims to enable students to grasp the main themes of the theories that have been most influential in explaining world politics and, to some extent, to apply them in analyzing the reality of world affairs. This course examines traditions of key

theories and approaches in the study of international relations, including classical realism and neo-realism; classical liberalism and neo-liberalism; the concept of international society; social constructivism and its application in IR; the relations between states and markets in world affairs (international political economy); the study of managing external relations and activities of nation states (foreign policy analysis).

Pre-requisite: None

# GPAD7535 EU AND THE WORLD I: THE NEIGHBOURHOOD

The course introduces how the new members in the east joined the European Union and the relation between the former Communist countries as well as those in the Mediterranean region. It also presents the discussions for further enlargement of the EU. Pre-requisite: None

# GPAD7536 EU AND THE WORLD II: EU-ASIA RELATIONS

This course aims to introduce the complexities of EU-Asia relations, both, at the inter-regional level and at the bilateral level. It will focus on matters that will encompass the following Asian sub-regions: East Asia, Central Asia and South-Asia. Within East Asia, special attention will be given to China-EU relations, both from the historical point of view as well as the most recent developments, including bilateral negotiations towards a new Partnership and Cooperation Agreement (PCA). EU-Japan and EU-ASEAN relations will be given some attention, as well. The ASEM process (Asia Europe Meeting) will be introduced as a case of summit diplomacy with all its merits and limitations. In regard to Central-Asia, a brief analysis of Central-Asia significance in the context of Asia-Europe relations and the overall economic and security concerns of EURASIA will be the focus of our attention. In the same token, EU-India relations will be briefly analyzed. Because the EU integration force is such an overall successful process, by bringing peace and development to the whole continent of Europe, it will attract other regions to also try the similar experiences. Regionalism in Asia is an on-going issues and it is worth comparing currents Asian trends with the case of the EU. Pre-requisite: None

# GPAD7537 SEMINAR ON SELECTED TOPICS ABOUT EU'S COMMON FOREIGN & SECURITY POLICIES

The seminar guides students into discussions after introducing the latest picture of the EU's latest development in its Common Foreign & Security Policies one decade after the establishment of the European External Action Service under the Lisbon Treaty and also its actions in response to the geopolitical challenges at the global level. Pre-requisite: None

# GPAD7598 PROJECT REPORT

The Project Report is an extended research paper/essay of either academic or policy nature to report findings of an individual research project, agreed with the supervisor and approved by the coordinator. Students are expected to undertake a systematic study into a topic or an issue, in the scope of European studies, broadly defined. They should apply substantive knowledge and develop analytical and presentation skills, acquired from the Programme and beyond into their individual research project. They are required to define a central research question, design a proper analytical process, and develop a reasonable argument.

# GPAD8000 SELECTED TOPICS IN PUBLIC ADMINISTRATION

In this course, students will engage with high-level readings of primary sources for exploration of various topics related to the public administration. Exploration of topics is annually determined and involves issues not covered by the standard curriculum but of interest to faculty and students in a particular semester.

Pre-requisite: None

## GPAD8099 DOCTORAL THESIS

Thesis writing is the advanced stage of doctoral studies. The candidates should first select a topic with consultation of their supervisors. They should, based on extensive literature review, engage vigorously in construction for a suitable theoretical and analytical framework and then apply it to the analysis of empirical issues. The thesis needs to develop a cohesive structure, a central argument through formulating and selecting a number of hypothesis and a rich set of data to support the comprehensive discussion of the cases under review. The writing style and standards must strictly follow the UM regulations.

Pre-requisite: None

## GPAD8100 SEMINAR ON SELECTED TOPICS ON INTERNATIONAL RELATIONS

This course will be designed according to students' specific areas of research interest. Students will be required to get familiar with and have an in-depth understanding of the existing literature and research achievements in the field. Students will then be asked to explore the feasibility to make new scholarly contribution in the field of their particular interest. Pre-requisite: None

#### GPAD8199 DOCTORAL THESIS

Thesis writing is the advanced stage of doctoral studies. The candidates should first select a topic with consultation of their supervisors. They should, based on extensive literature review, engage vigorously in construction for a suitable theoretical and analytical framework and then apply it to the analysis of empirical issues. The thesis needs to develop a cohesive structure, a central argument through formulating and selecting a number of hypothesis and a rich set of data to support the comprehensive discussion of the cases under review. The writing style and standards must strictly follow the UM regulations.

Pre-requisite: None

## PSYC1000 GENERAL PSYCHOLOGY

This is a foundation course offering an introductory survey of the various areas of psychology from the perspective of psychology as the scientific study of behaviour. The course explores the major theories, methods, and research findings in such topics as personality, life-span development, social relations, as well as the biological bases of behaviour. The focus will be on relationship between research results and their applications to daily life. Pre-requisite: None

## PSYC1001 PSYCHOLOGY STATISTICS I

This course provides the fundamental skills and knowledge needed to understand and use statistical procedures in basic psychological research. Topics cover basic descriptive and inferential statistics, including measures of central tendency and variability, probability, sampling, the normal distribution, hypothesis testing and statistical power, t-tests for means, analysis of variance, correlation and simple linear regression. Activities will include the use of statistical software packages to explore data and conduct an analysis. Pre-requisite: None

#### PSYC2000 DEVELOPMENTAL PSYCHOLOGY

In this course, students examine theories of human development across the life cycle of the individual from birth to death, in different domains including physical, cognitive, and social and personality. Research methods for studying developmental processes, as well as various issues related to the processes and challenges of developmental transitions in different life periods within a local context are discussed.

Pre-requisite: GESB1010 / PSYC1000

#### PSYC2001 SENSATION AND PERCEPTION

In this course, students will study the sensory process in acquiring information and how the information is understood and interpreted in our brains resulting in various perceptual experiences. Various sensory systems will be introduced with a primary emphasis on the visual system. Pre-requisite: None

## PSYC2002 HUMAN LEARNING AND COGNITION

This course introduces the theoretical and empirical research of cognitive processes. The course covers the fundamental concepts and theories of thinking and levels of mental processes of how human mind works (and fails to work) such as how we perceive, attend, remember (or forget), think and reason.

Pre-requisite: None

## PSYC2003 SOCIAL PSYCHOLOGY

This course examines how people think, feel, and behave when they are in the actual or imagined presence of others. The course covers classical and contemporary topics in social psychology, including perceptions of the self in relation to others, attitudes, social cognition, and the interpersonal dynamics of social behaviours, such as attraction, persuasion, and conformity. Instruction may also include the application of social principles and research to various settings. Pre-requisite: None

## PSYC2004 PERSONALITY PSYCHOLOGY

In this course, students encounter the major theories and theorists that historically shaped the psychological understanding of personality. The focus is on different questions, units of analysis, assumptions about causes of behaviour, and approaches to personality change proposed by theories of personality. Students engage in examining the underlying assumptions, conceptual issues, and motivation of human behaviour based on contemporary research regarding human nature and personality.

Pre-requisite: None

## PSYC2005 PSYCHOLOGY STATISTICS II

This course covers advanced statistical methods and procedures commonly used in experimental and non-experimental research in psychology. Topics include multiple regression and, at more advanced levels, mediating effect, interaction effect, factor analysis, path analysis, structural equation modeling, and hierarchical linear modeling. This course focuses on the application of these and other analytical procedures especially in non-experimental research. Pre-requisite: PSYC1001

## PSYC2006 CLOSE RELATIONSHIPS

Close relationships are central to our lives; friends, parents, siblings, romantic partners, social networks, and acquaintances, have an enormous influence on our thoughts, feelings and behavior. The purpose of this course is to help students understand the processes that regulate human social relationships, through the lens of psychological method. It will include an overview of the social-psychological theories of relationships research and an exploration of the current literature. Specifically, this course will focus on topics such as: our need for relationships, interpersonal attraction, intimacy, love, attachment, communication, relationship maintenance, sexuality, relationship trajectories, relationship dissolution, jealousy, and extra-dyadic relationships.

Pre-requisite: None

#### PSYC3000 ABNORMAL PSYCHOLOGY

Abnormal Psychology introduces students to the scientific study of psychological disorders and dysfunctional behaviour. While the course surveys a broad selection of disorders, it focuses on the contributing factors, clinical presentation, and treatment implications of these selected disorders. At the same time, students will explore how biological, psychological, social and multicultural dimensions interact to cause a particular disorder.

Pre-requisite: GESB1010 / PSYC1000

## PSYC3001 CULTURAL PSYCHOLOGY

The course examines the relationship between individual psychological functioning and cultural contexts, both from a theoretical and practical/research point of view. The focus is on crosscultural comparisons of behaviour, cognition, self, attribution, reasoning, decision making, communication, emotion, motivation, socialization, and more, with the aim of raising awareness and understanding of human commonality and diversity. Pre-requisite: PSYC2003

## PSYC3002 RESEARCH METHODS

This course presents the concepts of scientific inquiry and the methods used by psychologists to investigate human behavior and individual differences. It covers basic concepts and procedures across the research process, including reliability and validity, and instrument development and validation (measurement), experimental designs, sampling and surveys, as well as gualitative methods (research design), and the application of analytical tools in testing hypotheses and research questions (data analysis). This course focuses on the quantitative methodological approach. Students are expected to understand the process of quantitative research and be able to conduct their own studies using some of the necessary methods and approaches.

Pre-requisite: PSYC1001

## PSYC3003 PSYCHOLOGY OF ADDICTION

The main objective of this course is to understand addictive behaviour and its paradoxes using fundamental psychological concepts and focusing on the psychological causes of excessive behavioural patterns such as drug dependence, gambling disorder, and Internet addiction. Addictive behaviours and behavioural change are examined from different perspectives such as personality, social, and cognitive psychology, as well as the growing body of knowledge in the field, including assessment, treatment, and prevention strategies.

Pre-requisites: GESB1010 / PSYC1000

## PSYC3004 PHYSIOLOGICAL PSYCHOLOGY

This course focuses on introducing the fundamental principles of brain structures and their associated functions, and the physiological basis of behaviour. Topics include anatomy and physiology of the nervous system, genetic influences on behaviour, the physiological bases of emotional behaviour (e.g., anxiety & stress), and the study of psychological disorders (e.g., alcoholism, drug abuse, & depression).

Pre-requisite: None

## PSYC3006 COGNITIVE NEUROSCIENCE

The course provides a basic understanding of brain structure and function, brain trauma and disease, and plasticity. The methodologies utilized to study brain-behaviour relationships are reviewed, and an appreciation of the role of clinical perspectives is provided. Pre-requisite: GESB1010 / PSYC1000

## PSYC3008 PSYCHOLOGY OF LEADERSHIP

This course examines how leadership is defined and how views of leadership have changed over time. Psychological contributions to understanding leadership form the main basis of the course, including topics such as the types of power, personal characteristics, interpersonal interactions, hierarchical relationships, and others. Readings and discussions address the question of how people become leaders, how environmental circumstances can encourage or inhibit potential leaders, and the various personal qualities needed to be a successful leader. Pre-requisites: None

#### PSYC3009 CONSUMER PSYCHOLOGY

This course explores how consumer think, feel and act. We will focus on applying theories in social psychology, cognitive psychology and assessment in consumer decision making processes. Topics include attitude formation and change, consumer information processing,

decision processes, assessment of cultural and individual differences etc. Pre-requisite: GESB1010 / PSYC1000 / PSYC2003

## PSYC3013 EVOLUTION, HUMAN NATURE AND BEHAVIOUR

Whereas it is well accepted in biology that human bodies are products of natural selection, it is still controversial in the mainstream social sciences to link human behaviours to evolution. This course takes an evolutionary approach to explore the ultimate question of why, but not just how, human beings behave in the ways in which they do. Broadly covered by evolutionary cognitive, social, and developmental psychology, the topics include how the human mind works and why it works in these ways, how and why human beings negotiate social contracts with conspecies, and how and why related individuals love and hate in resolving family conflict of interest. In addition to the coverage of evolutionary psychological concepts, theoretical perspectives, and empirical findings, this course also introduces natural selection, sexual selection, kin selection, reciprocal altruism, life history, and other theoretical foundations of evolution and their applications to the study of human behaviours.

Pre-requisite: None

## PSYC3014 HEALTH AND BEHAVIOUR

This course studies how psychology improves our understanding of health and illness. We will particularly discuss the biopsychosocial model of health and illness, which highlights the interplay among psychosocial factors, physiological processes, and behavioral pattern involved in health and illness. We will examine the contribution of this biopsychosocial model to the understanding of: a) health promotion and illness prevention, b) responses to an illness and its recovery, and c) coping with chronic diseases. In each domain, we will discuss the basic concepts, explanatory theories, research methods, and interventions developed or adopted by health psychologists. Application of the knowledge to improving individual or public health in the local context is emphasized.

Pre-requisite: None

## PSYC3016 PSYCHOLOGY OF LEARNING AND MOTIVATION

This course offers an overview of different theories and empirical research on learning and motivation from diverse perspective and approaches (behaviorist, biological, evolutionary, cognitive, cross-cultural, etc.). Current research of learning and motivation, and their applications in applied settings will also be discussed (e.g, achievement motivation in educational settings). Pre-requisite: None

## PSYC3017 SELECTED TOPICS I

Intensive focus concerning a selected topic of contemporary interest in psychology forms the basis for this course. The course can also include extensive fieldwork experience and may require additional hours of practical work at a selected site in the local community. Topics change with the interests and speciality of the faculty and the content varies from semester to semester. The instructor will select a topic or area of interest for discussion based on current developments in psychology and her or his expertise.

Pre-requisite: GESB1010 / PSYC1000

## PSYC3018 SELECTED TOPICS II

Intensive focus is given to a selected topic of contemporary interest in psychology. The course can also include extensive fieldwork experience and may require additional hours of practical work at a selected site in the local community. Topics change with the interests and speciality of the faculty and the content varies from semester to semester. The instructor will select a topic or area of interest for discussion based on current developments in psychology and her or his expertise.

Pre-requisite: GESB1010 / PSYC1000

## PSYC3020 COGNITIVE DEVELOPMENT

In this course, emphasis will be on the research findings from the study of cognitive development,

particularly the development of thinking in the first decade of life. We will examine children's understanding of the physical world, psychological kinds, biological entities, number, objects, and space. Topics to be explored include theories in cognitive development, neural development, language development, conceptual development, social cognition, and academic achievements in reading and mathematics.

Pre-requisite: GESB1010 / PSYC1000

## PSYC3021 EXPERIMENTAL PSYCHOLOGY

Experimentation is one of the major methods in psychology (it is a way of gathering new knowledge). This course introduces the essential features of this method, with reference to general concepts related to scientific knowledge, psychological research questions, and statistical analysis/inference. These general concepts will be illustrated with the help of examples from six different topics of research: These include the experimental studies of (1) goals (2) honesty/dishonesty, (3) rule-following and rule-violation (4) sense of control (5) free choice and forced choice, and (6) daydreaming. We will discuss instances in which the experimental method is a good choice and instances where it might not be appropriate.

Pre-requisite: GESB1010 / PSYC1000

#### PSYC3022 PSYCHOLOGY OF TESTING

This course is a survey of psychological testing through an overview of measurement principles, the psychological assessment process, test construction and development, reliability and validity, and the use of test results in individual psychological evaluation. Examples relevant to clinical psychology (e.g., personality, mental disorders) and school psychology (e.g., ability, aptitude, learning, etc.) are given.

Pre-requisite: PSYC1000 and PSYC1001 / GESB1010

#### PSYC4000 GRADUATION PROJECT

Students will gain practical experience in applying psychological knowledge and research skills learnt. Emphasis will be put on enhancing skills in conducting literature review and designing research studies. "Students are expected to participate in a group research project, which can be an empirical study, a systematic review, or other kind of research projects. Pre-requisite: PSYC3002

## PSYC4001 RESEARCH PROJECT I

This course allows promising students carrying out an independent psychological research under the supervision of a psychology faculty member. It engages the student in practical experience conducting psychological research from the proposal to writing up the thesis. With the support of the thesis mentor, a student may start working on an honors thesis in year 3. Pre-requisites: PSYC3002

#### PSYC4002 RESEARCH PROJECT II

A continuation of Research Project I Pre-requisite: PSYC4001

#### PSYC4003 FIELD EXPERIENCE I

This course includes supervised field work/internship experiences in different work settings or counseling settings pertinent to formal academic training in applied psychology or counselling psychology. Students' performance in the Field Experience will be evaluated by the individual supervising faculty member and students' immediate supervisor in the work settings. In addition to learning how to apply psychological concepts with clinical populations, the field experience course provides students the opportunity to conduct supervised applied field research, to apply their analytic skills toward investigating ways to evaluate community health programmes and gather data to improve local services.

Pre-requisite: None

## PSYC4004 FIELD EXPERIENCE II

This course includes supervised field work/internship experiences in different work settings or counseling settings pertinent to formal academic training in applied psychology or counselling psychology. Students' performance in the Field Experience will be evaluated by the individual supervising faculty member and students' immediate supervisor in the work settings. In addition to learning how to apply psychological concepts with clinical populations, the field experience course provides students the opportunity to conduct supervised applied field research, to apply their analytic skills toward investigating ways to evaluate community health programmes and gather data to improve local services.

Pre-requisite: None

#### PSYC4005 CLINICAL PSYCHOLOGY

This course introduces students to the specialization of clinical and counselling psychology. It covers the basic theoretical assumptions when understanding and treating pathological behaviours; spectrum of subfields and their prospects; and paradigms and implications in clinical and counselling psychology as a profession.

Pre-requisites: GESB1010 / PSYC1000

#### PSYC4006 ORGANIZATIONAL PSYCHOLOGY

This course examines human behavior in organizations based on classical organizational theory and contemporary empirical research at the micro (individual, interpersonal, and group) and macro (organizational/environmental) levels. Theoretical bases include the principles of scientific management, the human relations movement, and organizations as systems. Empirical and applied foci will be on traditional organizational psychology topics, such as motivation, groups as teams, leadership, decision-making, and organizational socialization, as well as organizational analysis and change.

Pre-requisites: None

#### PSYC4007 GLOBAL MENTAL HEALTH

Global mental health is an emerging transdisciplinary scientific field. It utilizes approaches from multiple fields including psychology, anthropology, sociology, medicine, public health and epidemiology. Students in this course will explore 1) public health and global health approaches to the treatment and prevention of ill mental health, substance abuse and neurological disorders, 2) the role of culture in mental illness and its definitions, 3) epidemiological approaches to study and measure the prevalence and incidence of mental health globally, 4) public policy implications for ill mental health, and 5) mental health systems. Readings in the course will focus on peerreviewed research literature. A particular emphasis will be placed on research and case examples from Asian country contexts (e.g., East and South East Asia), including Macao and Mainland China, so the course will have particular local and regional relevance to students. Pre-requisite: None

## PSYC4008 INTELLIGENCE AND CREATIVITY

This course provides an overview of emerging concepts of intelligence, intelligence development and creativity from biological, cognitive and methodological approaches. Contemporary models of intelligences and creativity are introduced and compared. Practical implications of the theories and findings in applied settings such as education, workplace and interpersonal relationships are discussed.

Pre-requisite: None

## PSYC4012 SOCIAL COGNITION

This course provides an introduction to research and theories in social cognition. The course will examine how people reason and make sense of the social world. Specifically, topics examined in the course include the dual processing model, social perception and impression formation, mental representation and memory, the self, attribution, heuristics, attitudes and persuasion, stereotyping, etc.

Pre-requisite: PSYC2003

## PSYC4015 GREAT IDEAS IN PSYCHOLOGY

Psychology is a heterogeneous discipline with diverse historical roots. In this course, we will cover some of the major ideas, thinkers, movements in the discipline of Psychology with particular focus on ideas that have had a largescale impact on the discipline and society. The goal of this course is to enrich our perspective with regard to psychology's history, its current state and its possible futures. Course content is organized around 6 topics: How to think about psychological research methodology (how psychologists support their claims), what is behaviour, what is a person, what are goals, what are games, and what is meaning? In discussing these central topic, we will meet some of the greatest thinkers that have contributed to the discipline. Pre-requisite: GESB1010 / PSYC1000

## PSYC4017 ADVANCES IN PSYCHOLOGICAL SCIENCE

This is an advanced course devoted to current development and advancement of one or more than one area of psychology. The content coverage is expected to change from time to time and should not represent fixed textbook material but focus on the recent development in psychology at the time of offering. Attending to the feature of new and recent advancement in psychology, an offering of this course may focus on depth by going into details of a narrow topic area or may focus on breadth by covering many aspects and related issues forming a broader area of research.

Pre-requisite: GESB1010 / PSYC1000

## PSYC4018 ISSUES IN APPLIED PSYCHOLOGY

This course provides an analysis of current or controversial cutting-edge topics in applied psychological science. Students will engage with readings from primary sources for exploration of various topics of relevance to local and global issues in applied psychology. The readings will vary from year to year depending on the expertise of specialist staff and the needs for advanced study of psychology.

Pre-requisite: GESB1010 / PSYC1000

## PSYC8805 ADVANCED TOPICS IN PSYCHOLOGICAL RESEARCH METHODS

In this course, students will engage in the nature of inquiry in psychological sciences and explore different epistemological perspectives and related methodological issues in psychology research. The course covers various advanced topics related to psychological science and research in applied contexts (e.g., business/industry, education, community, policy, health, national development, etc.), professional practice (e.g., clinical, counselling, school, etc.), and cultural settings.

Pre-requisite: None

## PSYC8810 SEMINAR IN PSYCHOLOGICAL SCIENCES

In this seminar-based course, students will engage with high-level readings of primary sources for exploration of various topics related to the psychological sciences. The readings will vary from year to year depending on the expertise of specialist staff and the needs for advanced study of psychology.

Pre-requisite: None

## PSYC8811 SEMINAR IN PERSONALITY AND SOCIAL PSYCHOLOGY

In this seminar-based course, students will engage with high-level readings from primary sources for exploration of various topics related to personality and social psychology, with an emphasis on the cultural dimensions of personality and social psychological phenomena and research. The readings will vary from year to year depending on the expertise of specialist staff and the needs for advanced study in the area of personality and social psychology. Pre-requisite: None

## PSYC8812 SEMINAR IN APPLIED PSYCHOLOGY

In this seminar-based course, students will engage with high-level readings from primary sources for exploration of various topics of relevance to local and global issues in applied

psychology. The readings will vary from year to year depending on the expertise of specialist staff and the needs for advanced study of psychology. Pre-requisite: None

## PSYC8813 SEMINAR IN SELECTED TOPICS IN PSYCHOLOGY

In this seminar-based course, students will engage with high-level readings from primary sources for exploration of selected topics related to psychology but not covered in other Seminar courses, such as topics on the latest trends in psychology, issues currently under debate, or new paradigms and approaches recently proposed.

## SOCY1000 INTRODUCTION TO SOCIOLOGY

This course is designed to study how society works, (e.g. culture, groups and societies), why it works that way (e.g. socialization, social interaction, conflict theory, functionalism), in what way we are all affected (e.g. gender, race, class, deviance), and in what way we can change society (e.g. social movements). By the end of the course, students should understand society better and their relation to it more clearly.

Pre-requisite: None

## SOCY1001 READING SOCIOLOGY

This course aims to inculcate students with the basic reading skills that are necessary for understanding sociological literature, and in this way to acquaint students with the distinctive approach of sociology as an academic discipline and a way of seeing. Foundational concepts such as culture and social interaction are introduced by way of intensively reading elementary and classic texts. By the time the students finish this course, they should be able to read and analyze sociological texts with a reasonable level of language proficiency and intellectual literacy. Pre-requisite: Sociology majors only

## SOCY1002 INTRODUCTION TO ANTHROPOLOGY

Anthropology is the study of the human species in all its aspects: biological, social and cultural; behavioral and psychological; spiritual and symbolic; historic, environmental and material. This course concentrates on the multiple dimensions of cultural anthropology, or what it means to be human, through an examination of different cultures, topics and case studies taken from around the world. Goals of the course include appreciation of the variety and range of human achievement, the understanding of change and progress, and the imagination of alternative possibilities for much of what we take for granted in everyday life. Pre-requisite: None

## SOCY1003 SOCIAL RESEARCH METHODS

This course introduces to students some of the basic concepts and practices of social research as adopted and codified by social sciences in general and sociology in particular. Comprehensive treatment of major research methods, including survey, in-depth interview, ethnography, and comparative-historical method, will be offered. The logic of social research will also be discussed, with the purpose of clarifying fundamental issues such as the nature of causality and correlation, the criterion and procedure of scientific falsification, etc. Methodological problems in the broad sense, such as the distinction among positivist, interpretive and critical approaches to social reality, will be covered as well. Pre-requisite: Sociology majors only

## SOCY2000 SOCIOLOGICAL THEORY

This course introduces and familiarizes sociology students with the major theoretical paradigms as they have emerged and evolved in the classical foundation and contemporary development of the discipline. Accordingly the course is intended to be at once analytical and historical, examining the shifting contexts within which various concepts and approaches have been formulated. We will focus on four sociological traditions, namely, rational choice, class analysis, institutional analysis, and symbolic interactionism. The course will also highlight the relevance and applicability of these perspectives to real social life. Pre-requisite: None

## SOCY2001 SOCIAL STATISTICS

The primary purpose of this course is to provide students with the basic skills and understanding to conduct data analysis in social research. It aims to equip students with the statistical techniques used most commonly by social scientists. In addition, students are also instructed on the relationship between social theory and empirical analysis. At the end of the course, students should be able to understand research reports in social science publications and in the mass media, and should also be able to evaluate the accuracy and adequacy of the conclusions reached.

Pre-requisite: SOCY1003 Social Research Methods

## SOCY2002 POLITICAL SOCIOLOGY

This course examines major theoretical questions about power, politics, and the state from a sociological perspective. We will explore the dynamics of political institutions and processes, on the basis of which issues concerning state formation and nationalism, social movements, globalization, political culture and participation, and civil society etc. will be discussed. Pre-requisite: None

## SOCY2003 SOCIAL STRATIFICATION AND INEQUALITY

This course overviews the major sociological approaches to the study of social stratification and inequality. We begin with an examination of the concepts of social stratification and social inequality, with an emphasis on the major dimensions of stratification including caste, class, gender, and ethnicity. The consequences of stratification on life chances and life style and on social mobility will be explored. The empirical relevance of these issues to the changing stratification system of Macao will also be addressed.

Pre-requisite: None

## SOCY2005 QUALITATIVE SOCIAL RESEARCH METHODS

This course is designed to introduce students to the principles and methods of qualitative research. It aims to guide students to appreciate the value of qualitative research as well as to get a practical grasp of a variety of qualitative research strategies and techniques. We will examine some of the main methods used by qualitative researchers in social sciences and in particular sociology such as participant observation, interviewing, documentary research, and content analysis etc. Our examination will consist of both readings and actual practice. The purpose is not only to understand the comparative strengths and weaknesses of each method but also to gain experience using them.

Pre-requisite: SOCY1003 Social Research Methods

## SOCY2006 SOCIOLOGY OF DEVIANCE

We will study how and why certain behaviors are considered dangerous enough to deserve negative sanctions, how deviant careers are socially constructed, and how deviants and conventional society cope with each other. In addition to theories, we will study criminal behavior, drug use, heterosexual and homosexual deviance, physical deviance such as body piercing and tattooing, religious deviance, and mental disorders, etc. Pre-requisite: None

## SOCY2007 SOCIOLOGY OF GAMING

This course will cover topics related to gaming and society. We will examine briefly the history of the gaming industry in leading casino cities, and the social consequences generated by it. This course will focus on four tendencies in the development of the gaming industry: legalization, popularization, entertainment, and modernization. The development of Macao's casino industry and the challenges it faces will be emphasized.

Pre-requisite: None

## SOCY2008 ENVIRONMENT AND SOCIETY

This course addresses the complex and often problematic relationships and connections between humans and natural and built environments by examining how cultures and societies

construct knowledge about nature and attribute value to it, how they use or abuse environments and resources, and how human activity, culture and social organization have always been deeply linked to the natural, material world. It also examines how factors such as gender, race, class, ethnicity, and cultural/historical experience influence the ways people perceive, understand, interact with, and are affected by the environments in which they live. Pre-requisite: None

## SOCY2009 THEORY IN ANTHROPOLOGY

This course examines why theory matters and how and why anthropological theories have influenced and been influenced by empirical studies of human communities and on-going debates about culture. We will discover why theory in anthropology has often been contentious, controversial, and marked by many productive disagreements and varieties of approach. The goals are to foster critical understanding of the aims and scope of any theory by examining, in historical context, the ideas of some of the discipline's most influential thinkers and evaluating their continued relevance to contemporary research.

Pre-requisite: None

#### SOCY2010 INTRODUCTION TO CRIMINOLOGY

The purpose of this course is to familiarize students with the major issues in the field of criminology, i.e., various approaches to criminology, concepts of crime and law, theories of crime causation, types of crime, and the criminal justice system. In other words, we are studying the what, why and how of crime and justice. The course is characterized by class discussions, presentations, mini-lectures, guest lectures, field trips, videos, and a major research project Pre-requisite: None

#### SOCY2011 SOCIOLOGY OF ADDICTIVE BEHAVIOR

This course will focus on several major types of addictive behaviour, including substance abuse, gambling addiction, Internet addiction, and video addiction. In each of these domains, we will discuss (1) the nature and distribution of the addictive behaviours; (2) the causes of the behaviours; (3) the psychological and social consequences of the behaviours; (4) the prevention and treatment of the addictive behaviours. Special focuses will be given to drug abuse and treatment in the greater China region, especially Macao and mainland China. Pre-requisite: None

#### SOCY2014 CHINESE SOCIETY

The course is structured not as an historical chronology but rather as a thematic discussion of some of the major issues in contemporary China. We will explore the basic institutional makeup of Chinese society, the structural changes brought forth in the reform era, and the impacts on the daily existence of the people therein. It is expected that after taking the course, students would not just know, but could also make sense of, what is going on in Chinese society today. Pre-requisite: None

#### SOCY2015 POLICING

This course aims to provide students with a criminological understanding of police and policing in a historical and comparative perspective. Up completion of the course, students will be able to master key concepts and theories of policing; critically analyze various issues and controversies on contemporary policing; understand social structural factors in shaping police practice in a given country; locate a local police issue in a historical and global context; and understand future development of policing.

Pre-requisite: None

## SOCY2016 CULTURAL SOCIOLOGY

Culture is one of the most complicated terms in the human vocabulary. It refers to particular cultural products and formats, such as arts, music, and literature, as well as the meanings, symbols, ideas, and habits that make us who we are. To familiarize students with the field, this course will explore major sociological approaches to culture (sociology of culture vs. cultural

sociology) and introduce representative themes, theories, and methodological debates regarding culture. Students will also have opportunities to connect the cultural theories to their own life experiences, studying the significance of culture in political, economic, and social settings more generally.

Pre-requisite: None

#### SOCY3000 GENDER AND SOCIETY

This course studies how pervasive gender is in organizing our social life. We shall examine how gender organizes everything from our sense of personal identity to our daily face-to-face interactions, and how gender is embedded in institutions such as the family, labor market, religious institutions, and the state. The aim is to provide students with sociological ways of thinking about gender.

Pre-requisite: None

#### SOCY3001 SURVEY METHODS AND SAMPLING

This course aims to teach students how to design a questionnaire and implement surveys using simple random, systematic, stratified, clustered or multistage sampling designs. Students are also expected to learn how to estimate sample size, test hypothesis and adjust for non-response upon successfully completing this course.

Pre-requisite: SOCY1003 Social Research Methods

#### SOCY3002 INTERNSHIP

This course is designed as a field practice course. Students will learn how to apply what they have learnt in class to a practical situation. They are expected to write reports and meet with the instructor regularly, in groups and/or in person, to share their experiences and discuss what they have learnt.

Pre-requisite: With instructor's approval

#### SOCY3004 RELIGION AND SOCIETY

This course examines the various approaches and studies pertaining to the complex interrelationships between religion and society. Some of the major themes it covers include: the classic secularization debate, sect and cult as the agents of religious and social change, the social and symbolic functions of ritual, the ambiguous power relationship between church and the state, the role of different religions in the making of modern civil society, as well as the resurgence of religions in the age of globalization. Examples from religions in Macao and other societies will be used in the illustration and discussion of relevant concepts and theories. Pre-requisite: None

### SOCY3005 SOCIOLOGY OF EDUCATION

This course examines the articulation of education with the broader social system. The various issues of educational attainment, ideologies and hidden curriculums, classroom as an interaction system between teachers and students, and the role of social, symbolic and cultural capitals in the determination of educational success and the reproduction of society, will be discussed. Pre-requisite: None

#### SOCY3006 SOCIAL MOVEMENTS AND COLLECTIVE BEHAVIOUR

This course focuses on theories of social movements and collective behaviour through an examination of contemporary movements. The goal is for students to learn the analytic tools necessary to examine and critically assess the role of social movements in our society. Students will learn the theoretical frameworks and perspectives to understand social movements and collective actions. The selected texts include articles from academic journals and case studies of movements which will further our theoretical and conceptual understanding of social movements.

Pre-requisite: None

## SOCY3007 FUNDAMENTALS OF URBAN STUDIES

More and more people in today's world live in cities. This course examines the special and often unique problems and challenges of both urban living and doing anthropological research on distinctly urban cultures, lifestyles and communities. Topics include the material and symbolic implications of increased urbanization worldwide; continuity and change in urban cultures; new opportunities, values and ways of life made possible in cities; concepts of space and place; and the conflicts and problems generated by recent trends in urban policy, planning, community development, and environmental impacts.

Pre-requisite: None

## SOCY3012 HEALTH AND SOCIETY

The purpose of this course is to introduce students to the major social variables—social class, race, gender, poverty, income distribution, social networks/support, community cohesion, the work and neighborhood environment—that affect population health. The course covers the theoretical underpinnings of each construct, and surveys the empirical research linking each to population health status. Methods are introduced to operationalize each construct for the purposes of empirical application in epidemiologic research. Pre-requisite: None

## SOCY3013 WHITE-COLLAR CRIME

This course provides an examination of theory and research in the field of white-collar crime. Classic theoretical works will be considered as well as contemporary writings. The course will begin with an introduction to the field, including definitional and theoretical issues regarding the areas of white-collar, occupational, organizational, and corporate crime. Following this, we will examine various forms of white-collar crime including: consumer crime, corporate crime, computer crime, and financial fraud. Finally, we will review salient issues regarding the causes, prevention, enforcement, and sanctioning of white-collar crime. Pre-requisite: None

## SOCY3015 CRIME AND CRIMINAL JUSTICE IN CHINA

The landscape of crime and criminal justice system in China has under dramatic changes in the past six decades. While pre-reform China has been regarded as a "crime-free" society, the crime rate has soared in the recent three decades due to rapid industrialization, urbanization and modernization. China's incarceration rate is around the world average, but its wide use of death penalty makes it one of the most punitive countries in the world. How to understand the unprecedented change of crime and Chinese government's effort in controlling crime? What are similarities and differences of Chinese experience of crime and its control in a global perspective? This course will provide a criminological analysis on various issues on crime, policing and punishment in China.

Pre-requisite: None

#### SOCY4000 RESEARCH PROJECT

This course aims to help final-year students to consolidate and deepen their understanding of sociological perspectives by applying them to the analysis of social phenomena and specific issues. Students are responsible for defining a research topic, articulating a research problem, and designing a feasible research project. Emphasis will be put on training the competence of the students to position their research projects in the broader relevant fields of the discipline, and to conduct constructive dialogues with the existing literature. Pre-requisite: Sociology majors only

#### SOCY4001 INDEPENDENT STUDY IN SOCIOLOGY

This course is designed to provide the student with an opportunity to gain or enhance sociological knowledge and to explore an area of interest related to sociology or criminology research under the supervision of a professor. Pre-requisite: None

### SOCY4002 SELECTED TOPICS IN SOCIOLOGY

This course is designed to be highly flexible to allow examination and discussion of specific issues in sociology not included in the regular degree curriculum. Discussion topics will be selected by the instructor and may vary from year to year.

Pre-requisite: None

### SOCY4003 SELECTED TOPICS IN ANTHROPOLOGY

This course is designed to be highly flexible to allow examination and discussion of specific issues in anthropology not included in the regular degree curriculum. Discussion topics will be selected by the instructor and may vary from year to year. Pre-requisite: None

### SOCY4004 SOCIOLOGY OF CONSUMPTION AND LEISURE

Consumption and leisure is an intrinsic part of modern life and the dominant economy in Macao. But what is a "consumer society"? What is the essence of economic and social relationship in consumer society and how is it different from other ways of structuring society? What is "consumerist culture" that is blamed for causing family disintegration and social alienation? This course will take students through the key readings and theories on consumption and leisure and on modernity and globalization at large, which are built upon classical sociological theories. The theories will be combined with topical discussion and case studies.

Pre-requisite: Students are required to take and pass SOCY1000, SOCY1001 and SOCY2000 prior to this course

### SOCY7700 CRIMINOLOGY AND CRIMINAL JUSTICE

This course provides an overview of the nature and extent of crime, the causes of criminal behavior, crime typologies and measurements, and the criminal justice system. The course takes an international approach, reviewing knowledge and theories about crime and assessing the effectiveness of crime prevention and offender treatment programmes in major social and cultural contexts.

Pre-requisite: None

### SOCY7701 CRIMINOLOGICAL THEORIES

This course will consider historical and contemporary explanations of crime and criminal behavior. Theories covered include strain, control, cultural, labeling, conflict, as well as more recent attempts at theoretical integration and multidisciplinary integration. Pre-requisite: None

### SOCY7703 APPLIED STATISTICS

This course represents an introduction to statistical methods for analysing empirical data. Students will learn basic and advanced methods for quantitative and qualitative data analyses, gain experience in using statistical software, and apply their statistical knowledge and technical skills to real datasets in criminology and criminal justice. Pre-requisite: None

### SOCY7704 POLICING

The course is an introduction to the study of modern policing from its 19th century origins to current controversies about community relations, public order, miscarriages of justice and the possible futures of police-work. It provides historical, social and political analysis of the roles and functions of policing. And it engages some current controversies about community policing, accountability, public order, private security and the future of police work. Pre-requisite: None

### SOCY7705 CORRECTIONS

The course examines the prison and issues of corrections in terms of historical development and current applications. It examines various perspectives and definitions of social control; philosophical underpinnings of the system; and prisoner and societal implications of social control. We deal with the history, forms, and functions of correctional philosophies, institutions, programmes, and policies. Topics include the structure and functions of prisons and jails, community corrections, intermediate sanctions, and the growth of correctional control in modern society.

Pre-requisite: None

### SOCY7710 RESEARCH METHODS

This course is a postgraduate level seminar designed to increase knowledge of research methods commonly used in social science research. Through lecture, discussion and class activities, this course will introduce different methods of conducting research. The seminar will focus on issues related to theory development, hypothesis formation, variable construction, research design, sampling methodology and the techniques and methods of data collection. Students will write a research proposal that details a research question and the research design appropriate for addressing that question.

Pre-requisite: None

### SOCY7711 COMPARATIVE CRIMINOLOGY

We study selected criminal justice systems in other jurisdictions, including the organization, administration and operation of criminal justice agencies in the United States, Europe, the United Kingdom, and Asia.

Pre-requisite: None

### SOCY7712 SUBSTANCE ABUSE AND ADDICTION

This course provides students with a survey of the historical context of the legislative initiatives that have been attempted to combat the use of drugs, the relationship between drug use/abuse and crime, and the public policy problems surrounding the control of drugs. We describe major drugs, what effects they have, their methods of use, their prevalence, production and marketing and common street names. The course analyzes the composition, manufacture, use, and misuse of drugs (including alcohol); their relationship to criminality, and current responses by governmental and private organizations. Exposure to treatment programmes may be required. Pre-requisite: None

### SOCY7713 ADVANCED STATISTICS

The course is designed to help students to master advanced quantitative methods used in the social sciences, and to facilitate them learning more advanced methods. The main topics that will be covered in depth during this semester include ANOVA, simple and multiple regression, logistic regression, and Poisson regression.

Pre-requisite: None

### SOCY7714 CRIME PREVENTION

This course is about ways of crime control in global perspectives. The course will provide a concise and up-to-date account of crime control and prevention theory, practice and research. The course will also discuss in an informed and critical way about what has been and might be done in practice to prevent crime at local and national levels. This course will focus on crime reduction mechanisms and encourage students to critically think about issues on crime prevention.

Pre-requisite: None

### SOCY7715 CRIMINAL PSYCHOLOGY

This course focuses on biological, environmental, cognitive, and personality factors that influence delinquency and crime. Major topics of discussion will include psychopathology, maladjustment patterns, psychoses, personality disorders, cognitive development, and alcohol and drug dependency, and the relationships between these factors and criminal behavior. The course will also cover offender profiling, sexual violence, and psychological treatment of delinquents and criminal offenders.

Pre-requisite: None

### SOCY7720 SPECIAL TOPICS IN CRIMINOLOGY AND CRIMINAL JUSTICE I

This course is designed to provide up to date development in research and practice on certain topics in criminology and criminal justice field. Pre-requisite: None

### SOCY7721 SPECIAL TOPICS IN CRIMINOLOGY AND CRIMINAL JUSTICE II

This course examines selected topics and recent developments in research, policy, and practices in the areas of criminology and criminal justice. Pre-requisite: None

·

### SOCY7996 APPLIED THESIS

An applied thesis emphasizes on application of knowledge in solving practical needs or problems. The thesis may be based on a project or professional activity designed or executed by the student as a way of solving a problem related to crime and criminal justice. Pre-requisite: None

### SOCY7999 ACADEMIC THESIS

An academic thesis is a scholarly work that demonstrates substantial capacity on the part of the student to engage in independent investigation. In order to satisfy thesis requirements, students must pose an original research question and apply appropriate methods

of scholarship and methodology to that question in order to generate new knowledge. Pre-requisite: None

### SOCY8801 SELECTED TOPICS IN SPECIALIZED THEORIES

The objective of the course is to deepen students' understanding of theory by connecting larger paradigms of sociological theories to specific theories that analyze a specific field of study in sociology. Selected topics in this course may include theories focusing on specific issues in sociology such as gender and sexuality; marriage and family; adolescent development; globalization; political participation; deviance and crime; social movements; religion; race and ethnicity; nationalism and national identity, etc. The specialized theories covered depend on the needs of the students.

Pre-requisite: None

### SOCY8802 SELECTED TOPICS IN ADVANCED RESEARCH METHODS

The objective of the course is to strengthen students' abilities in sociological research. This course teaches students advanced research methodologies as well as data management and analysis skills. These may include advanced statistical methods and recent developments in research design in the quantitative tradition, and/or qualitative 8 approaches in the interpretive and critical traditions. The specific topics covered depend on the needs of the students. Pre-requisite: None

### SOCY8805 SELECTED TOPICS IN ADVANCED SOCIOLOGICAL RESEARCH

In this course, students will engage with classical and/or contemporary readings of primary sources for exploration of various topics related to sociology and sociological research. The readings will vary from year to year depending on the needs for advanced study of sociology. Pre-requisite: None

### SOCY8999 DOCTORAL THESIS

PhD candidates must complete a thesis. A thesis is a scholarly work that demonstrates substantial capacity on the part of the student to engage in independent investigation. In order to satisfy thesis requirements, students must pose an original research question and apply appropriate methods of scholarship and methodology to that question in order to generate new knowledge.

Pre-requisite: Completing required coursework and passing qualifying examinations

### SSGC7001 RESEARCH SEMINARS ON MACAO STUDIES

This seminar course aims to provide an overview of the latest research outcomes about Macao to the students. Experts from the different areas of Macao studies will deliver lectures about their research and findings of particular research projects. Topics will cover history, culture, social institutions, political developments and other aspects of social sciences or issues in humanities and even natural science.

Pre-requisite: None

### SSGC7002 MACAO HISTORY

This course traces the history of Macao. Emphasis will be on the relations between the Chinese, Portuguese, and other power in the early days of Portuguese settlement, the colonial history after the Opium Wars, and major historical events before and around the return of Macao sovereignty to China.

Pre-requisite: None

### SSGC7003 CONTEMPORARY ISSUES OF MACAO

This course adopts a "problem-based" approach where students engage with contemporary issues about Macao from four major perspectives: Politics, Economy, Culture and Society. It will cover topics including: Basic Law and the Political system of Macao; Local Macao Politics and social organizations; Macao and the Greater China; Macao economics and Industry Policy; Macao population and social development; Macao's cultural heritage and its cultural development, Greater Bay Area and Macao; Belt and Road Initiative and Macao; Macao and the Portuguese speaking countries.

Pre-requisite: None

### SSGC7004 RESEARCH METHODS

This course provides students with knowledge of major social sciences research methods that are relevant in Macao Studies. Quantitative and qualitative research methods are introduced. A focus will be given on conceptualization, research design and operationalization of quantitative and qualitative projects, providing a foundation for an academic exploration. Pre-requisite: None

### SSGC7005 CULTURE AND SOCIETY OF MACAO

This course will examine the various aspects of Macao culture, including the aspects of the Chinese, Portuguese, and other cultures and religions. In addition, the course will examine various social issues like gender, race, class, deviance and crime, urban housing, traffic and transportation, air pollution, etc. An emphasis is on social change, civil society formation and a Macao identity formation.

Pre-requisite: None

### SSGC7007 LITERATURE AND THE ARTS IN MACAO

Macao has a rich history of literary tradition among the Chinese, Portuguese, Macanese, and English. Novels, short stories, poems, and other works of literature and the arts all vividly portray Macao's culture and society and define Macao's identity. This course will examine how different literary works portray Macao's socioeconomic life and help shape Macao's identity. Pre-requisite: None

### SSGC7010 URBAN GEOGRAPHY OF MACAO

This course covers the spatial aspects of Macao's rapid-pace development, including the built and natural environment over time as a result of human-land-maritime interactions and historical harborworks and the maritime/fishing interface. It also deals with a range of current local and cross-border issues, including pollution, energy, water supply, public transport, housing, urban planning, recreation/nature zones, expanded land reclamation etc. An emphasis is on a historical-comparative understanding versus such other built environments-coastal cities as Singapore, Hong Kong, and Shanghai.

Pre-requisite: None

### SSGC7011 HISTORICAL HERITAGE OF MACAO

This course folds into post-colonial studies and cultural studies understandings. We will emphasize memory and remembering as part of this reflective trope. We will study monuments, museums, churches, temples, colonial buildings, industrial buildings, and other representations like street names and compare with such regional "heritage" managed cities as Penang, Malacca, Hoi An (Vietnam), Goa, etc.

Pre-requisite: None

### SSGC7012 AND SSGC7013 SELECTED TOPICS I AND II

Each of these is a course that provides students with knowledge and/or skills that is or are related to a specific issue in Macao studies. It will be taught by an instructor with the special knowledge and/or skills in that area of study.

Pre-requisite: None

### SSGC7015 THE MACAO ECONOMY

This course will overview the historical development of the different industries in Macao and focus on Macao's economic growth in the 20th and 21st century. It will introduce basic political economy concepts like monopoly and provide an economic explanation of the current Macao economic status.

Pre-requisite: None

### SSGC7016 POLITICS AND POLITICAL SYSTEM IN MACAO

This course explores politics between China and Portugal as well as among the world powers after the Portuguese settled in Macao. The course will especially examine and evaluate the contemporary political system under the "One Country, Two Systems" formula. How political factors interact with each other and influence the evolution of the political system throughout history will be the focus of the course.

Pre-requisite: None

### SSGC7017 REGIONAL STUDIES

The course aims at providing students with an understanding of the critical concepts and issues related to regional studies. Through the regional studies approach. Students will learn about political, economic and cultural processes occurring at a sub- and supra-state level. It will introduce the main concepts concerning the modern State, the concepts of localism and regionalism. It will also analyse the political developments around the world through some regional case studies, and pay special attention to China's national, regional development policies like the Greater Bay Area and the Belt and Road Initiative.

SSGC7018 RESEARCH PRACTICE

This course integrates theoretical learning with practice in real research projects. It trains students towards acquiring competence in research endeavors including information search, literature reviews, methodological designs, data collection, data analysis, proposal and report writing, experimental/laboratory skills and so on.

Pre-requisite: None

### SSGC7100 RESEARCH METHODS ON POLICE AFFAIR

This course systematically describes the science, scientific research, academic paper topic selection, scientific research methods and application, features, and science research papers writing. The highlight of the course is the topic selection methods and skills of police science research with information technology.

Pre-requisites: None

### SSGC7101 STUDIES OF CRIMINAL INVESTIGATION

This course mainly introduces the research status of theories and basic principles of criminal investigation, and discusses methods, strategies and patterns of investigation, etc. According to

the current situation of crime and investigation, this course discusses the serialization, industrialization, networking of crimes and related investigation countermeasures. Pre-requisite: None

### SSGC7102 CRIMINOLOGICAL THEORY

This course will provide an overview of the most influential criminological theories. It focuses on major perspectives related to crime causation, including biological, psychological, sociological, and developmental theories of delinquency and crime. Another focus of the course is the application of these theories to predict and explain criminal activities mostly commonly observed in the contemporary societies of Macao and mainland China. Pre-requisite: None

### SSGC7103 POLICING TACTICS AND COMBAT

This course is derived from the guiding ideology of safe police law enforcement and aims to build a necessary bridge between basic theoretical study and police law enforcement practice. Under the premise of consolidating the basic theory, this course uses case teaching and adversarial training throughout the course to explore the concepts and essence of police tactics, and then cultivate tactical awareness and group training capabilities. Pre-requisite: None

### SSGC7104 STRATEGY AND PRACTICE OF CRIME PREVENTION AND CONTROL

This course will provide an overview of the current strategies and practices of crime prevention and control. Under the premise of explicating the basic ideas, basic theories, the subject and object, and operating mechanism of public security maintaining, this course teaches special topics (including public security order management, emergency management, public security maintaining in important infrastructure, key areas and cyberspace, and so on) combined with practical cases.

Pre-requisite: None

### SSGC7105 THEORIES AND PRACTICE OF CRIMINAL LAW

The course is through face-to-face study in the professional fields of public security management, legal system, prevention and control practice and social security governance within the established learning period, after passing the results of each subject, the students write their graduation thesis based on theory and practical work experience. Pre-requisite: None

### SSGC7106 THEORIES AND PRACTICE OF COMMUNITY POLICING

This course draws on the theories and practices of public security, sociology, political science, management, and other disciplines, combines with the latest developments in social governance and community policing in the country, and aims to cultivate the comprehensive ability of master students of public security management to solve public security practical problems especially in community policing.

Pre-requisite: None

### SSGC7107 MODERN POLICING TECHNOLOGY

This course mainly introduces common scientific and technological methods, principles and applications in modern police work, including biometric identification technology, video investigation technology, forged document inspection technology, voice inspection technology, spectral imaging technology, biological evidence technology, big data technology, digital forensics technology, network attack and defense technology, etc. Pre-requisite: None

### SSGC7108 SOCIAL ISSUES AND GOVERNANCE

This subject provides students with a series of approaches to the study of social policy and governance in Macau or the Greater Bay Area. The subject bridges theories from sociology, political economy, and epidemiology to develop students' capacity to provide a holistic analysis

of the policies surrounding social issues in the light of socio-economic changes. The subject will help students to understand and examine the potential contradictions that market failure and government failure have for specific socio-demographic groups. Pre-requisite: None

### SSGC7109 PUBLIC RELATIONS AND MEDIA COMMUNICATION SKILLS

The primary objective of this course is to train students on the theories/concepts/principles/practices of media relations from public relations perspectives. It helps students understand what media relations is all about, and how to communicate and manage the relationships with the media. Due emphasis is also placed on such technical aspects as planning, developing and executing the programs focusing on improving and enhancing the relationships with the media. Local and overseas cases are to be used to help students comprehend how to cope with and deal with the media in reality. Pre-requisite: None

### SSGC7197 INTERNSHIP AND REPORT

Students will place an internship at a public security department or a relevant unit for public order and security. The internship exercise aims at articulating and applying theories and knowledge discussed in the class at real workplace so as to enhance students' capacity in managing agency for public security. In addition, students will have to critically review and reflect internship experience, suggest policy/reform for public security issues and hence, contribute to the understanding in the field of public security and policing. Pre-requisite: None

### SSGC7990 THESIS

The thesis can be in either Macao history, politics, economics, sociology, education, law, or comparative literature of Macao. But it has to integrate the knowledge learned in the programme. It has to demonstrate that the student is well-prepared for PhD studies. And it can be in either Chinese or English, depending on the language used by the student and supervisor. Pre-requisites: None

### SSGC8000 GOVERNANCE: POLITICS, POLICIES AND NETWORKS

This course provides the candidates with an understanding of the key concept of governance in politics and public administration for them to apply to current issues. It introduces different approaches of public management and governance, both normative and empirical. Besides, it focuses on the relationship between governance and public administration reform in terms of new public management/new public governance, the policy networks of governance, and the diversity of organisations involved in policy formulation and public service delivery. Pre-requisite: None

### SSGC8001 PUBLIC POLICY ANALYSIS

The course introduces candidates to the concepts of public policy analysis, like collective action, political efficacy and transparency, as well as, tools useful for evaluating policy impact and effectiveness. The candidates can understand the tradeoffs involved in the design of policies and institution, besides, the impacts of public administration reforms on efficiency, accountability and transparency.

Pre-requisite: None

### SSGC8002 PUBLIC ADMINISTRATION THEORY AND PRACTICE

This course introduces to the candidates the evolution and the future direction of public administration theory and practice. In fact, the focus of public administration theory is shifting from mechanical efficiency of traditional public administration to social efficiency of New Public Management and, recently, to public values and public interests of New Public Governance or New Public Service. Interdisciplinary and integrative approach becomes more and more important to public administration and public policy research.

Pre-requisite: None

### SSGC8003 PUBLIC ADMINISTRATION IN MACAO AND HONG KONG

The course provides the candidates with an overview of some major issues in public administration and public policy in Macao and Hong Kong. Topics may include the public administrative system of Macao and Hong Kong, political participation and socialization, the sustainability of social welfare system, civic engagement and public governance. Pre-requisite: None

### SSGC8004 PUBLIC ADMINISTRATION IN CHINA

The course provides the candidates with an overview of some major issues in public administration and public policy in China. Topics may include the public administrative system of China, social welfare system and welfare dependency, performance evaluation of municipal government, smart city development, civic engagement and public governance. Pre-requisite: None

### SSGC8005 RESEARCH WRITING AND ETHICS

This course covers the international standards associated with the conduct of human-subject research, with a particular focus on survey, ethnographic, archival, and qualitative research. Topics also covered include issues of authorship, mentoring, and professional ethics for academics in the university. Some guest speakers from public sector will also share their viewpoints and insights about public administration and management. Pre-requisite: None

### SSGC8006 ETHICS AND PUBLIC AFFAIRS

Under the principle of Good Governance Agenda, public values and public interests are integrated into policymaking and public services delivery. This course provides candidates with an understanding of the principles of ethical considerations of public affairs and public policy, like ageism, feminism and sustainability. Researchers and senior civil servants are invited to demonstrate the concerns of ethics on various public affairs. Pre-requisite: None

SSGC8007 PUBLIC ADMINISTRATION AND POLICY RESEARCH

Research skills are essential for evidence-based policy-making in public sector. This course provides the students with an overview of the theory and practice of qualitative methods and quantitative methods. This course enables candidates to deliver empirical studies, like the examination of causal effects of policy on observed outcomes and practical experience in applying techniques of qualitative analysis using computer software. Pre-requisite: None

### SSGC8010 CURRENT ISSUES IN PUBLIC ADMINISTRATION AND PUBLIC POLICY

The course provides the candidates with an overview of current issues in public administration and public policy in Guangdong-Hong Kong-Macau Greater Bay Area. Topics may include the development of the recruitment and training of civil servants, the principal officials accountability system and smart public administration.

Pre-requisite: None

### SSGC8011 CURRENT ISSUES IN ECONOMICS AND FINANCE

The course provides the candidates with an overview of current issues in economic and fiscal policy in Guangdong-Hong Kong-Macau Greater Bay Area (GBA). Topics may include the exchange rate policy of Renminbi (Hong Kong Dollar and Pataca), the development of stock exchange and featured finance, the role of GBA in service platform between China and Portuguese-speaking Countries and "the Belt and Road" Initiative, as well as, the development of GBA city clusters.

Pre-requisite: None

### SSGC8012 CURRENT ISSUES IN PUBLIC SECURITY

The course provides the candidates with an overview of public security in Guangdong-Hong

Kong-Macau Greater Bay Area (GBA). Topics may include the crisis management of natural disaster, the development of smart police management, the legislation of national security, and the development of anti-corruption authority and anti-money laundry authority. Pre-requisite: None

### SSGC8013 CURRENT ISSUES IN SOCIAL SECURITY AND SOCIAL WELFARE

The course provides the candidates with an overview of social security and social welfare in Guangdong-Hong Kong-Macau Greater Bay Area (GBA). Topics may include the social welfare system and welfare dependence, the sustainability of social welfare system, the role of voucher system and social insurance in social welfare system, tourism poverty alleviation, furthermore, smart health care and smart elderly service.

Pre-requisite: None

### SSGC8014 CURRENT ISSUES IN URBAN PLANNING

The course provides the candidates with an overview of urban planning in Guangdong-Hong Kong-Macau Greater Bay Area (GBA). Topics may include urban renewal policy, smart transportation, public housing policy and the infrastructure development. Pre-requisite: None

### SSGC8099 DOCTORAL THESIS

By this course, candidates have the opportunity to apply the concepts and the theories learned from the programme. The thesis-writing process could consolidate the candidates' ability to conduct independent research, demonstrate their expertise in a chosen area of interest and make an intellectual contribution to the practice of public administration and public policy. Pre-requisite: None

### SSGC8802 QUANTITATIVE RESEARCH METHODS

This course is a doctoral level seminar designed to develop the students' knowledge and skills of quantitative methods in social sciences, familiarize them with procedures of designing and implementing quantitative research projects, improve their critical thinking capability, and increase their competency in writing research papers for publication in refereed English journals. It will provide the students with hand-on experiences in data collection through surveys and data analysis using SPSS, the software packages most commonly applied in quantitative research in social sciences.

Pre-requisite: None

### SSGC8803 QUALITATIVE RESEARCH METHODS

This doctoral level course aims to develop students' knowledge and skills of qualitative research methods in social sciences. Students explore different ontological, epistemological and related methodological perspectives of qualitative research in 6 applied contexts, professional practice, and cultural settings. Students also engage with high-level readings of primary sources and apply critical analysis of exemplary qualitative research papers in preparation for designing and implementing qualitative research projects, develop interpretive/hermeneutic skills, and enhance competency in writing research papers for publication in refereed English journals. Pre-requisite: None

### SSGC8806 UNIVERSITY TEACHING AND PRACTICE

The purpose of this seminar-based course is to introduce students to the issues, practices and strategies involved in collaborative and interactive teaching in higher education settings. Through assigned readings and online and in-class discussion, the course focuses on the nature of teaching and learning, the role of student engagement, how student development impacts learning, the use of teaching practice. The course further explores strategies for authentic assessment and whole person education, as well as the development of a teaching portfolio through practical application.

Pre-requisite: None

### SSGC8807 ACADEMIC WRITING AND SCHOLARSHIP

This doctoral level course aims to develop students' knowledge and skills regarding academic scholarship and research writing within the social sciences. The course includes the discussion of ways in which culture informs academic writing, and the underlying principles of logic, argumentation and reasoning in academic writing practices. Discipline-specific scholarly conventions and technical requirements for quantitative and qualitative research reporting are discussed and applied in preparation for dissertation writing and the writing of research papers for publication in refereed English journals. Students will also engage with relevant primary and secondary source readings, and conduct critical analysis of exemplary texts. Pre-requisite: None

### SSGC8808 SOCIAL THEORY

This seminar-based course covers a wide range of material derived from a variety of theoretical traditions and bodies of work. It introduces students to, and help them develop an understanding of, complex issues and texts that are now established as the theoretical basis of scholarship in a number of relevant cognate fields, including communication studies, media studies, cultural studies, gender studies, visual culture, postcolonial studies, literary studies, anthropology, education, film studies, sociology and psychology. Topics in this course will vary according to course instructor and student interest, and may include readings of classical and/or contemporary theories in the social sciences.

Pre-requisite: None

### SSGC8809 RESEARCH ETHICS

In this online research ethics course, students will engage as independent learners in the CITI training programme to gain in-depth knowledge and understanding of all aspects of ethics as it applies in the social sciences. The CITI training programme comprises the minimal standards to demonstrate ethical competence and to comply with UM policy and Macao governed regulations for research with vulnerable populations, emerging designs, technology, and more. All students need to complete the discipline-specific prescribed units of the CITI training programme with a default score of 80% or more.

Pre-requisite: None

# PROGRAMMES OF STUDY HONOURS College

### PROGRAMME CURRICULUM

The curriculum is designed to nurture high flying students into globally competitive leaders and intellectual achievers committed to collaborative and creative thinking for Macao and beyond. It provides students with courses for learning and practicing leadership, experience of study abroad, community engagement at residential college (RC) and service learning on and off campus. In completion of the Honours College Certificate Programme, students will have:

- earned seven credits of honours courses
- gained study abroad experience
- fulfilled the RC residency requirement
- completed a leadership & service learning requirement

### HONOURS COURSE

Students have to complete one 3-credit lecture base honours course, one 1-credit honours project and one 3-credit capstone project with a "B" or higher grade earned for each course.

Course Title	Туре	Credits
HONR2003 Developing Leadership	Compulsory	3
HONR2004 Project on Social Awareness	Compulsory (Group Project)	1
HONR4001 Honours Project	Compulsory (Individual Project)	3
тс	otal credit requirement:	7

### STUDY ABROAD EXPERIENCE

Students are required to fulfil "study abroad" experience during their studies at UM. The experience must be semester/academic year based and credit bearing with a minimum of 3 abroad credit successfully transferred back to UM. It must be *international* experience. Hence, mobility programmes to universities in Mainland China, Taiwan and Hong Kong regions will not be considered as fulfillment of the Honours Programme. There are multiple ways in fulfilling this requirement with different types of financial support and requirements as stipulated by internal regulations; e.g.

- A full time semester abroad at universities having agreement with the Honours College.
- A full time semester/year abroad through the programme operated by UM.

<sup>†</sup> Different types of scholarship with requirements will be awarded to support this study abroad experience based on the availability of university's financial resources.

### RESIDENTIAL COLLEGE RESIDENCY

- Students are required to have four-semester RC residency during their undergraduate study at UM
- For students admitted through recommendation of RC Masters and Dean of Students, they are required to have full (except study abroad period) RC residency during their undergraduate study at UM

### LEADERSHIP & SERVICE LEARNING

- Students are required to demonstrate their leadership skills and services on and/or off campus by satisfying requirements through the Whole Person Development Award Programme offered by the Student Affairs Office (SAO), or an equivalent programme recognized by SAO
- With the Whole Person Development Award Programme, students are required to earn a minimum of 900 cumulative Competency Score (CS) with a minimum of 150 CS in each of the 5 core areas of development for graduation
  - Interpersonal Relation and Teamwork
  - Healthy Living
  - Cultural Engagement
  - Citizenship with Global Perspectives
  - Leadership and Service

### ADMISSION

Students pursuing a Bachelor's degree could be admitted to the Honours College Certificate Programme through three different channels:

1. Direct admission of incoming first-year students

Students who are offered any of the following scholarship awards are eligible for application of expedited admission to the Honours College, and will be admitted upon passing the admission interview<sup>\*</sup>.

- UM Grand Lotus Scholarship (by Principals' Recommended Admission)
- UM Golden Lotus Scholarship (by Principals' Recommended Admission & Admission Examination channels)
- UM Full Scholarship for Mainland China, Hong Kong and Taiwan students
- UM International Student Scholarship (Full Scholarship)
- Any other scholarships subject to the University's decision

\*Admission interview will be conducted by the Honours College at the beginning of the academic year.

The Honours College offers activities focusing on personality development for the incoming first-year students.

2. Admission by open application

First-year students for 4-year programme and Second-year students for 5-year programme could be admitted through application.

- A minimum 3.3 cumulative GPA (Scale Average15 for Faculty of Law) is required at the time of application and admission
- Applicants will be assessed based on their academic and extracurricular documents submitted with the application, and by interview if needed
- 3. <u>Admission by Recommendation of Residential College and Student Affairs Office</u> Students who have demonstrated strong leadership potential, stronger participation in services and/or special talents in areas such as arts, sports, language, music, literature can be admitted by recommendation of RC Masters and Dean of Students.
  - RC Master could recommend 2 students per year from the corresponding RC into the Honours College
  - Dean of Students could recommend 2 students per year into the Honours College
  - First-year students for 4-year programme and Second-year students for 5-year programme could be admitted through application.
  - A minimum 3.0 cumulative GPA (Scale Average 14 for Faculty of Law) is required at the time of recommendation and admission

### CONTINUATION REQUIREMENTS

To remain enrolled in the Honours College, a student must normally satisfy the following requirements

- Enroll each semester on the degree programme at the student's home unit.
- Maintain (1) cumulative GPA\* of 3.0 (cumulative Scale Average 14\* for Faculty of Law students) or above and (2) Honours College Certificate Programme cumulative GPA of 3.0 or above.
- Those with cumulative GPA\* dropping below 3.0 but not below 2.95 would be placed on probation and would be given a grace period of one semester to achieve a cumulative GPA\* of 3.0 or higher.
- Pass every subject taken at the partner University in the Study Abroad experience.
- For students admitted through recommendation of RC Masters and Dean of Students, maintain residency on RC except during study abroad period.
- Meet the English language proficiency requirement by obtaining certain scores from a public examination by the end of the first year of study at HC:
  - TOEFL iBT 79 or above, or
  - TOEFL Paper test 550 or above, or
  - IELTS 6.5 or above

<sup>†</sup>Other proof of equivalent language skills to be considered on a case-by-case basis.

• For students in the programmes of Bachelor of Law and Bachelor of Arts in Portuguese Studies, valid CAPLE or CELPE-Bras exam certification at Level CIPLE (A2) or above should be obtained by the end of the first year of study at HC.

\*The above mentioned cumulative GPA and cumulative Scale Average refer to the overall performance of a student in all the semesters of the specified years of studies, including all courses taken for the degree programme, minor programme(s).

### **COMPLETION REQUIREMENTS**

To graduate from the University of Macau with special recognition at congregation and an Honours College certificate to signify passing of the Honours College Certificate Programme, a student must satisfy the following requirements.

- Complete the requirements of the degree programme at the student's home unit.
  - Complete the requirements of the Honours College Certificate Programme.
    - Receive a "B" or higher grade for each of the honours courses taken.
      - Satisfy the Study Abroad Experience requirement.
      - Satisfy the four-semester RC residency requirement; for students admitted through recommendation of RC Masters and Dean of Students, satisfy the full (except study abroad period) RC residency requirement.
    - Satisfy the leadership and service learning requirement by earning 900 cumulative competency score through the Whole Person Development Award Programme of the University. The 900 CS must include a minimum of 150 CS in each of the 5 core areas of development (Interpersonal Relation and Teamwork; Healthy Living; Cultural Engagement; Citizenship with Global Perspectives; Leadership and Service).
- For students admitted through direct admission or open application Has (1) cumulative GPA\* of 3.3 (cumulative Scale Average\* of 15 for Faculty of Law students) or above and (2) Honours College Certificate Programme cumulative GPA of 3.3 or above.
- For students admitted admitted through recommendation of RC Masters and Dean of Students Has (1) cumulative GPA\* of 3.0 (cumulative Scale Average\* of 14 for Faculty of Law students) or above and (2) Honours College Certificate Programme cumulative GPA of 3.0 or above.

\*The above mentioned cumulative GPA and cumulative Scale Average refer to the overall performance of a student in all the semesters of the specified years of studies, including all courses taken for the degree programme, minor programme(s).

### HONOURS RECOGNITION

Upon completion of all requirements of the Honours Programme and the degree programme at their home unit, the honours students will receive special recognition at congregation and a Certificate of Honours College. Honours work is noted on transcripts.

### **Course Description**

### HONR2003 DEVELOPING LEADERSHIP

This course has three interrelated components focused on the individual, community, and global society, and is designed to develop leadership abilities. The first component focuses on developing students' individual self-awareness and personal development through an exploration of values, beliefs, and socio-cognitive skills. The second component focuses on developing students' leadership skills in the local community. The third component focuses on preparing students to be global citizens, with an enhanced understanding of the diverse values, beliefs, and behaviours typical of different cultures and societies. Taken together, these three distinct course components will build students' capacity to be global leaders.

### HONR2004 PROJECT ON SOCIAL AWARENESS

The course brings together students of different majors to conduct small group research and discussion on current social issues of local and global communities, and everyday problems, under the supervision of members from the Residential Colleges, including resident fellows, non-resident fellows, and college affiliates. Students are motivated to develop their skills on critical thinking, multidisciplinary approach to problem solving, and teamwork.

### HONR4001 HONOURS PROJECT

Students are required to apply knowledge from their disciplines of studies to broader global issues such as innovation, entrepreneurship, and sustainability, and complete scholarly projects under the supervision of faculty advisors in the respective field of study of the research topics, including multidisciplinary topics. The projects are expected to meet the scholarly standards of the disciplines and of the Honours College. Students are required to present their projects.

### LANGUAGE OF INSTRUCTION

English is the main language of instruction.

(3 credits)

### (3 credits)

(1 credit)

### 766

# PROGRAMMES OF STUDY Institute of Applied Physics and Materials Engineering

# **Doctoral Degree Programme**

# AREA OF STUDY

Applied Physics and Materials Engineering

# **Doctoral Degree Programme**

# **Doctor of Philosophy**

### **Applied Physics and Materials Engineering** •

Compulsory (	Courses:	Credits
APME8003	Advanced Instrumentation for Materials Characterization	3
APME8025	Advanced Quantum Mechanics	3
APME8027	Research Ethics	0
APME8028	Research Writing	0
1 Required Ele	ective from the list of Required Electives	3
APME8999	Doctoral Thesis	18
Total Credits:		27

# **Total Credits:**

### List of Required Electives:

APME8001	Solid State Physics	3
APME8007	Thin Film Physics	3
APME8014	Advanced Electrochemical Energy Conversion and Storage	3
APME8020	Advanced Optoelectronics	3
APME8021	Advanced Laser Spectroscopy Technology	3
APME8022	Transmission Electron Microscopy	3
APME8024	Special Topics in Applied Physics and Materials Engineering	3
APME8029	Advanced Inorganic Chemical Synthesis	3
APME8030	Advanced Mechanics of Materials	3
APME8031	Advanced Micro and Nano-systems: from Fundamentals to Applications	3
APME8032	Advanced Organic-Inorganic Engineering Materials	3
APME8033	Nanomaterials and Nanochemistry	3
APME8034	Semiconductor Physics	3
APME8035	Advanced Materials Science and Engineering	3
APME8036	Advanced Electromagnetism and Modern Scattering Techniques	3

# **Course Description**

### APME8001 SOLID STATE PHYSICS

In this course, the behavior of atoms and shared electrons in solids will be described by classical physics and quantum mechanics. The discussion of solid with crystalline structure will be one of the emphases. Some properties of crystal such as defects, disorder and thermal vibration will be studied. Then, band theory will be investigated. The physics of p-n junction semiconductor will also be introduced. Materials will be classified by models of magnetism as well as electric properties.

Pre-requisite: None

### APME8003 ADVANCED INSTRUMENTATION FOR MATERIALS CHARACTERIZATION

Introduction of commonly used materials characterization methods (XPS, SEM, AFM, XRD, XRF, Raman, XPS), including their theory of operation and hands-on experience. Includes a discussion of the measurement process and instrumental analysis of samples. Pre-requisite: None

### APME8007 THIN FILM PHYSICS

Definition of thin films. Environment and molecular and plasma processes in thin film deposition. Cold and thermal plasma. Requirement for substrate, substrate cleaning. Formation of thin films. Properties of thin films. Mechanical, electrical, thermal, chemical, and optical properties of thin films. Thermal evaporation. Laser ablation, synthesis of nanomaterials. Electrical discharges used in thin film deposition. Practical electric discharge configuration for deposition of thin films. direct current electric discharges, radio-frequency discharges, microwave discharges, electron cyclotron resonance plasma, matching units, floating potential, bias potential, plasma potential, effective bias, self-bias. Physical deposition techniques. Chemical vapor deposition techniques (CVD). Other processing technologies.

Pre-requisite: None

### APME8014 ADVANCED ELECTROCHEMICAL ENERGY CONVERSION AND STORAGE

This advanced course introduces principles, mathematical models and implementation of electrochemical energy conversion and storage. The principle of electrochemistry is introduced, including components of an electrolytic cell, Nernst's equation, thermodynamics and electrokinetics. The basic of power conversion is also introduced, including power electronics switches, converters and their control. The applications to batteries, solar cells, fuel cells and other emerging energy generation technologies are explored. Pre-requisite: None

### APME8020 ADVANCED OPTOELECTRONICS

Brief introduction of semiconductor physics and condensed matter physics. Theory of the interaction between light and matter. Optical gain, light transmission and absorption in media. Applications of light emission device and photo-electric transfer device. Principle and structure of selected photoelectric device.

Pre-requisite: None

### APME8021 ADVANCED LASER SPECTROSCOPY TECHNOLOGY

Provide essential knowledge for the research frontiers in ultrafast laser spectroscopy and novel optical materials. Topics include: laser fundamentals, linear and nonlinear optical spectroscopy, time-resolved spectroscopy, single molecule spectroscopy, fluorescence and Raman microscopy, optical manipulation, optical properties of novel materials and some optoelectronic applications. Pre-requisite: None

### APME8022 TRANSMISSION ELECTRON MICROSCOPY

Introduction to imaging and diffraction analysis with transmission electron microscopy. Common sample preparation techniques. Basic diffraction theory and imaging principles using different imaging techniques, including bright field, dark field, high resolution and z-contrast imaging.

Working principles of related compositional analysis techniques, including energy dispersive Xray spectroscopy (EDS) and electron energy loss spectroscopy (EELS). Hands-on operation of the microscope can be optional.

Pre-requisite: None

### APME8024 SPECIAL TOPICS IN APPLIED PHYSICS AND MATERIALS ENGINEERING

Any specialized topic in Applied Physics and Materials Engineering chosen by the staff member who has experience in that particular field, but the topic is not covered by the other postgraduate courses in the PhD Programme.

Pre-requisite: None

### APME8025 ADVANCED QUANTUM MECHANICS

History and philosophy of quantum mechanics will first be reviewed in this course. Wave function and its statistical interpretation will be investigated. Time-independent Schrodinger equation will be discussed with some examples of infinite square well, finite square well and harmonic oscillator, etc. Then, hydrogen atom will be studied by Schrodinger equations in three dimensions. Furthermore, wave function of two-particle systems, atoms and solids will be introduced. The parts of application cover contents of perturbation theory, variational principle, WKB approximation and adiabatic approximation.

Pre-requisite: None

### APME8027 RESEARCH ETHICS

The course provides students with an understanding of the following issues:

- The need for research ethics and the responsibility of the researcher (the student)
- The most common types of academic dishonesty (such as fabrication and plagiarism)
- How to avoid committing acts of academic dishonesty (such as through using citations and references)

Pre-requisite: None

### APME8028 RESEARCH WRITING

The course focuses on helping students to make academic presentations whether verbally (as in a conference) or in writing (as in a paper). Topics include:

- How to write a research proposal
- How to structure a presentation (on paper and in power point)
- Tenses used in various parts of a paper presentation
- How to structure clear logical paragraphs
- How to be concise
- How to avoid ambiguity and different writing styles (for example, conventions for use of numbers, abbreviations, etc.)

Pre-requisite: None

### APME8029 ADVANCED INORGANIC CHEMICAL SYNTHESIS

Brief introduction of chemistry basics and main focus on classic and emerging inorganic chemical synthesis methods as well as some physical and mechanical approaches for comparison. Some characterization techniques and their chemical principles. Implications of the inorganic synthesis techniques to the research and development in applied physics and materials science.

Pre-requisite: None

### APME8030 ADVANCED MECHANICS OF MATERIALS

Basic training for students to understand the advanced mechanics of materials such as elastic behavior, inelastic behavior, anisotropic behavior, fracture behavior, and fatigue. With these knowledge, students will be able to analyze the materials mechanical behavior and wisely use the materials. Students with the knowledge of different mechanical behavior of materials, both isotropic and anisotropic. Pre-requisite: None

770

### APME8031 ADVANCED MICRO AND NANO-SYSTEMS: FROM FUNDAMENTALS TO APPLICATIONS

Overall introduction to miniaturization and microelectromechanical systems (MEMS); Fundamental physics of scaling in micro/nano-worlds; Overview of advanced micro/nanofabrication materials & technologies & devices; Governing principle of physical phenomenon in micro/nano-scales, e.g. actuation, transduction, resonance, and manipulation, etc.; State-of-theart applications of micro/nano-systems for interdisciplinary fields. Pre-requisite: None

### APME8032 ADVANCED ORGANIC-INORGANIC ENGINEERING MATERIALS

Briefly introducing basic knowledge of traditional engineering materials including polymer and cement. Mainly focus on: Introduction of organic/inorganic composite and nanocomposite materials; Introduction of polymeric admixtures for high-performance inorganic materials; Crystallization, surface and interface science of composite materials; Achievement of functionalization and ultimate mechanical properties for engineering composites; Design of advanced engineering composites; Industrial processing and application of engineering composites. Students will learn how to apply the basic knowledge of polymer, cement and composite into the design of advanced organic/inorganic engineering materials towards practical applications. They will also have a good impression for the real industrial use of engineering composites.

Pre-requisite: None

### APME8033 NANOMATERIALS AND NANOCHEMISTRY

Introduction of low dimensional nanomaterials, e.g. carbon nanotube, graphene and transition metal dichalcogenides, and the corresponding methods of synthesis and characterization. Surface and interface modification of nanomaterials. Band-structure engineering of nanomaterials. Low-dimensional Van del Waals heterostructures. Applications of electronic devices, thermodynamics and fluid dynamics.

Pre-requisite: None

### APME8034 SEMICONDUCTOR PHYSICS

Brief introduction of solid-state physics and crystallography. Mainly focus on the knowledge of semiconductor physics, condensed matter physics and semiconductor device physics: Intrinsic semiconductor, doped semiconductor and the carrier transportation in semiconductors will be introduced; the operating principles of some kinds of semiconductor devices will be introduced, such as pn junction, MS junction and FET, as well as the fabrication method and application in present. Also, some commercial semiconductor devices, such as LED and solar cells, will be introduced.

Pre-requisite: None

### APME8035 ADVANCED MATERIALS SCIENCE AND ENGINEERING

A historical account of the discovery and development of materials science & engineering, including in-depth discussion of metals, ceramics, semiconductors, and other strongly-correlated electron systems. Fundamental knowledge in development of energy materials and single crystal growth, introduction of the modern neutron & synchrotron X-ray scattering techniques based on worldwide national large facilities, review of the most updated research achievements in the study of advanced functional materials such as spintronic, multiferroicity, superconductivity, spin frustration, spic ice, solar cell, battery, etc.

Pre-requisite: None

# APME8036 ADVANCED ELECTROMAGNETISM AND MODERN SCATTERING TECHNIQUES

Magnetism is a very active and challenging subject since it represents a typical many-body problem and a complex application of quantum-mechanics, statistical physics and electromagnetism. During the last decades, new discoveries have emerged such as the high

temperature superconductors and the colossal magneto-resistance manganite compounds. Besides bulk materials, magnetism of thin films and surfaces became a topic of great current interest. A promising new field of application emerges, so-called magneto-electronics with spin transistors. This progress is largely due to new experimental methods and only neutron and synchrotron X-ray scattering would be mentioned. Pre-requisite: None

### APME8999 DOCTORAL THESIS

An independent investigation under the supervision of an institute staff member. Pre-requisite: None

# PROGRAMMES OF STUDY Institute of Collaborative Innovation

# **Master's Degree Programmes**

# **Master of Science**

## Data Science

Compulsory Cour	ses	Credits
CISC7201	Introduction to Data Science Programming	3
CISC7204	Data Science and Data Visualization	3
CISC7203	Database and Data Mining Technologies	3
CISC7202	Tools for Machine Learning	3
Total Credits:	° °	12

### Specialization A--<u>Artificial Intelligence Applications</u>:

Choose 4 required elective courses from the following:

<b>Required Elective</b>		Credits
CISC7013	Principles of Artificial Intelligence	3
CISC7018	Computer Vision and Pattern Recognition	3
CISC7019	Web Mining	3
CISC7021	Applied Natural Language Processing	3
CISC7022	Big Data Processing and Analysis	3
CISC7026	Introduction to Deep Learning	3
Total Credits:		12

eenipaleery eea		
CISC7298	Project Report	6
Total Credits:		6
Grand Total:		30

## Specialization B-- Marketing Analytics:

Compulsory Courses		Credits	
MKTG7010	Marketing Management	3	
MKTG7030	Consumer Behavior	3	
MKTG7033	Marketing Analytics	3	
BAGC7011	Research Methods	3	
BAGC7898	Project Report	6	
Total Credits:		18	
Grand Total:		30	

# **Specialization C --** <u>Financial Technology</u>: Choose 2 required elective courses from the following:

Required	Electiv
----------	---------

0110000 2 10941104 01	courses norm the renowing.	
Required Elective		Credits
FINC7010	Corporate Finance	3
FINC7026	International Banking and Bank Management	3
FINC7035	Financial Risk Management	3
ACCT7060	Financial Statement Analysis for Decision Making	3
BECO7010	Statistics and Financial Econometrics	3
Total Credits:		6
Compulsory Course	es	
FINC7060	Topics in Data Analytics and Financial Technology	3
FINC7054	Introduction to Modern Financial Technology	3
BAGC7898	Project Report	6

12

30

Project Report BAGC7898 **Total Credits:** Grand Total:

### Specialization D -- Data Strategy and Compliance:

Compulsory Courses	6	Credits
LAWS7701	Data Applications and Regulation in Digital Society	3
LAWS7702	Big Data Analytics and Compliance in E-business	3
LAWS7703	Data Strategy and Protection in Healthcare and E- governance	3
LAWS7704	Artificial Intelligence and Comparative Law	3
LAWS7798	Project Report	6
Total Credits:		18
Grand Total:		30

### Specialization E -- Precision Medicine:

Compulsory Cour	ses	Credits
HSCI7001	Artificial Intelligence in Medicine	3
HSCI7002	Biomedical Sciences	3
HSCI7003	Digital Bio-medicine	3
HSCI7004	Healthcare Analytics	3
HSC17998	Project Report	6
Total Credits:		18
Grand Total:		30

# Specialization F -- <u>Computational Linguistics:</u>

Choose 3 required elective courses from the following:

<b>Required Elective</b>		Credits
CISC7021	Applied Natural Language Processing	3
ENGL7022	Corpus Linguistics	3
AHGC7039	Computer-aided Translation	3
AHGC7303	Evaluation and Assessment of Language Use	3
CHLL7101	Methods in Chinese Linguistics	3
AHGC7308	Special Topics in Applied Linguistics I	3
PHIL7101	Topics in Semantics	3
Total Credits:		9
Compulsory Cour	rses	
AHGC7315	Language and Linguistics	3
AHGC7398	Project Report	6
Total Credits:	- ·	9
Grand Total:		30

### Specialization G -- Analytics in Teaching and Learning:

Choose 4 required elective courses from the following:

Required Elective		Credits
EDUC7041	Assessment and Evaluation of Educational Big Data	3
EDUC7042	Data-driven Approach to Educational Administration	3
EDUC7043	Learning Enhancement with Big Data	3
EDUC7044	Quantitative Social Science Research with Big Data	3
SSGC7201	Civic Data Acquisition and Analysis	3
Total Credits:		12

Compulsory Cou	rses	
EDUC7098	Project Report	6
Total Credits:		6
Grand Total:		30

### Specialization H – Smart Governance:

Choose 4 required elective courses from the following:

<b>Required Elective</b>	•	Credits
SSGC7201	Civic Data Acquisition and Analysis	3
SSGC7202	Big Data and Smart Governance	3
SSGC7203	Analysis of Media and Opinion Data	3
SSGC7204	Making Sense of Smart Governance	3
EDUC7044	Quantitative Social Science Research with Big Data	3
Total Credits:	<sup>o</sup>	12
Compulsory Cour	rses	
SSGC7298	Project Report	6
Total Credits:	· ·	6
Grand Total:		30

# PROGRAMMES OF STUDY Institute of Collaborative Innovation

# **Master's Degree Programmes**

# **Master of Science**

# • Cognitive Neuroscience

Compulsory Cour	ses	Credits
CCBS7001	Principles of Neuroscience	3
CCBS7002	Cognitive Neuroscience	3
CCBS7003	Brain Stimulation and Neuroimaging Techniques	3
CCBS7098	Project Report	6
Total Credits:		15
	s – Group 1 (Students are required to take 2 Required from Group 1 to obtain 6 credits)	Credits
CCBS7004	Magnetic Resonance Imaging	3
CCBS7005	Computational Cognitive Neuroscience	3
CMED7018	Bio-Statistics	3
Total Credits:		6
Required Electives – Group 2 (Students are required to take 3 Required Elective courses from Group 2 to obtain 9 credits)		
EDUC7402	Psychology of Learning	3
EDUC7503	Advanced Exercise Physiology	3
EDUC7403	Advanced Developmental Psychology	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
SHGC7400	Clinical Linguistics	3
ENGL7004	Psycholinguistics	3
AHGC7302	Second Language Acquisition	3
ENGL7005	Sociolinguistics	3
ECEN7021	Biomedical Transducers and Instruments	3
CISC7026	Introduction to Deep Learning	3
CISC7013	Principles of Artificial Intelligence	3
CISC7202	Tools for Machine Learning	3
PYSC7708	Behavioral Addiction	3
IRTM7036	Cross Cultural Gambling Psychology	3
CCBS7006	Neuroeconomics	3
Total Credits:		9
Grand Total:		30

# **Course Description**

# Master of Science - Data Science

### CISC7201 INTRODUCTION TO DATA SCIENCE PROGRAMMING

This course is designed for students who are new to the world of data science. After the introduction of some basic arithmetic, variables, and data structures in Python, students will start to learn how to collect and extract data from real datasets. Some data analytical skills using the control flows and Python packages (e.g., NumPy, SciPy, Pandas, etc.) will be introduced. To address the needs of big data processing, some distributed computing frameworks (e.g., Spark) and visualization tools with Python will be discussed. Students may apply some basic learning algorithms with Python packages (e.g., scikit-learn) to extract knowledge from data.

Pre-requisite: None

Grade Type: Letter Grade

### CISC7204 DATA SCIENCE AND DATA VISUALIZATION

This course is designed to enable students to learn the significance of data visualization in data science and big data analytics, and develop knowledge and skills to present quantitative data using data visualization tools. This course emphasizes on the practical aspects of data science with a focus on using R or Python programming language to process data, produce visualizations, and interpret these visualizations. Students will learn the practice of data cleaning, reshaping of data, basic tabulations, aggregations and visual representation in order to increase the understanding of complex data and models.

Pre-requisite: None

Grade Type: Letter Grade

### CISC7203 DATABASE AND DATA MINING TECHNOLOGIES

This course is designed to enable students to learn the database and data mining concepts and techniques for big data analytics and development in different domains. The course concentrates on the practical issues of database and data mining for solving big data problems. The content includes data modeling in database and data warehouse, SQL, Python programming for database, Python programming and R programming for data mining applications. Students will learn the skills of database modeling, querying, and programming, as well as the programming techniques for data mining.

Pre-requisite: None

Grade Type: Letter Grade

### CISC7202 TOOLS FOR MACHINE LEARNING

The course will start from the very beginning of the ML basis. First, the basic concepts such as liner algebra; probability and information theory, and numerical methods will be introduced. Next machine learning overview, inductive learning, and representation learning will be introduced. Basic deep learning processes are designed as artificial neural network; Bayesian Networks and learning; Deep learning and deep neural networks; convolution neural network. Throughout the course, practical methodology of using tools such as Tensorflow or Karas etc. will be emphasized. Pre-requisite: Introduction to Data Science Programming Grade Type: Letter Grade

### Specialization A: Artificial Intelligence Applications

### CISC7013 PRINCIPLES OF ARTIFICIAL INTELLIGENCE

Overview of Artificial Intelligence Application Areas, Languages and Programming Techniques

for Artificial Intelligence, Problem Solving, Knowledge-based Systems, Knowledge Representation, Planning, Machine Learning, Natural Language Processing, Genetic Algorithms. Pre-requisite: None Grade Type: Letter Grade

### CISC7018 COMPUTER VISION AND PATTERN RECOGNITION

This course introduces the fundamentals and advanced topics of pattern recognition for postgraduate students. It emphasizes both theory and applications of pattern recognition. Topics include overviews of general pattern recognition techniques, statistical decision theory, linear discriminant functions, multilayer neural networks, supervised learning, unsupervised learning and clustering, and applications of pattern recognition (such as biometrics and multimedia database retrieval.) Pre-requisite: None

Grade Type: Letter Grade

### CISC7019 WEB MINING

The course will cover the fundamental concepts, principles and algorithms in the area of Web Mining. It will firstly give an introduction to the concepts of the traditional informati retrieval systems and the principles of web search engines, then, the course will extensively discuss techniques and algorithms of web mining, including Link-Base analysis, web page classifications, web advertisement, recommendation algorithms, web information extractions, web image indexing. The course also requires each student to complete a related course project. Pre-requisite: None

Grade Type: Letter Grade

### CISC7021 APPLIED NATURAL LANGUAGE PROCESSING

This course covers both the fundamental and advanced topics in Natural Language Processing (NLP), which deals with the application of computational models to text data. In this course, the core tasks in natural language processing will be examined, including minimum edit distance, language modelling, Nävie Bayes, Maximum Entropy, text classification, sequence labelling, POS tagging, syntax parsing and computational lexical semantics. Modern NLP applications will be explored such as information retrieval, and statistical machine translation. Students will learn how to formulate and investigate research questions on related topics.

Pre-requisite: None

Grade Type: Letter Grade

### CISC7022 BIG DATA PROCESSING AND ANALYSIS

This course introduces the latest development of data engineering techniques, including data query processing (e.g., multi-dimensional data, sequence data, and spatial-temporal data) in cloud computing and HPC environments. Students will learn study and learn how to formulate and investigate the state-of-the-art problems and solutions on related topics.

Pre-requisite: None

Grade Type: Letter Grade

### CISC7026 INTRODUCTION TO DEEP LEARNING

This is an introductory course on Deep Learning methods with applications to computer vision, natural language processing, biology, financial data, and more. Students will learn foundational knowledge of deep learning algorithms and get practical experience in building neural networks in modern deep learning frameworks. Experience in Python is helpful but not compulsory. We assume students having background in calculus (i.e., taking derivatives) and linear algebra (i.e., matrix multiplication).

Pre-requisite: None Grade Type: Letter Grade

### CISC7298 PROJECT REPORT

An independent project under the supervision of a faculty staff member. A Project Report focuses

on combining existing academic theories or advanced technologies with an evaluation of a case study or industrial project. The goal of this Project Report is to facilitate the integration of practice with academic research. Pre-requisite: None

Grade Type: P/NP

### Specialization B: Marketing Analytics

### MKTG7010 MARKETING MANAGEMENT

This course seeks to equip students with the key conceptual, analytical and problem solving skills to address marketing problems and decisions. Specifically, it introduces students to various marketing analyses (customer, competitor and company analysis) and marketing strategies. Tools and methods used in planning and implementing the four Ps (product, price, place and promotion) will be explored. This course integrates theory and practice within the context of organizations operating locally and globally.

Pre-requisite: None

Grade Type: Letter Grade

### MKTG7030 CONSUMER BEHAVIOR

This course offers an analysis of consumer and organizational purchase behavior. Emphasis is placed on how and why purchase decisions are made and on the psychological, sociocultural and economic underpinnings of different purchase behaviors. Based on these principles, students should be able to predict how buyers (consumers and organizations) will react to various marketing actions.

Pre-requisite: MKTG 7010 Marketing Management Grade Type: Letter Grade

### MKTG7033 MARKETING ANALYTICS

This course is designed to help students understand the development of marketing data in the big data era and the value of such data in marketing decision making. Students will be introduced the broad range of marketing data available to businesses, ways to gain insights from the data and convert insights into profitable customer acquisition, retention and growth efforts. Important marketing data usages (e.g.,customer behavior prediction, customer value evaluation, social listening, etc.) are discussed using examples from different industries. Issues of data privacy and implementation challenges in big data marketing will also be explored.

Pre-requisite: MKTG 7010 Marketing Management

Grade Type: Letter Grade

### BAGC7011 RESEARCH METHODS

This course prepares students to design and conduct academic and applied research in business. It aims to provide essential knowledge and skills to the students for mastering the research process. Major topics include problem identification, literature review, research design, data collection, analytical methods and report writing.

Prerequisite: None (for students of Master of Science in Data Science (Big Data and Analytics in Marketing)

Grade Type: Letter Grade

### BAGC7898 PROJECT REPORT

This Project Report gives the students an opportunity to apply the knowledge obtained from their previous studies in data science and their field of specialization. Students will be required to identify existing practical problems in their field of specialization. To develop solutions for the problems identified, they need to conduct detailed literature review, design appropriate research method, gather relevant data, analyze their data using big data analytic techniques, interpret their findings, and finally write up the entire project report.

Pre-requisite: Research Methods, Marketing Analytics [for students of MSc in Data Science (Big Data and Analytics in Marketing)] & Corporate Finance, Introduction to Modern

Financial Technology [for students of MSc in Data Science (Financial Technology)] Grade Type: Letter Grade

### Specialization C: Financial Technology

### FINC7010 CORPORATE FINANCE

This course offers students a more advanced understanding of important concepts in the field of corporate finance. It covers basic topics including capital budgeting, alternative valuation methods, capital structure decisions, corporate payout policy, securities offering decisions, as well as more advanced topics (optional) such as corporate governance, mergers and acquisitions, and corporate risk management. The objective of this course is to provide students with essential tools to study more advanced courses in finance.

Pre-requisite: None (for Master of Science in Data Science (Financial Technology)) Grade Type: Letter Grade

### FINC7026 INTERNATIONAL BANKING AND BANK MANAGEMENT

This course is structured around the microeconomic problems of financial management of banking firms. It focuses on decision making and offers a unique approach to understanding commercial bank management. Topics to be covered include banking trends and competition, performance analysis, liquidity planning, interest rate risk management, credit risk analysis, cost of funds, and capital management. Both domestic and international banking activities will be examined. The objective of this course is to provide the student with the conceptual framework necessary to analyze and comprehend the current problems confronting managers of commercial.

Pre-requisite: FINC7010 Corporate Finance/FINC7011 Managerial Finance Grade Type: Letter Grade

### FINC7035 FINANCIAL RISK MANAGEMENT

This course focuses on risk management techniques in multinational corporations and credit risk management. A strand of risk management topics would be covered such as foreign exchange, money market instruments, derivative products, risk exposure of corporations, measurement of exposure, and risk management in financial institutions. The credit risk will discuss various economic and financial factors that affect credit quality of corporations, evaluating corporation's debt servicing ability and their likelihood of default. Topics covered will include business and financial risk analysis, debt covenants, security structures, credit scoring and credit rating models.

Pre-requisite: FINC7010 Corporate Finance Grade Type: Letter Grade

### FINC7054 INTRODUCTION TO MODERN FINANCIAL TECHNOLOGY

Financial Technology, FinTech, refers to the use of technological innovation, particularly digital technology, in financial systems, business models, and existing and new financial products. This course offers students an introduction to how an ecosystem for the financial sector is created using disruptive technology. Topics covered include fintech financing, fintech innovations (such as smart contracts, robo-advisors, cryptocurrencies and block chain, insurtech, proptech), and cybersecurity. Through this course, students should have a foundation on how fintech innovations affect the finance industry, such as traditional banking, financial services, investment decisions, innovation on financial products, financial data analytics, and financial regulations. Pre-requisite: FINC7010 Corporate Finance

Grade Type: Letter Grade

### FINC7060 TOPICS IN DATA ANALYTICS AND FINANCIAL TECHNOLOGY

This course introduces to students the advanced statistical and decision analysis tools. It emphasizes on the applications of data analytics techniques in business practices. Students will learn the intuition behind the methods and build hands-on experiences using Python, which is the most popular programming tool with versatile applications in finance and economics. Pre-requisite: None

Grade Type: Letter Grade

### ACCT7060 FINANCIAL STATEMENT ANALYSIS FOR DECISION MAKING

The course aims to demonstrate how financial statements can be reformulated, analysed and interpreted for decision making. It further examines how accounting information is used to assess and manage credit, liquidity, operating risks in the market.

Pre-requisite: None (for Master of Science in Data Science (Financial Technology)) Grade Type: Letter Grade

### **BECO7010 STATISTICS AND FINANCIAL ECONOMETRICS**

This course introduces the basic tools with the aid of data for decision making in finance. It covers introductory probability, decision analysis, basic statistics, regression, simulation, linear and nonlinear optimization, and discrete optimization. Computer Programming exercises, cases, and examples, deliver in SAS® (by the SAS Institute Inc.) are drawn from asset pricing, market microstructure, derivatives, and other functions.

Pre-requisite: None

Grade Type: Letter Grade

### BAGC7898 PROJECT REPORT

This Project Report gives the students an opportunity to apply the knowledge obtained from their previous studies in data science and their field of specialization. Students will be required to identify existing practical problems in their field of specialization. To develop solutions for the problems identified, they need to conduct detailed literature review, design appropriate research method, gather relevant data, analyze their data using big data analytic techniques, interpret their findings, and finally write up the entire project report.

Pre-requisite: Research Methods, Marketing Analytics [for students of MSc in Data Science (Big Data and Analytics in Marketing)] & Corporate Finance, Introduction to Modern

Financial Technology [for students of MSc in Data Science (Financial Technology)] Grade Type: Letter Grade

### Specialization D: Data Strategy and Compliance

### LAWS7701 DATA APPLICATIONS AND REGULATION IN DIGITAL SOCIETY

The evolution of data science and its applications in a digital society raise various legal and regulatory questions. This course aims to introduce the legal concepts and principles necessary to understand the pertinent rights and obligations as well as compliance requirements in the development and use of data applications. The course will identify the key legal issues facing diverse data applications and technologies and introduce applicable legal and regulatory regimes. The course will examine the scope and limitations of the relevant domestic and international laws governing the data applications within a digital society and in the context of cross-border transactions.

Pre-requisite: None

Grade Type: Letter Grade

### LAWS7702 BIG DATA ANALYTICS AND COMPLIANCE IN E-BUSINESS

Big data analytics is emerging as a fundamental part of strategic planning and decision making in modern businesses. The success of a data-analytics embedded e-business strategy not only depends on proficient analytical models but also the ability to address challenges and

externalities that are beyond the control of individual enterprises. This course is aimed at developing the capacity to identify and address various legal and compliance requirements impacting relevant data strategies. Legal and regulatory issues facing data applications in ebusiness including in business-to-business and business-to-consumer sectors and effective means to prevent and resolve related legal disputes will be covered.

Pre-requisite: None

Grade Type: Letter Grade

### LAWS7703 DATA STRATEGY AND PROTECTION IN HEALTHCARE AND E-GOVERNANCE

The course is designed to introduce students to gain an in-depth understanding of e-governance with an emphasis on regulatory frameworks for data security, information protection, and transparent governance. It examines legal challenges associated with the use of data collected by various smart applications for smart city plans. The course also gives a focused examination of digitalized healthcare and biomedical research, and the regulations that govern them. It addresses not only privacy and security matters but also other important challenges, such as those related to data quality and data analysis in precision medicine and clinical research. Pre-requisite: None

Grade Type: Letter Grade

### LAWS7704 ARTIFICIAL INTELLIGENCE AND COMPARATIVE LAW

Developing effective Artificial Intelligence (AI) applications entails the ability to identify relevant opportunities and challenges and address them strategically. This course aims to explore the nexus between AI and law and introduce contemporary and emerging issues in the field. It will study specific AI applications and identify related legal challenges and compare how key jurisdictions regulate such challenges. The course will cover potential legal risks and liability facing users of AI and discuss precautionary measures to limit liability. Data protection and privacy obligations and Intellectual Property Rights Protection of AI Programing and Algorithms of Machine Learning will be comparatively studied.

Pre-requisite: None

Grade Type: Letter Grade

### LAWS7798 PROJECT REPORT

The Project Report serves the purpose of demonstrating the ability to systematically analyze the fundamental relationship between law and data applications and related strategies in a specific context. Students will identify, study, and critically examine key inter-disciplinary issues arising in the context of a chosen topic or a case study approved by the Faculty. The students may conduct a fundamental or applied research to seek practical solutions to legal and policy challenges facing formulation and implementation of effective data strategies. A faculty member competent in the selected legal field will supervise the project research and finally approve the project report.

Pre-requisite: None Grade Type: Letter Grade

### Specialization E: Precision Medicine

### HSCI7002 BIOMEDICAL SCIENCES

This course introduces the essential biological knowledge to students with non-biology background in order for them to understand the basic concepts of precision medicine. It uses cancer as a model disease to illustrate how precision medicine can provide better, individually tailored healthcare solutions to patients. The course introduces the methods of discovering causes of cancer, the techniques to perform accurate diagnoses, the mechanisms of cancer therapies, and the different strategies for cancer treatment. Pre-requisite: None

Grade Type: Letter Grade

### HSCI7003 DIGITAL BIO-MEDICINE

This course introduces the knowledge in digital medicine, technologies, and the associated big data and analysis to students with non-biology background. Digital medicine is the convergence of digital technologies (including genomic technologies) with medicine, living, and society to enhance the efficiency of medicine delivery and make medicines more personalized and precise. This course covers high-throughput (HT) genotyping, HT phenotyping, artificial intelligence, big data analysis, public database, proteomics and other omics. The goal of this course is to develop students' understanding of digital medicine and required analytical skills for the exciting possibilities towards creating a new paradigm of precision medicine.

Pre-requisite: None

Grade Type: Letter Grade

### HSCI7004 HEALTHCARE ANALYTICS

Healthcare analytics is one of the fastest growing industries in our economy. Healthcare analytics allows for the examination of patterns in various healthcare data in order to determine how clinical care can be improved. This course introduces the essential elements of healthcare analytics to students with non-healthcare background, and provides them with an overview of population health informatics, clinical informatics, imaging informatics, mobile healthcare and their contributions to precision medicine. The goal of this course is to develop students' understanding of healthcare analytics and analytical skills to comprehend healthcare data. Pre-requisite: None

Grade Type: Letter Grade

### HSCI7001 ARTIFICIAL INTELLIGENCE IN MEDICINE

This course introduces the concept of artificial intelligence (AI) in medicine, the associated big data analysis, and analytic programming. Medical AI is the use of algorithms and software to approximate human cognition in the analysis of complex medical data. AI is currently transforming healthcare delivery and is augmenting doctors' roles in medicine. This course covers analytic programming (predominately in R), big data analysis, and application for AI in medicine. The goal of this course is to develop students' understanding and to confer hands-on analytical skills for AI in medicine on them.

Pre-requisite: None

Grade Type: Letter Grade

### HSCI7998 PROJECT REPORT

An individual project provides the opportunity to plan and execute a significant project of research, investigation or development, and to integrate learning and put the techniques learnt throughout the master programme into practice under an academic supervision. Using large datasets from academia, hospitals, industry or government, students carry out high-level coordinated academic and practical work to solve a real-world problem in the field of biomedical sciences, medicine or healthcare, including collecting and processing real data, designing and implementing data science methods and tools, and applying, evaluating and critically assessing data analysis, visualization and prediction techniques to solve the real problem.

Grade Type: P/NP

### Specialization F: Computational Linguistics

### AHGC7315 LANGUAGE AND LINGUISTICS

This course introduces key concepts and approaches to the study of language and linguistics. It provides an overview, with basic terminology, of the major subfields of linguistics, investigating the nature, history, and structure of language, and how language relates to the mind, society, and education. It provides the basis of investigation in subsequent courses in the MA in SLA program. Students are encouraged to reflect on their own language experience and apply the

theories covered in the course to their own linguistic context. Pre-requisite: None Grade Type: Letter Grade

### CISC7021 APPLIED NATURAL LANGUAGE PROCESSING

This course covers both the fundamental and advanced topics in Natural Language Processing(NLP), which deals with the application of computational models to text data. In this course, the core tasks in natural language processing will be examined, including minimum edit distance, language modelling, Nävie Bayes, Maximum Entropy, text classification, sequence labelling, POS tagging, syntax parsing and computational lexical semantics. Modern NLP applications will be explored such as information retrieval, and statistical machine translation. Students will learn how to formulate and investigate research questions on related topics. Pre-requisite: None

Grade Type: Letter Grade

### ENGL7022 CORPUS LINGUISTICS

This course introduces students to the practices and issues involved in corpus linguistics. Its aims are to demonstrate the practical use of online corpora to explore questions asked by scholars of language and literature, and to address some of the main theoretical issues raised by corpus design and analysis. Students familiarize themselves with some of the available online corpora and practise using concordancers, and search tools that give information about frequencies, collocations, colligations, etc. The classes cover language analysis at the levels of lexis, grammar and discourse and applications such as lexicography and language teaching. As the course progresses, the students consider questions of representation, size, transcription and tagging in the building of a customized corpus.

Pre-requisite: None Grade Type: Letter Grade

### AHGC7039 COMPUTER-AIDED TRANSLATION

This course reviews state-of-the-art technology in translation. In addition to Translation Memory, which allows users to leverage existing data, deep learning technologies have allowed Machine Translation to achieve fully automatic translations for some genres of writing. The course will include an extensive practical component using these technologies in addition to exploring assessment of Machine Translation quality, emerging possibilities and issues. In addition to these, the use of the World Wide Web, Web-based translation aids and other applications for producing rapid, localized and high-quality translation are discussed.

Pre-requisite: None

Grade Type: Letter Grade

### AHGC7303 EVALUATION AND ASSESSMENT OF LANGUAGE USE

This course introduces students to fundamental concepts of language testing and assessment and critically examines testing instruments and procedures for specific purposes, with particular attention to test use in classroom settings.

Pre-requisite: None Grade Type: Letter Grade

CHLL7101 METHODS IN CHINESE LINGUISTICS 漢語語言學研究方法

本課程旨在系統介紹語言學的研究思路、方法和一些重要的語言學理論,指導學生採用科學的工具和方法對漢語進行共時或歷時的系統研究。課程包括語言學研究的一般方法和特殊方法,語言學研究中經常使用的工具性概念,各個語言學流派所採用的分析技術,國內學者建立的語言學理 論筆內容。

Pre-requisite: None

Grade Type: Letter Grade

### AHGC7308 SPECIAL TOPICS IN APPLIED LINGUISTICS |

This course is designed to offer visiting scholars, existing or future staff, the opportunity to offer courses in their particular area of specialisation. The topic and content of the courses will vary from year to year depending on the availability of expert staff. Examples of specialised topics that may be offered include: data-driven learning, computer-adaptive language testing, automated scoring, corpus-based EAP (English for academic purposes), etc.

Pre-requisite: None

Grade Type: Letter Grade

### PHIL7101 TOPICS IN SEMANTICS

This course is an introduction to the formal analysis of natural language semantics as situated within the larger domain of linguistics. Students will be introduced to the main goals and methods of formal semantics, with a special focus on some of its core empirical results, and to some mathematical concepts underlying semantic interpretation systems (sets, relations, functions). Topics include: predication, the semantics of quantificational determiners, indexicals, semantic binding, tense, and modality.

Pre-requisite: None

Grade Type: Letter Grade

### AHGC7398 PROJECT REPORT

A "Project Report" addresses a particular issue in a specific context and may incorporate elements of data collection, data processing, data analysis and data solution. Students demonstrate their ability to reflectively examine a particular context, identify and define an issue in that context, access, summarize, and synthesize current literature relevant to the issue, and develop a justified approach to address that issue. Various linguistics and applied linguistics related topics are acceptable.

Pre-requisite: None Grade Type: P/NP

### Specialization G: Analytics in Teaching and Learning

### EDUC7041 ASSESSMENT AND EVALUATION OF EDUCATIONAL BIG DATA

This course is designed to introduce graduate students to the application of big data in educational context, including the epistemological underpinnings of data science, in-depth knowledge of data science theories in education, and the methodological nuts-and-bolts in conducting educational evaluation.

Pre-requisite: None

Grade Type: Letter Grade

### EDUC7042 DATA-DRIVEN APPROACH TO EDUCATIONAL ADMINISTRATION

This course is to introduce prospective data scientists to data management in educational administration. Emphasis is placed on the use and repurposing of data to enhance governance and efficiency of school education as well as to formulate or update relevant policies and administrative measures emerged in response to changing social development or enactment of laws or rules.

Pre-requisite: None

Grade Type: Letter Grade

### EDUC7043 LEARNING ENHANCEMENT WITH BIG DATA

This course is designed to improve instruction using data. In the digital age, a wealth of data is available for teaching and learning purposes. This course aims to broaden students with the initiatives undertaken to make use of data-driven approaches that can improve the learning process. Students are expected to make use of tools to mine a wide range of learning patterns and behaviors so as to enhance the quality of instruction. They will study, experience and review

the theory and practice of existing applications of big data in order to make informed judgment about their educational duties.

Pre-requisite: None Grade Type: Letter Grade

### EDUC7044 QUANTITATIVE SOCIAL SCIENCE RESEARCH WITH BIG DATA

This course is designed to be part of the emerging field of quantitative/computational social sciences. The goal is to equip students with data science approach to answer social science questions. This course will introduce principles and skills of quantitative social science research. Students will receive an update of the major tools and ideas used in the field and be guided toward their first data-driven research project throughout this course. Pre-requisite: None

Grade Type: Letter Grade

### SSGC7201 DATA CIVIC DATA ACQUISITION AND ANALYSIS

This course introduces a broad overview of big data sources, opportunities and examples in social studies, and illustrate how they can be used to improve social science studies. The focus is placed on selected topics related to computational social science and their applications, such as the collection and analysis of unstructured and structured web data. The methods will be demonstrated mostly in R. The course can be helpful for both of social science students who want to extend their research scope and science students who are interested in doing more social science.

Pre-requisite: None Grade Type: Letter Grade

### EDUC7098 PROJECT REPORT

Project Report is designed to encourage students in this program to participate in various projects and practices at different levels relevant to the use of big data and cultivate their abilities in collecting, managing, and processing big data in related areas of education independently. The Project Report should include the purpose, process and outcomes of participation in the project. Pre-requisite: None

Grade Type: P/NP

### Specialization H: Smart Governance

### SSGC7201 CIVIC DATA ACQUISITION AND ANALYSIS

This course introduces a broad overview of big data sources, opportunities and examples in social studies, and illustrate how they can be used to improve social science studies. The focus is placed on selected topics related to computational social science and their applications, such as the collection and analysis of unstructured and structured web data. The methods will be demonstrated mostly in R. The course can be helpful for both of social science students who want to extend their research scope and science students who are interested in doing more social science.

Pre-requisite: None Grade Type: Letter Grade

### SSGC7202 BIG DATA AND SMART GOVERNANCE

This course is designed to teach students analytical techniques of dealing with open government data and other (usually big) data that are related to smart governance. We will focus on two types of data: text data and geo-spatial data.

Digitalized text represents an important source of data for social scientists. This is particularly true in political science, where a large amount of political information, otherwise difficult to analyze, is embodied in historical and contemporary speeches and documents that can be

converted into digitalized text with increasing ease. Another source of text-based data come from online contents. Pre-requisite: None Grade Type: Letter Grade

### SSGC7203 ANALYSIS OF MEDIA AND OPINION DATA

This course introduces students to the theories and techniques of data analysis for monitoring and understanding media behavior and public opinion. While theories of statistics, communication, media effects, and public opinion will be reviewed, the emphasis is on handson analysis and presentation of data. The objectives are two-fold 1) facilitate data-based policy making and decision making in government and cooperate settings; 2) facilitate data-based theory building in both applied and academic settings.

Pre-requisite: None

Grade Type: Letter Grade

### SSGC7204 MAKING SENSE OF SMART GOVERNANCE

Smart Governance is an essence for the development of smart city that stressing on the publicprivate collaboration for city management through the use of Information and Communication Technologies (ICTs). What are smart governance practices being implemented for the success of smart city? How does it work with the use of big data in managing a city? This course aims at the discussion on the key elements of smart governance (including virtual and cyber government organizational network, digital network between government and stakeholders, data sharing and digital agenda, e-participation and social media). It will use the experiences in different countries for the practice of smart government in various policy areas like transport, health, tourism and public security etc.

Pre-requisite: None

Grade Type: Letter Grade

### EDUC7044 QUANTITATIVE SOCIAL SCIENCE RESEARCH WITH BIG DATA

This course is designed to be part of the emerging field of quantitative/computational social sciences. The goal is to equip students with data science approach to answer social science questions. This course will introduce principles and skills of quantitative social science research. Students will receive an update of the major tools and ideas used in the field and be guided toward their first data-driven research project throughout this course.

Pre-requisite: None

Grade Type: Letter Grade

### SSGC7298 PROJECT REPORT

Project report gives the students an opportunity to apply the knowledge obtained from their previous studies in data science and field of specialization based on their interest. Students, guided and supervised by individual instructor on a person-to-person basis, are required to independently and individually complete a research project on smart governance that subject with a report of no less than 4,000 words in length. Mini conferences would be organized by the academic year-end and students were required to deliver their projects which would be graded. Pre-requisite: None

Grade Type: P/NP

## Master of Science - Cognitive Neuroscience

### CCBS7001 PRINCIPLES OF NEUROSCIENCE

This course provides an introduction to the mammalian nervous system with emphasis on the structure and function of the human brain. Topics include the function of nerve cells, sensory

systems, control of movement and speech, learning and memory, emotion, and diseases of the brain. No prerequisites, but knowledge of biology and chemistry at the high school level is assumed. The course also aims to have students to know the basic knowledge in functional aspects of nervous system organization, psychiatric and neurological disorders and molecular and cellular neurosciences.

Pre-requisite: None Grade Type: Letter Grade

### CCBS7001 COGNITIVE NEUROSCIENCE

This course provides an introduction to the neuroscientific study of cognition. Topics surveyed in the course include the neural bases of perception, attention, memory, language, executive function, emotion, social cognition, and decision making. In covering these topics, the course will draw on evidence from brain imaging (fMRI, EEG, MEG), transcranial magnetic stimulation, electrophysiology, and neuropsychology. The course will also consider how knowledge about the brain constrains our understanding of the mind.

Pre-requisite: None

Grade Type: Letter Grade

### CCBS7001 BRAIN STIMULATION AND NEUROIMAGING TECHNIQUES

This course is one of the core introductory courses of the Programme that give and overview of the methodologies currently at place to study ccognition and brain function based on neuroimaging and brain intervention techniques. Methods such as functional near-infrared spectroscopu (fNIRS), electroencephalography (EEG), magnetoencephalography (MEG), transcranial magnetic stimulation (TMS), Transcranial Direct Current Stimulation (tDCS) and Transcranial Alternating Current Stimulation (tACS), and others will be respectively introduced, which can provide the students with new insights into the structure and function of human brain. Nature and origin of electric, magnetic, light responses of human brain will be discussed throughout the course.

Pre-requisite: None Grade Type: Letter Grade

### CCBS7098 PROJECT REPORT

A project report is required for all students to complete this programme. By the nature of this programme, the performance of projects cuts across departmental boundaries, with faculty from neurobiology, psychology & neuroscience, radiology, psychiatry, biomedical science, engineering, neurology, biology, and philosophy. Thus, the program explicitly involves collaboration between FAH, FSS, FED, ICMS, FHS, and FBA. Students will join individual labs and be guided by professors in different faculties. By doing a project, students will synthesize and integrate knowledge from their course work, apply it to a particular topic area, and communicate their ideas and findings through a scholarly written thesis. Additionally, students are encouraged to publish their thesis in academic journals.

Pre-requisite: None Grade Type: P/NP

### CCBS7004 MAGNETIC RESONANCE IMAGING

In this course, basic MR-physics, spatial encoding, basic pulse sequences, MR image contrast in MR, MR hardware, practical considerations, general clinical applications of MRI, perfusion and diffusion MRI, and clinical MR spectroscopy will be introduced. In addition, introduction to functional MRI (fMRI) will provide students with the basic and practical principles underlying fMRI of the brain. Students will complete the course having an in-depth introduction to neurophysiological mechanisms that couple magnetic resonance phenomenon to task- or stimulus dependent changes in neuronal activity and cerebral metabolism.

Pre-requisite: None

Grade Type: Letter Grade

#### CCBS7005 COMPUTATIONAL COGNITIVE NEUROSCIENCE

This course will introduce a collection of computer simulation techniques useful for investigating a variety of cognitive phenomena involving perception, action, learning, and memory. This course is formatted to support interdisciplinary inquiry, with the backgrounds of students expected to vary broadly across the range of such disciplines as computer science, cognitive science, psychology, and neuroscience, as well as other related fields. The learning of both classic and contemporary methods for cognitive modeling will be facilitated by readings, presentations by class participants as well as by the instructor, computer simulation exercises, a term project, and ample interaction and discussion between attendees.

Pre-requisite: None

Grade Type: Letter Grade

#### CMED7018 BIO-STATISTICS

This course is designed for master students to understand the basic bio-statistics theory and skills. Also the course will teach students how to use the most advanced bio-statistics softwares. Pre-requisite: None

Grade Type: Letter Grade

#### EDUC7402 PSYCHOLOGY OF LEARNING

This course introduces psychological theories pertinent to the learning of students, and current views of how people learn. Particular focus is placed on linking theories to classroom situations. Topics included are: behavioristic, information- processing, constructivistic, and humanistic theories of learning.

Pre-requisite: None

Grade Type: Letter Grade

#### EDUC7503 ADVANCED EXERCISE PHYSIOLOGY

The programme introduces the nature of human body and examines its biological nature to the teaching and learning of physical education. Students will have chances to focus on human anatomy, exercise physiology and its biomechanics principles to development of movement exercises. The programme also aims to promote an understanding of the variety of laboratory and field skills used in the biomechanical assessment of the exercising human. The purpose is to enhance human performance growth in physical education and sport through the knowledge of body science.

Pre-requisite: None Grade Type: Letter Grade

#### EDUC7403 ADVANCED DEVELOPMENTAL PSYCHOLOGY

This course focuses on an integrated study of human development across the life span with implications for educational psychology. It aims at familiarizing students with current state of knowledge and major theories of human development with particular emphasis on childhood and adolescence. The interrelationship among biological, social-psychological, and educational factors that influence human development will be examined. In particular the influence of Chinese culture and context on development during the childhood and adolescence will be discussed.

Pre-requisite: None Grade Type: Letter Grade

#### SHGC7400 CLINICAL LINGUISTICS

This course provides a systematic study of linguistic theories, methods and findings concerning the description of natural language, Language acquisition and learning, intelligibility, normal and impaired speech, language developmental and acquired disorders. Covering areas of human speech development, production and perception, prosody, language variation and bilingualism, students will be able to understand how does brain process language, the effects of neurological disorders and brain injury on language use. They will become familiar with the tools most often used for language, speech and voice analysis, such as FEELtrace (evaluating dynamics of

speech), Hoarseness Diagram (properties of normal and pathological voices) and PRAAT (speech and phonetics analyses). Pre-requisite: None Grade Type: Letter Grade

#### ENGL7004 PSYCHOLINGUISTICS

This course introduces students to the biological, neurological and cognitive bases for language, language development, multilingualism and second language acquisition, and language disorders. It will also deal with some aspects of natural language processing in relation to certain areas of linguistic analysis: phonology, the lexicon, morphology, syntax, semantics, and discourse.

Pre-requisite: None Grade Type: Letter Grade

#### AHGC7302 SECOND LANGUAGE ACQUISITION

This course will examine current theories of second language acquisition, in relation to the acquisitional process, developmental stages, and external factors conditioning acquisition, including the effects of the first language, age of acquisition, motivation, instructional context and the nature of input. Topics discussed will include the critical period hypothesis, parallels with first language acquisition, bilingualism and exceptional language learning.

Pre-requisite: None

Grade Type: Letter Grade

#### ENGL7005 SOCIOLINGUISTICS

This course will examine language variation as it occurs within the notion of a speech community and introduce some of the major theories and methods used in the study of language in society. Topics to be covered may include bilingualism & multilingualism, pidgins, creoles & trade languages, code-switching, second language variation, language & identity, language shift, and language variation. Students are expected to have a good understanding of linguistics and language structure before they enter the course, as these topics depend upon a pre-requisite knowledge of linguistics.

Pre-requisite: None

Grade Type: Letter Grade

#### ECEN7021 BIOMEDICAL TRANSDUCERS AND INSTRUMENTS

This essentially interdisciplinary course aims to introduce students the basic principles & techniques for biomedical transducers and instrumentations. This course covers sensing and measurement for qualitative description and quantitative analysis in biomedical engineering field mainly on noninvasive techniques.

Pre-requisite: None

Grade Type: Letter Grade

#### CISC7026 INTRODUCTION TO DEEP LEARNING

This is an introductory course on Deep Learning methods with applications to computer vision, natural language processing, biology, financial data, and more. Students will learn foundational knowledge of deep learning algorithms and get practical experience in building neural networks in modern deep learning frameworks. Experience in Python is helpful but not compulsory. We assume students having background in calculus (i.e., taking derivatives) and linear algebra (i.e., matrix multiplication).

Pre-requisite: For student of MSc Cognitive Neuroscience to take this course, basic knowledge is required in 1) Math, in particular, linear algebra, and 2) Programming skills with python

Grade Type: Letter Grade

#### CISC7013 PRINCIPLES OF ARTIFICIAL INTELLIGENCE

Overview of Artificial Intelligence Application Areas, Languages and Programming Techniques

for Artificial Intelligence, Problem Solving, Knowledge-based Systems, Knowledge Representation, Planning, Machine Learning, Natural Language Processing, Genetic Algorithms. Pre-requisite: None

Grade Type: Letter Grade

#### CISC7202 TOOLS FOR MACHINE LEARNING

The course will start from the very beginning of the ML basis. First, the basic concepts such as liner algebra; probability and information theory, and numerical methods will be introduced. Next machine learning overview, inductive learning, and representation learning will be introduced. Basic deep learning processes are designed as artificial neural network; Bayesian Networks and learning; Deep learning and deep neural networks; convolution neural network. Throughout the course, practical methodology of using tools such as Tensorflow or Karas etc. will be be emphasized.

Pre-requisite: For student of MSc Cognitive Neuroscience to take this course, basic knowledge is required in 1) Math, in particular, linear algebra, and 2) Programming skills with python

Grade Type: Letter Grade

#### PYSC7708 BEHAVIORAL ADDICTION

This course aims to be informative and practical. It focuses on developing learners' overall knowledge on the history, prevalence, theories, research, assessment, and interventions of different types of behavioral addiction, including gambling disorder, gaming disorder, internet/smartphone addiction, compulsive eating and buying, and workaholism. Specific attention will be paid to their biological, neurological, and cognitive features and mechanisms. Students will learn to identify different types of risk factors for the development and maintenance of behavioral addiction. Through team project and experiment participation, students will have hands-on experience of theory application and use of common assessment tools in the Chinese context.

Pre-requisite: None Grade Type: Letter Grade

#### IRTM7036 CROSS CULTURAL GAMBLING PSYCHOLOGY

This course focuses on the application of psychological knowledge to gambling behaviors. Topics include motivations, decision-making strategies, cognitive heuristics and biases, group and social influences, and pathological addictive gambling behaviors. Students will be able to better formulate organizational strategies for integrated resorts and enhancing both their communication and analytical skills.

Pre-requisite: None

Grade Type: Letter Grade

#### CCBS7006 NEUROECONOMICS

Neuroeconomics is the study of human behavior, decision making in particular, by adopting the value-based approach in economics and through the use the neuroscientific methodologies. Behavioral economics is a confluence of economics, psychology and neuroscience. The course will start with some normative theory from economics. Yet decision makers do not behave "rationally" as required by the classical economic theory. These psychological insights will be discussed based on the theoretical frameworks in behavioral economics such as behavioral decision theory and behavioral game theory. We will then survey the neuroscientific studies motivated by these theories.

Pre-requisite: None

Grade Type: Letter Grade

## **Doctoral Degree Programme**

## AREA OF STUDY

Biomedical Sciences

# INSTITUTE OF CHINESE MEDICAL SCIENCES Doctoral Degree Programme

## **Doctor of Philosophy**

• Biomedical Sciences

Disciplinary Courses		
Compulsory (	Courses:	
CMED8012	Research Ethics	
CMED8013	Research Writing	1
CEMD8006	Seminars	
CMED8005	Quality Research in Chinese Medicine	3
Total Credits		4
Required Ele	ctive (Choose <u>one</u> of the following):	3
CMED8001	Advanced Pharmacokinetics	
CMED8002	Advanced Pharmaceutics	
CMED8003	Functional Food Product Development in Chinese Medicine	
CMED8004	Healthcare Decision Analysis	
CMED8007	Chemistry of Natural Medicine	
CMED8008	Advanced Pharmaceutical Analysis	
CMED8009	Drug Discovery	
CMED8010	Advanced Pharmacology	
CMED8011	Advanced Topics in Medicinal Administration	
Total Credits:		3

For students admitted without a relevant Master's degree required to choose 2 Required Electives from the 9 courses listed above.

Doctoral	Thesis

CMED8999 Doctoral Thesis

Credits 18 INSTITUTE OF CHINESE MEDICAL SCIENCES

# Master's Degree Programmes

## **Master of Philosophy**

## • Chinese Medicinal Science

Year I		Credits
Compulsory (	Courses:	
CMED7001	Pharmacology and Safety Evaluation	3
CMED7002	Introduction to Research in Chinese Medicinal Science	3
CMED7008	Quality Control of Chinese Medicine	3
CMED7009	Development of Drugs and Health Products	3
Required Elec	ctives (Choose <u>four</u> of the following):	12
CMED7003	Medical Technology Management	
CMED7007	Biomedical Informatics	
CMED7010	Pharmaceutical Science	
CMED7011	Systems Biology	
CMED7012	Targets and Models for Drug Screen	
CMED7013	Emerging Materials in Clinical Medicine	
CMED7014	Advanced Natural Products Chemistry	
CMED7015	Progress in Contemporary Study of Chinese Medicine	
CMED7016	Application of Pharmacokinetics and Metabonomics in Drug D	evelopment
CMED7017	Across the Gap between Science and Industry	•
CMED7020	Computational Pharmacy	
Total Credits	:	24

Year II	Credits
Thesis	12
Total Credits:	36

## INSTITUTE OF CHINESE MEDICAL SCIENCES Master's Degree Programmes

## **Master of Philosophy**

## • Medicinal Administration

Year I		Credits
Compulsory (	Courses:	<u> </u>
CMED7003	Medical Technology Management	3
CMED7004	Social Medicine	3
CMED7005	International Business and Law for Medicine	3 3
CMED7006	MED7006 Introduction to Research in Medical Administration	
Required Elec	ctives (Choose <u>four</u> of the following):	12
CMED7007	Biomedical Informatics	
CMED7009	Development of Drugs and Health Products	
CMED7010	Pharmaceutical Science	
CMED7011	Systems Biology	
CMED7012	Targets and Models for Drug Screen	
CMED7018	Bio-Statistics	
CMED7019	Standardization and Quality Management of Chinese Medicine	
CMED7020	Computational Pharmacy	
CMED7021	Research Methodology	
Total Cradite		24

#### **Total Credits:**

24

Year II	Credits
Thesis	12
Total Credits:	36

## **Course Description**

#### CMED7001 PHARMACOLOGY AND SAFETY EVALUATION

- Principles of Pharmacology.
- Mechanisms of some classes of drugs.
- Pharmacokinetics.
- In vitro and in vivo models for pharmacology research
- Experimental models for evaluating drugs used in the areas of cancer, cardiovascular diseases, immunology and endocrinology.
- Principle of safety evaluation.
- Experimental models for drug safety evaluation.
- Acute toxicity in drug safety evaluation, suchronic and chronic toxicity studies, genotoxicity, developmental and reproductive toxicity testing, carcinogenicity studies.
- Pharmacological studies and safety evaluation of Chinese medicine.

Pre-requisite: None

#### CMED7002 INTRODUCTION TO RESEARCH IN CHINESE MEDICINAL SCIENCE

- Harmless Chinese medicine and medicinal plants.
- Novel technology on the extraction, separation and purification of Chinese medicine.
- Novel dosage forms of Chinese medicine.
- Regulation and accreditation of the quality standard of Chinese medicine.
- Toxicity and adverse effects of Chinese medicine.
- Research, development and trends of the usage of Chinese medicine in clinical prevention, treatment and rehabilitation.

Pre-requisite: None

.

#### CMED7003 MEDICAL TECHNOLOGY MANAGEMENT

- An introduction to:
  - Management.
  - Human resources management.
  - Financial control.
  - Costing study.
  - Audit system.
  - Organization development.
  - Centralization & Decentralization.
  - Marketing of pharmaceutical products.
    - Sales strategy of medical products.
- Quality control and surveillance of drugs and health products.
- International requirements on quality, safety and clinical trials of registered drugs.
- Good Guideline Practice (GGP)
- Good Agricultural Practice (GAP) of pollution-free Chinese medicine.
- Good Laboratory Practice (GLP) of non-clinical research.
- Good Clinical Practice (GCP).
- Good Manufacturing Practice (GMP).
- Good Supply Practice (GSP).

• Regulations of herbs and Chinese medicine in China, EU, US and East Asia. Pre-requisite: None

## CMED7004 SOCIAL MEDICINE

- Theory and methods of social medicine research.
- Interactions between social economy, politics, culture and education.
- Principles and applications of economics on health delivery system.
- Social survey and its assessment.

- Medicine ethics.
- Human interactions and communication in medical practice.
- Analysis of psychological, behavioural and social factors of drug usage and abuse.
- Supply and demand of health services.
- Social responsibility of pharmacist.
- Marketing and regulation of drugs.
- Social welfare systems of China (Macao, Hong Kong, Taiwan) and other major western countries.
- Macro policy analysis and methodology.

#### CMED7005 INTERNATIONAL BUSINESS AND LAW FOR MEDICINE

- An introduction to international business and trade.
- Introduction of health economics and pharmaceutical economics.
- Health Act & Regulation.
- Types of main international legal systems for medicine
- Regulations and international treaties for the control of medicine.
- Establishment and operation of multi-national, joint-venture pharmaceutical enterprises/companies.
- Legal settlement for business disputes.
- Medical patenting, trademarks and intellectual property.
- Legal rights and obligations of medical wholesalers.
- Censorships and responsibility of advertisements of medical products.
- Registration of Chinese medicine in European and US markets and its related laws. Pre-requisite: None

#### CMED7006 INTRODUCTION TO RESEARCH IN MEDICAL ADMINISTRATION

- Medical care and social security systems in Europe, US and China.
- Developmental strategies for medical health economy and medical technology industry.
- Development strategies for medical technology.
- Development and trends of research in surveillance and management of medicine, functional food, cosmetics and other health products in China and worldwide.

Pre-requisite: None

#### CMED7007 BIOMEDICAL INFORMATICS

Informatics broadly covers the studies of natural and artificial domains for communication, interaction, data, and information, and relating them to the processes of defining, developing, managing, criticising, and refining knowledge. Biomedical informatics focuses on the theories, methodologies, and technologies of informatics that are related to processing biological and medical knowledge. This course mainly introduces important concepts (not trivial details), including those in basic informatics, medical informatics, bioinformatics, and Chinese medicine informatics. Later parts of this course will cover the recent advances in some integrative approaches such as systems biology, translational medicine, and evidence-based/led Chinese medicine.

Syllabus:

- Knowledge representations and computational reasoning
- Knowledge management
- Web, semantic Web, and multi-agents
- Practical software development
- Medical knowledge-based technologies
- Medical evidence reasoning
- Medical knowledge discovery
- Algorithms for biological sequences and structures

- Prediction of protein structure and protein interactions
- Analysing data from high-throughput experimentation
- Systems biology and pathway modelling
- Translational research in biomedicine
- Medical research protocols
- Evidence-based/led Chinese medicine

#### CMED7008 QUALITY CONTROL OF CHINESE MEDICINE

- Strategies of quality control for Chinese medicine.
- Optimization of marker for quality control of Chinese medicine.
- Samples preparation for quality control.
- New development for extraction, separation, and purification of major groups of active components.
- Application of modern biology on quality control of Chinese medicine.
- Chemical identification of major groups.
- Significant factors affecting the quality of Chinese medicine.
- Origin and species identification.
- Analysis of residual pesticides, heavy metals and arsenic salts.
- Contemporary analytical techniques in the quality control of Chinese medicine.
- Spectrophotometry, chromatography, mass spectrophotometry and their combined applications.

Pre-requisite: None

### CMED7009 DEVELOPMENT OF DRUGS AND HEALTH PRODUCTS

- Introduction of international herbs, Chinese medicine and its health products.
- Precursor compounds.
- Principle and methods of drug design.
- Drug forms and process control.
- Screening of bioactive ingredients.
- Investigation of cellular and molecular mechanisms.
- Pharmacokinetics.
- Toxicology and drug dependence.
- Integrated clinical evaluation.
- Development of Chinese medicine, health products and cosmetics.
- Functions and safety assessment of health products and cosmetics.

• Development of simulation design on new drugs and health products.

Pre-requisite: None

### CMED7010 PHARMACEUTICAL SCIENCE

- Optimal design of drug preparation.
- Novel medical subsidiary materials.
- Stability of drug preparation.
- Different types of preparations: slow-release and controlled-release preparations, targeted preparations, important and new types of Chinese medicine preparations, biotechnological preparations, etc.
- Manufacturing techniques and instruments used in drug preparation.
- Techniques and their applications in Chinese medicine preparations: inclusion technique, solid dispersion, micro-cyst, liposome, etc.

Pre-requisite: None

#### CMED7011 SYSTEMS BIOLOGY

- Principles of system biology.
- Gene expression, regulation and molecular cloning.

- Genomics (that is, organismal DNA sequence) and its application.
- Epigenetics (that is, DNA methylation, histone acetylation and deacetylation, etc.) and its application.
- Proteomics (that is, whole proteins and peptides from organismal, tissue, or cell level) and its application.
- Metabolomics (that is, organismal, tissue, or cell level measurements of all smallmolecules) and its application.
- Application of system biology for studying Chinese medicine.

## CMED7012 TARGETS AND MODELS FOR DRUG SCREEN

- Principles of targets, models and drug screen.
- Drug screen for the samples from different sources.
- High-throughput drug screen.
- High-content drug screen.
- Targets and models for anti-cancer compounds screen.
- Targets and models for anti-microorganism compounds screen.
- Targets and models for neuro-protective compounds screen.
- Targets and models for immune-regulation compounds screen.
- Targets and models for screening compounds for treatment of cardiovascular diseases.
- Screen biological active compounds from Chinese medicine.

Pre-requisite: None

#### CMED7013 EMERGING MATERIALS IN CLINICAL MEDICINE

This course aims to provide students a broad understanding of cutting-edge development in biomedical materials, devices and implants, and their emerging applications in clinical medicine. This course will introduce successful stories from bench to bedside (and beyond), discuss exciting breakthroughs in nanomedicine, tissue engineering, cancer therapy and regenerative medicine, as well as outline important regulatory and marketing challenges for these inventions. Pre-requisite: None

#### CMED7014 ADVANCED NATURAL PRODUCTS CHEMISTRY

This course introduces and reviews the basic concepts of natural products chemistry, focusing on modern extraction and purification methods, and advanced spectroscopic methods. Biogenesis pathways of common natural products, as well as the biological activities and pharmaceutical importance of natural products will also discussed. The course includes lectures and group discussion.

Pre-requisite: None

### CMED7015 PROGRESS IN CONTEMPORARY STUDY OF CHINESE MEDICINE

The objective of this course is to provide an overview of progress in contemporary study of Chinese medicine. The course will consist of a series lectures based on the specific disciplines of Chinese medicine research, focusing on immunopharmacology, tumor pharmacology, cardiovascular pharmacology, toxicology, chemistry and medicinal pharmacy, etc. The academic staff in ICMS or guest speakers will be recruited to provide lectures in their areas of expertise, and each is responsible for respective course objectives. This course will also have a journal club component, which will enable students to read and present a scientific journal article related to the course.

Pre-requisite: None

# CMED7016 APPLICATION OF PHARMACOKINETICS AND METABONOMICS IN DRUG DEVELOPMENT

This course aims to equip students with practical working knowledge of pharmacokinetics and metabonomics and its application to lead identification and target validation in drug discovery and development. Properties that affect pharmacokinetics, pharmacodynamics, and toxicity are

discussed (i.e., physicochemical, interactions with human body). Cutting-edge models and technique platforms as well as comprehensive strategies are introduced. Cases examples from the literature illustrate successful lead selection and optimization using pharmacokinetics and metabonomics approaches in drug development. Pre-requisite: None

#### CMED7017 ACROSS THE GAP BETWEEN SCIENCE AND INDUSTRY

There is a big gap between science and industry. This course tries to help student get across this gap by introducing necessary knowledge and skills in the industry. The course covers a wide range of information including: over all view of business of Chinese medical science, a glance of big Pharms, the organization of global company, product development strategies, project management, business communication skills, leadership and team work, knowledge transfer issues, introduction of generic drugs and the GXP in drug development. The course will be useful for those who want to move to industry after graduation also for those who want to develop health related products in the university.

Pre-requisite: None

#### CMED7018 BIO-STATISTICS

This course is designed for master students to understand the basic bio-statics theory and skills. Also the course will teach students how to use the most advanced bio-statics softwares. Pre-requisite: None

#### CMED7019 STANDARDIZATION AND QUALITY MANAGEMENT OF CHINESE MEDICINE

In 'Standardization and Quality Management of Chinese Medicine' course, some basic concepts and theories of standardization will be introduced. The topics include standard substance, uniformity stability, precision, ISO, Total Quality Management (TQM), Six Sigma ( 6σ ), Lean Manufacturing and Lab certification. Moreover, some cases will also be introduced to show how to design the quality of traditional Chinese medicine or new drugs. Pre-requisite: None

CMED7020 COMPUTATIONAL PHARMACY

The course introduces computer application to pharmacy, including expert and knowledgebased systems, artificial intelligence, online pharmacy and medical databases, molecular modeling and computer-aided drug design, computational pharmaceutics and bioinformatics. In computer laboratory, students will acquire initial skills of molecular modeling. They will also practice in searching online databases. The course will build a bridge between computer science and pharmacy for students.

Pre-requisite: None

#### CMED7021 RESEARCH METHODOLOGY

This course aims to help students to master the main research methods for their thesis projects, including qualitative methodology, case study, web content analysis, qualitative data analysis, network visualization and analysis, correlation analysis, multiple regression, etc. Moreover, students will learn how to write and publish academic papers in major journals. Pre-requisite: None

#### CMED8001 ADVANCED PHARMACOKINETICS

The principal objective of the course is to provide the students an in-depth insight into the basic processes that governs the disposition of drugs and other xenobiotics by the human body and the correlation with efficacy and toxicity. The course focuses on the application of the principles of pharmacokinetics solving problems in new drug discovery and development and the development of the herbal medicine products. Real-world cases will be reviewed and formal readings and discussions will occur throughout the course to foster critical thinking and independent learning.

Pre-requisite: Participants need to have knowledge in biological sciences, pharmaceutical sciences, mathematics

#### CMED8002 ADVANCED PHARMACEUTICS

This course introduces the recent progress in the interdisciplinary field of pharmaceutical sciences, with particular emphases on drug delivery systems, nanoscale formulations as well as gene/cell therapy. It enables students to understand how these new theories and technologies can improve drug safety, enhance therapeutic efficacy and translate into new therapeutic modalities.

Pre-requisite: None

#### CMED8003 FUNCTIONAL FOOD PRODUCT DEVELOPMENT IN CHINESE MEDICINE

This course will introduce students to the essential concept and development procedure of functional food in Chinese Medicine (CM). It includes basic knowledge of medicine - food dual purpose CM, functional ingredients in CM, pharmacological activity evaluation and safety evaluation. These lectures will also cover in moderate detail the new technologies and methodologies for the development of functional food from CM. Moreover, this course will introduce selected topics of functional food from other natural products, including functional fatty acids, mushroom, soy extracts, grape, etc. In addition, functional food regulations in China. USA and Europe will be briefly introduced.

Pre-requisite: None

#### CMED8004 HEALTHCARE DECISION ANALYSIS

This course aims to equip research students with the knowledge and skills to conduct evaluation research into the healthcare issues that require evidence-based reasoning and data analytics. Major healthcare cases related to complex diseases will be studied through interactive study and project-based research.

Pre-requisite: Before taking this course, the students should prepare themselves with a working knowledge of basic multivariate statistics and pathophysiology. Some knowledge of statistical software or data mining packages based on R or Python would be an advantage.

#### CMED8005 QUALITY RESEARCH IN CHINESE MEDICINE

This subject introduces the novel strategies, new methodologies and state-of-the-art techniques for quality research of Chinese medicines. Strategy of systematic evaluation, advanced instruments and analytical techniques including sample preparation and detection will be emphasized in the course.

Pre-requisite: None

#### CMED8006 SEMINARS

The Seminar is a graduate level course designed to give students an opportunity to hear from and interact with experts in their fields of study. ICMS will invite the leading local, national, and international scientists to speak about the latest advances in Biomedical Sciences. Graduate students also present talks about their own research. This experience gives the students practice speaking to the others and allows for the exchange of ideas as they conduct their thesis research. Pre-requisite: None

#### CMED8007 CHEMISTRY OF NATURAL MEDICINE

This course is intended to provide an extensive understanding of chemistry of natural medicine and the cutting-edge techniques in discovering and developing natural medicines. Especially, the isolation, structural elucidation, classification, bioactivities and toxicities of natural medicines and related topics will be discussed in this course. Pre-requisite: None

#### CMED8008 ADVANCED PHARMACEUTICAL ANALYSIS

The principal objective of the course is to provide the students an in-depth insight into the advanced development in strategies and practices in pharmaceutical analysis. The course focuses on the new methodologies and state of the art techniques for including sample preparation, instrumental analysis and data processing for pharmaceutical analysis. Real-world

cases will be reviewed and formal readings and discussions will occur throughout the course to foster critical thinking and independent learning.

Pre-requisite: Participants need to have knowledge in analytical chemistry, pharmaceutical sciences, pharmaceutical analysis

#### CMED8009 DRUG DISCOVERY

This course will introduce students to the essential concepts and principles of drug discovery. It covers the latest and most outstanding developments on the medicinal chemistry and pharmacology of molecular drug targets, e.g. disease specific proteins, receptors, enzymes, and genes. This course also includes descriptions of current techniques in isolation and structural elucidation, screening techniques and high-capacity instrumentation for increased productivity in the development and discovery of new drugs.

Pre-requisite: None

#### CMED8010 ADVANCED PHARMACOLOGY

This course will introduce students to the essential concepts and principles of pharmacology. It includes descriptions of type of receptor, agonist and antagonist activities, analysis of agonisteffect relationships and the intracellular signaling pathways and transcriptional regulation at molecular level by which endogenous and exogenously applied compounds elicit effects. Also, this course will introduce some new research strategies recently developed in pharmacology such as systems pharmacology, network pharmacology. Lastly, this course will emphasize the hot topics of biology such as autophagy, hormesis, epithelial-mesenchymal transition, etc., which could be integrated into pharmacological study of Chinese medicine research. Pre-requisite: None

#### CMED8011 ADVANCED TOPICS IN MEDICINAL ADMINISTRATION

This course will introduce various advanced topics in medicinal administration to PhD students, including pharmaceutical care at community pharmacy, pharmaceutical innovation system, basic theories of standardization and quality management (ISO 9001), total quality management (TQM) and relevant case study, data and visualization of data, e-learning in pharmacy education, ICT in pharmaceutical industry, and drug registration and patent linkage. Once completing this course successfully, students can have a wide understanding of cutting-edge theories and methods in medicinal administration, which is crucial to integrate multidisciplinary resources to develop PhD study.

Pre-requisite: None

#### CMED8012 RESEARCH ETHICS

The on-line course provides students with an understanding of the following issues:

- the need for research ethics and the responsibility of the researcher (the student)
- the most common types of academic dishonesty (such as fabrication and
- plagiarism)
- how to avoid committing acts of academic dishonesty (such as through using citations and references)
- how the University deals with students who have been proven to have committed acts of academic dishonesty (The University's 'Rules on Handling Student Academic Dishonesty' will be outlined)

Pre-requisite: None

#### CMED8013 RESEARCH WRITING

The course focuses on helping students to make academic presentations whether verbally (as in a conference) or in writing (as in a paper). Topics include:

- how to write a research proposal
- how to structure a presentation (on paper and in powerpoint)
- tenses used in various parts of a paper presentation
- how to structure clear and logical paragraphs

- how to be concise
- how to avoid ambiguity and different writing styles (for example, conventions for use of numbers, abbreviations, etc.)

## **Master's Degree Programmes**

## **Master of Philosophy**

## Microelectronics

		Credits
IMEL7000	Microelectronic Circuit Design	3
IMEL7990	Thesis	12
5 Required Electives chosen from the elective table		15
Total Credi	ts:	30

Elective Table for MPhil in Microelectronics:		
IMEL7001	Integrated Circuits Research Methodology and Applications	
IMEL7002	Digital Integrated Circuits	
IMEL7003	Data Converter Integrated Circuits	
IMEL7004	Flexible Alternating Current Transmission System	
IMEL7005	Power Management Intergrated Circuit Design	
IMEL7006	Special Topics in Biomedical Engineering	
IMEL7007	High-Frequency and High-Speed Wireless/Wireline Integrated Circuit	
IMEL7008	Analog IC Design Methodology	
IMEL7009	Machine Learning and Analog Accelerators	
IMEL7010	Interface Microelectronic Circuits and Sensors Design	
IMEL7011	Microelectronics for the Internet of Things	

## INSTITUTE OF MICROELECTRONICS Master's Degree Programmes

## **Master of Science**

## • Microelectronics

Students who take Project Report are required to take 7 courses from the following Required Electives to obtain 21 credits; students who take Internship and Report are required to take 8 courses from the following Required Electives to obtain 24 credits

		Credits
IMEL7000	Microelectronic Circuit Design	3
IMEL 7998	Project Report	6
7 Required El	ectives chosen from the elective table	21
Total Credits	:	30
OR		
IMEL7000	Microelectronic Circuit Design	3
IMEL 7997	Internship and Report	3
8 Required Electives chosen from the elective table		24
Total Credits:		30

Elective Table for MSc in Microelectronics:

IMEL7001	Integrated Circuits Research Methodology and Applications
IMEL7002	Digital Integrated Circuits
IMEL7003	Data Converter Integrated Circuits
IMEL7004	Flexible Alternating Current Transmission System
IMEL7005	Power Management Intergrated Circuit Design
IMEL7006	Special Topics in Biomedical Engineering
IMEL7007	High-Frequency and High-Speed Wireless/Wireline Integrated Circuit
IMEL7008	Analog IC Design Methodology
IMEL7009	Machine Learning and Analog Accelerators
IMEL7010	Interface Microelectronic Circuits and Sensors Design
IMEL7011	Microelectronics for the Internet of Things

## **Course Description**

#### IMEL7000 MICROELECTRONIC CIRCUIT DESIGN

This course is designed to discuss on fundamental principles for analysis and design of analog circuits and the practical considerations in integrated circuit design. Students will learn how to design, analyze and evaluate amplifiers as an essential integrated circuit building block. Advanced amplifiers/analog circuit layout techniques with case studies will also be introduced. By providing hands-on practice with one real advanced VLSI CMOS process using industrial EDA tools, students can have a deep understanding on how to design practical integrated circuits and make real world engineering tradeoffs. This course will be assessed with assignments, presentations and projects.

This course enables students to have:

- To introduce the essential knowledge in analog circuits design.
- To introduce common analog circuit building blocks with practical considerations.
- To teach students with hands on experience on designing and simulating analog circuits using industrial simulation tools with real world CMOS process.

Pre-requisite: None

#### IMEL7001 INTEGRATED CIRCUITS RESEARCH METHODOLOGY AND APPLICATIONS

This is an introductory course of integrated circuits research methodology and applications. It aims to aid the students to build up an internationally competitive research goal by understanding the state-of-the-art, trends in applications and technologies, and systematically formulate a feasible schedule, with available resources, to approach the research goals. Preparation of related academic publications and system-level case studies of advanced integrated circuits and systems will be organized for the students to digest and present them. The course aims to provide the students a set of essential engineering skills for research in the integrated circuits area.

This course enables students to have:

- To introduce the essential knowledge on starting integrated circuits research.
- To introduce the trend of integrated circuits for practical applications.
- An ability to communicate effectively and understand the integrated circuits industrial trends.
- An ability to understand the impact of integrated circuit solutions in a global and societal context.
- Ability to use the computer/IT tools relevant to the discipline along with an understanding of their processes and limitations.

Pre-requisite: None

#### IMEL7002 DIGITAL INTEGRATED CIRCUITS

This is an introductory course in digital integrated circuits. It covers topics from MOS inverters and different logic family. The student will learn how to model interconnect wires and design optimization with respect to a number of metrics: cost, reliability, speed and power. This course also cover sequential and dynamic logic circuit design, timing considerations, and clocking approaches, as well as design of large system blocks, including memories, such as D-flip-flop and SRAM. This customized course from bottom-up based, which starts from the fundamental techniques for the design and analysis of digital circuits. Then, it provides a detailed understanding of basic logic synthesis and analysis algorithms, and to enable students to apply this knowledge in the design of digital systems and EDA tools. The course aims to give a basic idea of the digital integrated circuit design. The students will have a hands-on experience on combinational circuit optimization (two-level and multi-level synthesis), sequential circuit optimization (state encoding, retiming), timing analysis, testing, and logic verification through the lab work.

This course enables students to have:

- To introduce the essential knowledge in digital circuits design both for custom and auto generation schemes.
- To introduce common digital circuit building blocks, such as logic gates, adder and SRAM, with practical considerations.
- To teach students with hands on experience on designing and simulating digital circuits using industrial simulation tools with real world CMOS process.
- To teach students with hands on experience on the digital standard cell design with real physical layout consideration using industrial layout tools in CMOS process.

#### IMEL7003 DATA CONVERTER INTEGRATED CIRCUITS

This course will provide an introduction to the various type of Data Conversion System. The performance characterization of Data Converters will be presented, and various type of data converters (including Analog-to-Digital and Digital-to-Analog) will be discussed. This course can be served as the beginning course in the field of Data Conversion and Signal Processing in the area of Analog IC Design.

This course enables students to have:

- An ability to understand and analyze the definitions of performance parameters for data converters, in datasheet and research papers.
- An ability to design the digital-to-analog converters.
- An ability to design the analog-to-digital converters.
- An ability to design the delta-sigma modulators.

• To implement the systems above using EDA tools widely adopted in IC industries. Pre-requisite: None

#### IMEL7004 FLEXIBLE ALTERNATING CURRENT TRANSMISSION SYSTEM

The Flexible Alternating Current Transmission System and Distribution Flexible AC Transmission System (FACTS/DFACTS) are a new converging technology based on the Power Electronics, Control Theory and Power System for revolution of ever more efficient control and better utilization of power and energy in the existing systems. The FACTS offers an opportunity to enhance controllability, stability and power transfer capability of AC transmission systems with fastest control speed. DFACTS is the extended modern technique of FACTS to focus on the Custom issues or power line conditioning in the distribution site as well as the Information Technology's Electricity Issues.

This course enables students to have:

- Students can understand the basic concepts, fundamental operational principles, advantages and disadvantages of different FACTS/DFACTS devices.
- Students can also understand the control strategies of some selected FACTS/DFACTS devices, in which FACTS/DFACTS devices are commonly found in nowadays power and distribution power systems.

Pre-requisite: None

#### IMEL7005 POWER MANAGEMENT INTEGRATED CIRCUIT DESIGN

This course starts from a single transistor, with introductions on transistor fabrication and electrical characteristics. Then, single-stage analog amplifier will be analyzed, design and analyses of two-stage amplifier will be discussed. After we know the analog integrated circuit (IC) design basics, we will learn the basic components of power management ICs: low-dropout regulators, inductor-based and switched-capacitor DC-DC converters. Last but not least, wireless power transfer circuits and systems will be briefly introduced.

This course enables students to have:

- An ability to introduce the essential knowledge in power management integrated circuits design.
- An ability to design and simulate power management ICs using EDA tools with CMOS process.
- An ability to design a low-dropout regulator to meet full design constraints.

An ability to analyze a DC-DC converter seen for the first time.

An ability to present design project results both orally and in IEEE-style reports. Pre-requisite: None

#### SPECIAL TOPICS IIN BIOMEDICAL ENGINEERING IMEL7006

This course is an introductory course on multidisciplinary topics covering microelectronics, biomedical engineering, and digital microfluidics. As a special topic course, it will focus on the principles and biomedical applications of digital microfluidics, which utilizes electronic signal to manipulate liquid droplets on an array of micro-electrodes. The course also covers the introduction of the fabrication technology in clean room related to MEMS and soft-lithography. The coating and etching techniques on silicon wafers or glass chips will be introduced and practiced in this course.

This course enables students to have:

- Acquire the state of the art knowledge in the development of biomedical engineering.
- Get information of new technologies in the field of biomedical engineering.
- Understand the working principles of microfluidics, including PDMS based channel . microfluidics and electronic based digital microfluidics.
- Acquire the fabrication techniques of silicon- or glass-based micro-electrode fabrication and 3D pattern on-chip.
- Be aware of the various biological applications of biomedical technologies. .
- Develop a self-learning capability. •
- Initiate a multidisciplinary research mind.

Pre-requisite: None

#### IMEL7007 HIGH-FREQUENCY AND HIGH-SPEED WIRELESS/WIRELINE INTEGRATED CIRCUIT

This is an introductory course in the high-frequency and high-speed systems and circuit of both wireless and wireline tailored for ECE students. It covers topics from basic circuit techniques in the data path of both wireless and wireline, such as low-noise amplifier, mixer, linear equalizer, non-linear equalizer, automatic gain control amplifier, clock and data recovery circuit, to basic circuit techniques in the clock path, for example, PLL, VCO and divider. Also, we brief more recent techniques such as non-contact communication and RF+BB communication with special attention to hardware aspects and wireline applications. The course aims to offer students a set of modern wideband system and circuit solutions as well as the basic ideas and intuition behind, with more emphasis on hands-on experience through practical examples such as high-frequency and high-speed circuit implementation and case studies with Cadence/MATLAB.

This course enables students to have:

- To introduce the essential knowledge of high-frequency and high-speed systems and circuits in both wireless and wireline designs.
- To introduce the different aspects of wireless and wireline designs.
- To introduce the common wireless/wireline circuit building blocks with practical considerations in the data path.
- To introduce the common wireless/wireline circuit building blocks with practical considerations in the clock path.
- To teach students with hands-on experience of designing and simulating highfrequency and high-speed circuits using industrial simulation tools with real-world CMOS process.

Pre-requisite: None

#### ANALOG IC DESIGN METHODOLOGY IMEL7008

This course provides the necessary systematic approach methodology in generic analog IC designs. The topics covered include the technique in systematic method in analysis and design of the amplifiers and opamps, such as using the scaled current and multiplier techniques, the impedance rules-of-thumb, and layout-oriented amplifier design techniques. Advanced layout techniques in detail, the analog IC simulations methodology, etc. will be covered. Project-based evaluations will be the primary assessments for the students' performance.

This course enables students to have:

- Understand the systematic design approach on how to design amplifiers and opamps.
- An ability familiar with the advanced layout techniques.
- To understand the theories for simulations.
- To master the above topics through practical design projects.

Pre-requisite: None

#### IMEL7009 MACHINE LEARNING AND ANALOG ACCELERATORS

This is an introductory course in machine learning tailored for IME students. It covers the topics from classification, regression and statistical signal processing, to more recent techniques such as neural network and deep learning. It also covers the analog approximate computing integrated circuit design considerations for acceleration purpose. The course aims to offer students the fundamental concepts in the advanced artificial intelligence theory with emphasis on hands-on experience through practical examples such as intelligent hardware system implementation and case studies with MATLAB/Python. The verified algorithm can be further implemented on an FPGA for applications such as image/audio recognition.

This course enables students to have:

- To introduce the essential knowledge in machine learning and deep learning.
- To introduce analog accelerators with practical circuit considerations.
- To teach students with hands on experience on designing, training and verifying neural networks for image/audio classification problems using MATLAB/Python.
- To teach students with hands on experience on implementing the neural networks on an FPGA board for real-time classification.

Pre-requisite: None

#### IMEL7010 INTERFACE MICROELECTRONIC CIRCUITS AND SENSORS DESIGN

The sensors and their interfaces with the circuits are important part of the electronic devices. They capture vital information from the real world. This course covers the design of sensors and interfacing circuits in CMOS process. The student will learn to design the sensors for different sensing purposes and their front-end interfaces to process the acquired signals at both systemand circuit-level. Different design considerations such as noise, power consumption, distortion/nonlinearity will be discussed. Fabrication of the micro-electro-mechanical systems and their integration with the CMOS integrated circuits will also be covered.

This course enables students to have:

- To build fundamental blocks in the CMOS process for signal readout.
- To design sensing systems in CMOS process.
- To realize different sensing elements (thermal, capacitive, magnetic, optical, etc.) in the CMOS process and their potential applications.
- To understand how to interface between the sensing elements and the readout circuits.
- To understand the Micro-Electro-Mechanical Systems (MEMS) and the synergy between MEMS and CMOS process.
- To use the simulation tools to design the sensing circuits and systems in CMOS process along with an understanding of their limitations.
- To present and communicate technical ideas and concepts effectively among different fields.

Pre-requisite: None

#### IMEL7011 MICROELECTRONICS FOR THE INTERNET OF THINGS

As enabled by the powerful technology, mircoelectronics have become essential in our daily lives. They are also used in a wide range of fields such as healthcare, environmental monitoring, robotics or entertainment etc. This introductory course in microelectronics is tailored for the Internet of Things (IoTs), which teaches how to use mircoelectronic circuits interacting with the environment through sensors and communicate wirelessly with the other devices. It covers topics from evaluation and implementation of sensor interface, data conversion, signal

processing and device communications. This customized course from bottom-up based, which starts from introducing the fundamental building blocks in microelectronics for the IoT. Then, followed by system and architectural interface considerations. Finally, the students have chance to realize a basic IoT system based on available microelectronic module. The course aims to give a basic idea of the key microelectronic building blocks for the IoT application. The students will have a hands-on experience through practical design examples and case studies with available microelectronic module.

This course enables students to have:

- To introduce the essential knowledge in basic building blocks and system of IoT system.
- To introduce practical considerations of IoT system, especially emphasized on wireless communction and its essential chip sets.
- To teach students with hands on experience on verifying and designing IoT system with exisiting modula.

Pre-requisite: None

#### IMEL7990 THESIS

An independent and original research study under the supervision of a faculty staff member. An academic thesis is a scholarly written document of a piece of original research on a particular topic in consistent with every details of research methodology. In general, the study could result in a technical publication or a presentation at a professional meeting.

This course enables students to have:

- An ability to apply knowledge of mathematics, science, and engineering appropriate to the degree discipline.
- An ability to design and conduct experiments, as well as to analyze and interpret data.
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- An ability to function on multi-disciplinary teams.
- An ability to identify, formulate, and solve engineering problems.
- An understanding of professional and ethical responsibility.
- An ability to communicate effectively.
- An ability to understand the impact of engineering solutions in a global and societal context, especially the importance of health, safety and environmental considerations to both workers and the general public.
- An ability to stay abreast of contemporary issues.
- An ability to recognize the need for, and to engage in life-long learning.
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice appropriate to the degree discipline.
- Ability to use the computer/IT tools relevant to the discipline along with an understanding of their processes and limitations.

Pre-requisite: None

#### IMEL7997 INTERNSHIP AND REPORT

An independent project carried out under the supervision of a faculty staff member and a project manager in industry. Internship training will be carried out at a selected industry. This course enables students to have:

- An ability to apply knowledge of mathematics, science, and engineering appropriate to the degree discipline.
- An ability to design and conduct experiments, as well as to analyze and interpret data.
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- An ability to identify, formulate, and solve engineering problems.
- An understanding of professional and ethical responsibility.

- An ability to communicate effectively.
- An ability to understand the impact of engineering solutions in a global and societal context, especially the importance of health, safety and environmental considerations to both workers and the general public.
- An ability to recognize the need for, and to engage in life-long learning.
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice appropriate to the degree discipline.
- Ability to use the computer/IT tools relevant to the discipline along with an understanding of their processes and limitations.

#### IMEL7998 PROJECT REPORT

An independent project carried out under the supervision of a faculty staff member. This course enables students to have:

- An ability to apply knowledge of mathematics, science, and engineering appropriate to the degree discipline.
- An ability to design and conduct experiments, as well as to analyze and interpret data.
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- An ability to function on multi-disciplinary teams.
- An ability to identify, formulate, and solve engineering problems.
- An understanding of professional and ethical responsibility.
- An ability to communicate effectively.
- An ability to understand the impact of engineering solutions in a global and societal context, especially the importance of health, safety and environmental considerations to both workers and the general public.
- An ability to stay abreast of contemporary issues.
- An ability to recognize the need for, and to engage in life-long learning.
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice appropriate to the degree discipline.
- Ability to use the computer/IT tools relevant to the discipline along with an understanding of their processes and limitations.

Pre-requisite: None

# **Residential Colleges**

# **Residential Colleges**

The University of Macau's residential college (RC) system provides a platform for knowledge integration based on the University's 4-in-1 education model with the goal of producing well-rounded graduates equipped for the challenges of life emotionally, morally and intellectually. Students are given the opportunity to cultivate skills and sensibilities of responsible citizenship with a heart and character to contribute to their motherland and Macao, as well as the humankind at large. They learn to take an active role as honest, incorruptible, law-abiding and public-spirited citizens to improve the quality of life and public good. Furthermore, the RC's communal living and activities help students develop their skills in service and leadership, teamwork and collaboration while enriching their lives through cultural engagement and healthy lifestyles.

Students from different academic disciplines live together in each RC, thereby creating a stimulating learning environment in which, with a broadened intellectual horizon, they are able to comfortably co-exist, communicate, and collaborate with people of different disciplines or cultural backgrounds, meanwhile develop a global perspective, think independently, and uphold self-confidence in cultural aspect. Learning from such experiences would be applied effectively in real-life situations once they enter the workforce after graduation, and get them better prepared to navigate in the globalizing world, lead a globally competitive career, and sustain a fulfilling and joyful life. Apart from regular RC courses, dedicated team of RC's Residential and Non-Residential Fellows also offer academic support by conducting non-credit-bearing tutorials pertaining to disciplinary studies, general education, and academic language skills. Through these RC academic programs, students are trained to better integrate academic knowledge, to think critically, and to become innovative and entrepreneurial. In sum, RC education enhances 7 competencies of the students:

- 1. Responsible citizenship
- 2. Global competitiveness
- 3. Knowledge integration
- 4. Teamwork and collaboration
- 5. Service and leadership
- 6. Cultural engagement
- 7. Healthy lifestyle

There are currently 10 Residential Colleges, namely Cheong Kun Lun College, Chao Kuang Piu College, Cheng Yu Tung College, Choi Kai Yau College, Henry Fok Pearl Jubilee College, Lui Che Woo College, Moon Chun Memorial College, Ma Man Kei and Lo Pak Sam College, Stanley Ho East Asia College and Shiu Pong College.

Enquiries:

ilquilles.	
	Tel: (853) 8822 9372, 8822 9376
Chao Kuang Piu College	E-mail: ckpcollege@um.edu.mo
	Website: http://ckpc.rc.um.edu.mo/
	Tel: (853) 8822 9363, 8822 9364
Cheng Yu Tung College	E-mail: cytcollege@um.edu.mo
	Website: http://cytc.rc.um.edu.mo/
	Tel: (853) 8822 9520
Cheong Kun Lun College	E-mail: cklcollege@um.edu.mo
	Website: http://cklc.rc.um.edu.mo/
	Tel: (853) 8822 9400
Choi Kai Yau College	E-mail: ckycollege@um.edu.mo
	Website: http://ckyc.rc.um.edu.mo/
	Tel: (853) 8822 4922
Henry Fok Pearl Jubilee College	E-mail: fpjcollege@um.edu.mo
	Website: http://hfpjc.rc.um.edu.mo/
	Tel: (853) 8822 9300
Lui Che Woo College	E-mail: lcwcollege@um.edu.mo
	Website: http://lcwc.rc.um.edu.mo/
Ma Man Kei and Lo Pak Sam	Tel: (853) 8822 9500
College	E-mail: mlcollege@um.edu.mo
	Website: http:// mlc.rc.um.edu.mo/
	Tel: (853) 8822 9266, 8822 9976
Moon Chun Memorial College	E-mail: mcmofficeofthemaster@um.edu.mo
	Website: http://mcmc.rc.um.edu.mo/
	Tel: (853) 8822 9630
Shiu Pong College	E-mail: spc.enquiry@um.edu.mo
	Website: http://spc.rc.um.edu.mo/
	Tel: (853) 8822 9319
Stanley Ho East Asia College	E-mail: seacollege@um.edu.mo
	Website: http://sheac.rc.um.edu.mo/

## Residential College System enquiry: rc.enquiry@um.edu.mo Website: http://rc.um.edu.mo/

# **Student Life**

# **Student Life**

#### The Way to UM - New Student Orientation Programme

The Orientation Programme is designed to provide students with a dynamic and informative experience, helping students adapt to the University learning environment, plan their university life, and develop essential skills for success. Through our programme, students will set a foundation for a rewarding university experience at UM.

#### **Psychological Counselling Service**

Psychologcial Counselling Service aims at enhancing students' self-understanding and personal development, empowering students to cope with their issues, facilitating their adjustment to university life, and assisting them in making healthy life changes. The service provides individual and group counselling to students according to their needs, in areas such as interpersonal relationship, self-esteem, self-awareness, stress management, emotional management, adjustment to campus life, etc. All counselling information is kept strictly confidential.

#### Social Work/Counselling Service in Residential Colleges

Social Work/Counselling Service aims to enhance students' whole person education and development. Based in the residential colleges, social workers/counsellors provide consulation and organize activities to foster students' adjustment and growth. Social workers/counsellors will also refer students to appropriate community resources if necessary.

#### **Disability Support Service**

Disability Support Service aims at providing appropriate resources to allow each student with disability to have an equal opportunity in education, university life activities and service at the University of Macau. Students with disabilities include those who have physical, visual, hearing, speech, learning, and psychological impairments which substantially limit their learning and/or activities of daily living. The services are tailor-made to meet the individual needs of students with documented permanent or temporary disabilities.

#### **Smart Point Scheme**

Smart Point (SP) is an incentive scheme that encourages students to participate in major activities in the University, thereby broadening their horizons and enhancing their sense of belonging to UM. The more Smart Points (SP) students accumulated, the more chances they are selected to participate in the Summer Programme with a subsidy up to Mop 15,000 or 70% of the total cost.

#### Whole Person Development Award Programme

The Whole Person Development Award Programme encourages students to participate in different extracurricular activities, cultivating their balanced development in the 7 competencies (Responsible Citizenship, Global Competitiveness, Knowledge Integration, Teamwork and Collaboration, Service and leadership, Cultural Engagement, Healthy Lifestyle). A total of 22 scholarships of MOP5,000 each are available for students with the most outstanding performance in the programme.

#### **UM Distinguished Lecture Series**

UM Distinguished Lecture Series provides students an opportunity to learn from distinguished people, broaden their horizons, and boost their knowledge.

#### **Sports Activity**

In order to promote sports culture and healthy living on campus, a wide range of sports activities (Orientation Sports Activities, Sportswear Day, Sports Fest, Campus Run, World Challenge Day, National Day Happy March and Happy Walk etc.), sports interest courses (Aerial Yoga, Kendo,

Kickboxing, Lawn Bowling, Rope Skipping, Salsa Dance, Swimming, Taekowndo, U-Bound, Wing Chun and Yoga etc.) and Fitness Room Users Introductory Course are being organized and co-organized by Office of Sports Affairs.

#### Alumni Mentorship Scheme

The scheme aims at providing opportunities for students to interact with and learn from alumni. Alumni will act as mentors to share their life experiences, successful stories in academic study and career development.

#### **Corporate Experience Scheme**

In order to provide opportunities for students to understand the industry development, work environment and employment market of different industries, the Career Development Centre organizes corporate visits and tea sessions for students to interact with professionals from various sectors.

#### **Career Advising Service**

Students can make appointments for career advising, mock interviews and resume review service in the Career Development Centre.

#### **Career Interest Assessment Workshops**

The workshops aim at helping students to better understand their occupational interests and characteristics through self-exploration activities and career interest assessments, so students can make more informed decisions about their career development.

#### **Career Training Workshops**

The training workshops aim at enhancing students' skills in job hunting and increase their competitiveness in career development.

#### **UM Student Job-hunting Platform**

The Career Development Centre liaises with employers and assists students in job searching. The UM Student Job Vacancy E-system is an electronic platform for such function. Each year, the Centre organizes Career & Internship Fair and Recruitment Talks, inviting companies and organizations from various sectors to provide students with a broad perspective of the job market, employment and internship opportunities.

#### Internship

The Career Development Centre arranges internship to assist students in obtaining practical experience and skills related to their studies and establish positive contact with prospective employers.

#### **Preparation Courses on Graduate Admission Tests**

The courses aim at assisting students to prepare for graduate school admission tests and enhancing their confidence and skills when taking the tests. The courses include TOEFL, IELTS, GRE and GMAT.

#### **Tea with Professors**

The Career Development Centre invites professors from different faculties to meet students in small groups over tea, giving students guidance and advice on further study and career matters.

#### **Further Study Experience Sharing Sessions**

Professors from different faculties and outstanding alumni will share their further study experiences in the sharing sessions, including how to select graduate schools and programmes, as well as to prepare for admission. Students can learn from their experiences and successful stories in further study.

#### Further Study Advising Service

The Career Development Centre provides further study advising services that cover advisory sessions, resume and personal statement review to assist students in graduate study preparation. The Centre also connects students with alumni through the UM Alumni Online to assist students in getting the first-hand information on overseas further studies and life as postgraduates.

#### **Further Study Talks**

Students can learn up-to-date information about further study in the talks, such as postgraduate programmes overseas and scholarship opportunities. The Career Development Centre also organizes overseas graduate programme introduction sessions in which representatives from top universities will share their admission information.

#### **Further Study Workshops**

The workshops aim at enhancing students' skills and competitiveness in the graduate school admission application.

#### Bank of China Trophy One Million Dollar Macao Regional Entrepreneurship Competition

The competition aims at fostering and encouraging Macao University students to start up their businesses. Winners from the Regional Competition will enter the Grand Final, competing against teams from Hong Kong, Beijing, Guangzhou, Shenzhen, Zhongshan, Foshan and Yangtze River Delta for over RMB1,000,000 of cash prizes in total.

#### Campus Entrepreneurship Programme – Student Shop Competition

In order to allow students to learn how to run business in a real life environment and cultivate the entrepreneurship culture on campus, the Career Development Centre organizes this competition in which the winners will be granted the rent-free operation rights of on-campus shops for an academic year.

#### Student Insurance

The Student Affairs Office (SAO) is responsible for the arrangement of personal accident insurance, travel insurance and medical insurance for students.

The UM medical insurance is mandatory for all registered students, unless exemption is approved. The insured period starts from the registration day to 31 July 2023 and covers outpatient visits and hospitalization benefits. For further information about the UM Medical Insurance Scheme, Waiver Guidelines and Exemption Application, please visit https://srs.sao.um.edu.mo/medical-insurance

#### **Student Caring Service**

The Student Affairs Office (SAO) provides special assistance to students who are in need. Upon receiving report from the responsible unit or concerned individual, SAO will immediately contact the concerned student and provide him/ her consultation to assist him/ her to overcome difficulties.

#### **Non-local Student Service**

In order to help new non-local students adapt to the new environment, the Student Affairs Office (SAO) provides pick-up service for them, arrange them to do medical check and apply for first Stay Permit at the beginning of each academic year.

#### **Financial Aid**

The Student Affairs Office (SAO) provides financial aid and related consultation to students in need. Students with financial difficulties may approach SAO to apply for Tuition Fee Installment and seek advice on financial aid resources.

#### **Campus Training Programme**

Campus Training Programme (CTP) provides students with opportunities to apply knowledge into practical work. Students can utilize their spare time to gain real working experience through the "on-the-job" training provided by the Student Affairs Office as well as the participation at university activities. There are four streams of programme including office administrative trainees, masters of ceremony, activity ambassadors and social media planners. It aims to enhance students' personal competitiveness, and build up their sense of belonging to the University and the society. To recognize trainees' hard work, awards will be presented to the trainees with outstanding performance every academic year. Outstanding trainees will also be nominated to the summer programme with subsidy.

#### Stage Management Programme

Stage Management Programme (SMP) aims to provide practical skills and on-job training to interested students while studying, so that they can gain more valuable working experience, professional skills and improve their competitiveness. Students are trained with technical skill for stage management including stage set up, backstage coordination, video, audio and lighting control and theatre management at the Student Activity Centre. A number of training workshops and activities will be organized for these students throughout the academic year.

#### **Student Leadership Training Programme**

Student Leadership Training Programme (SLP) aims to recruit potential students from different majors and residential colleges, equip them with soft and hard skills to be future leaders. By offering them a series of workshops, theme-based projects, exchange tour, etc.,members are set to contribute to the community with their creativity and enthusiasm. Outstanding members will be awarded the "Outstanding Award" in the annual UM Student Award Ceremony. Sponsorship and nomination to Summer Programme and exchange trips will also be offered to excellent members.

#### Summer Exchange Programme

Students can participate in various Summer Exchange Programmes in Australia, Austria, Belgium, Canada, China, France, Germany, Greece, Hungary, Israel, Italy, Japan, Korea, Malaysia, Netherlands, Norway, Poland, Portugal, Russia, Singapore, Spain, United Kingdom and United States and U.S.A. to enhance their English proficiency. At the same time, they can enrich cultural experience and sensitivity by interacting with other international students and visiting famous landmarks in the exchange countries.

#### **Postgraduate House**

The SAO manages the Postgraduate House (PGH), which offers accommodation and living services to postgraduate students (mainly non-local and exchange students).

SAO strives to create a "FISH" (FRIENDLY, INTELLECTUAL, SMART and HEALTHY) environment for the residents in order to promote their academic, research and employment ability. In addition, SAO also manages the "Temporary Hostel" so as to provide PhD students with adequate living space and facilities.

The PGH launches the below programmes and activities to enrich student life::

- Dean of Students' Tea Series
- Floor Activities
- PGH Fellow System
- PGH House Tutor Programme
- PGH Point System

#### Locker Rental Service

SAO provides locker rental service for students. A total of 2,391 lockers are located at the Central Teaching Building and different faculty buildings. The rental period begins in August and students need to apply it online. The relevant fee will be paid via Simple Pay at the online system.

#### **Sports Teams**

Sports Teams are managed by Office of Sports Affairs, with the aim to facilitate student-athletes to soar higher performance in sports; to develop student-athletes' essential attributes; to develop global outlook through national / regional competitions and exchange programmes; to nurture our student-athletes not only in sports excellence but also all-round attributes (such as team spirit, leadership, inter-personal skills, global outlook, sportsmenship, etc).

The University offers regular trainings, team members will represent the University to participate in competitions and exchange activities. Member recruitment will be held at the beginning of each academic year, all students are welcome to join the member selection. Currently, there are 17 Sports Teams and 2 Sports Performing Teams, including:

- Badminton Team
  - Men's Basketball Team
  - Women's Basketball Team
  - Cheerleading Team
  - Dragon Boat Team
  - Dragon Dance Team
  - Fencing Team
  - Karate Team
  - Korfball Team
  - Martial Arts Team
  - Rock Climbing Team
  - Men's Soccer Team
  - Squash Team
  - Swimming Team
  - Table Tennis Team
  - Tennis Team
  - Track and Field Team
  - Men's Volleyball Team
  - Women's Volleyball Team

#### Sports Performance Team - Dragon Dance Team

Established in March 2019, it is dedicated to promote Chinese traditional culture. UM Dragon Dance Team will perform in UM large-scale events like UM Open Day, Sports Fest, Sports Awards Presentation Ceremony etc.

#### Activities on National and Regional Education, Innovation and Entrepreneurship

To be in line with the youth education policy of the Macao S.A.R. government, SAO organizes various student activities to enhance students' knowledge on national affairs as well as the development of the Guangdong-Hong Kong-Macao Greater Bay Area and Macao S.A.R.

#### National Flag Team

The National Flag Team (NFT) is the only military uniformed team in the University of Macau, which aims at promoting national flag raising culture to students on campus and to other young individuals in primary and secondary schools. It holds flag-raising ceremonies on major days of the People's Republic of China, Macao S.A.R and the University of Macau. Outstanding members will be awarded with certificates and may have the opportunity to get the "Bank of China Macau University of Macau National Flag Team Outstanding Team Members Scholarship".

#### **Cultural and Arts University Teams**

Cultural and Arts University Teams (C&A U Teams) aim to enrich student life through debating, public speaking and art aspects. These teams also allow students to explore and develop their talents. In addition to regular trainings, competitions and performances, team members are also encouraged to participate in cultural promotion activities on campus, as well as to have ideas exchange and collaboration with local, mainland and overseas communities and organisations.

Recruitment of members will be held at the beginning of each academic year. Interested students are welcome to join the teams. C&A U Teams include:

#### Cantonese Debating Team

Communication is an everyday issue for all of us. Aiming at improving presentation skills and establishing critical thinking, the Cantonese Debating Team has regular training and friendly contests with Hong Kong debating teams every year. The team also invited famous debaters to conduct training workshops.

#### English Debating Team

The English Debating Team welcomes students who speak fluent English and possess good presentation skills to join. The team provides an excellent opportunity for students to foster critical thinking and improve persuasion skills. The team has participated in many renowned international and regional competitions and got good results. It has been ranked Top 8 at the World Universities Debating Championship, Top 8 for 12 years and awarded 3 National Champions, 2 1<sup>st</sup> Runner-up, 1 2<sup>nd</sup> Runner-up and Best 10 Debaters for 10 year in FLTRP Cup National Debating Competition. It is also the Champion of the Macao Inter-Tertiary English Debate Competition and won the Champion in the academic year 2021/2022.

#### Mandarin Debating Team

The Mandarin Debating Team was established in 2001. Besides friendly debating competitions with universities around the world, the Team participates in renowned international, national and regional debating contests and got good results. It got the Champions of the "Walk with the Constitution and the Basic Law – First Chinese Debate Competition for Higher Education Institutions in Macao", "Courtesy Living Charter - Respect life and Zeo Descrimination" Youth Debate Contest 2022, 1st "Star of CBA" Greater Bay area contest, Wanqu Debating Contest "Shui Xuan Cup", the 6<sup>th</sup> International Chinese Debating Competition organized by Beijing Normal University, Zhuhai, the 1<sup>st</sup> International Madarin Debating Championship organized by Chongqing University and Chinese Debate Association and the 2<sup>nd</sup> and 3<sup>rd</sup> Return of Kings International Varsity Debating Contests. The Team is also engaged in the promotion and development of Mandarin in Macao S.A.R.

#### Portuguese Debating Team

Established in 2014, the Portuguese Debating Team aims at promoting Portuguese language on campus. At the same time, it provides trainings to members to enhance their debating skills, promote their team spirit and collective problem solving abilities. By taking part in debating competitions, the UM Portuguese Debating Team members have the opportunity to compete with their counterparts and improve their Portuguese skill. The Team won the Champion, the 3rd Prize, and the 2nd Prize in the 10th, 8th, and 6th of the Portuguese Debate Competition for Higher Education Institutions in China and Asia respectively.

#### **Public Speaking Team**

The Public Speaking Team of the University was established in 2008. The Team welcomes students who are interested in public speaking, possess good presentation skill and confident in making public speeches. Regular trainings will be offered to team members to help improving their speaking and presentation skills. It is also established with the purpose of providing a chance for English speaking talents to participate in public speaking competitions.

#### Choir

The UM Choir was established in 2004. It aims at promoting chorus music and provide highquality music performance for all UM members. The Team actively performs in various University events and ceremonies and hold at least two concerts every year. It has also coorperated with other local and oversea choirs and participated in international choral events, such as the 6<sup>th</sup> National Inter-Varsity Art Show in Sichuan, IFCM World Choral Expo and Internatinal Choir Festival – Grand Prix.

#### **Chinese Orchestra**

The UM Chinese Orchestra aims at promoting Chinese music in the University. It currently consists of ten different sessions namely: Er Hu, Pi Pa, Di Zi, Gu Zheng, Liuqin, Ruan, Yangqin, Sheng, Souna and Chinese Percussion. The Team welcomes students with basic skills to join. It has regular training on a weekly basis and engages in performances both on and off campus. Our repertoire covers a wide range of musical genre, from traditional to contemporary musical pieces.

#### Dance Troupe

The UM Dance Troupe was established in 2014. It consists of 30 members from different faculties. It aims to enrich the dance culture in UM and provide high-quality performances for all UM members. The team holds at least one showcase annually and actively performs in various university events and local dance activities. It has participated in the International Youth Dance Festival held by the Education and Youth Development Bureau and the Macao International Parade held by the Cultural Affairs Bureau. Moreover, it also won the 1st Prize in the 5th National Inter-Varsity Art Show in Shanghai for the performance of "Scared to Be Lonely" and the 3rd Prize in the 6th National Inter-Varsity Art Show in Sichuan for the performance of "Hidden Courage".

#### **String Orchestra**

The UM String Orchestra was established in 2009 and welcomes students who are music enthusiasts and have basic knowledge on orchestra music to join. It currently has around 40 members and consists of 5 sessions: 1st Violin; 2<sup>nd</sup> Violin; Viola, Cello and Double Bass. The team offers regular training to improve members' performance skills. It participates in various internal and external performances throughout the academic year.

#### Symphonic Band

The UM Symphonic Band was established in 2007. It is the first and unique collegiate band in Macao. It consists of around 45 members and provides a platform for band enthusiasts to perform and exchange. It holds regular rehearsal and performances at different occasions throughout the academic year, which help promote cultural development of local band music in UM. The band was selected to participate in the 6<sup>th</sup> National Inter-Varsity Art Show in Sichuan and awarded the first prize for their performance of "Greensleeves".

#### **Student Activity Centre**

The Student Activity Centre is a multi-purpose building located in the centre of the campus. It houses offices and conference rooms of the Student Affairs Office and University of Macau Students' Union (UMSU), practice rooms and offices of C&A U Teams, one student-run shop and various venues for student activities including a 243-seat theatre, an outdoor plaza, an exhibition gallery, a recreation room (Student's Corner), meeting rooms, multi-function hall and multi-function rooms. A wide range of student activities and cultural events will be held year round, such as music concerts, dance performances, talent shows, various type of competitions, film screenings, and many more!

#### **Sports Facilities**

The campus has various large-scale sports facilities, including the UM Sports Complex with an indoor swimming pool, an athletic field, and outdoor sports facilities. The five-storey UM Sports Complex has a total net floor area of approximately 9,600 square metres. It can be used for large-scale events and performances.

Indoor sports facilities:

- UM Sports Complex
  - o 1<sup>st</sup> Floor Common Area
  - Activity Room
  - Badminton Hall
  - Bouldering Wall

- Dance Room
- Fitness Room
- Multi-Purpose Room
- Sport Climbing Wall
- Sports Pavilion
- Squash Court
- Swimming Pool
- Table Tennis Room
- Training Hall

#### Outdoor sports facilities:

- Archery Range
- Beach Court
- Lawn Bowling Green
- Mini Artificial Soccer Pitch
- Outdoor Basketball Courts
- Tennis Courts
- Tennis Practice Court
- UM Stadium
- Volleyball Court

#### Student Organizations and Development

To faciliate the opeartion and development of student organizations, we give advice on the organization of student activities, provide support on resources and funding for student organizations. We also provide training, development activities, student leadership seminars and cultural exchange trips to help students become well rounded student leaders and to strengthen their competences. Operating student organizations offers a wide variety of opportunities for students to enhance their academic and social life on campus via involvement, leadership, and empowerment. These experiences nurture campus pride and student success to advance an inclusive and fruitful community.

#### The University of Macau Students' Union

The University of Macau Students' Union (UMSU) was established on 29 March, 1993. Its office is located at Student Activity Centre (E31-1014). UMSU organizes extracurricular activities for students, aiming at enriching students' campus life. The University encourages students to actively participate in UMSU's activities and act as cabinet members of UMSU or its sub-organizations. All UM students can join UMSU and its sub-organizations but may be subject to different membership fees.

There are currently around 80 sub-organizations under UMSU, offering tailor-made services to suit the needs of students from different faculties, with different interests and demands.

- FAHSA Faculty of Arts and Humanities Students' Association
- FBASA Faculty of Business Administration Students' Association
- FEDSA Faculty of Education Students' Association
- FHSSA Faculty of Health Science Students' Association
- FLLSA Faculty of Law Students' Association
- FSSSA Faculty of Social Sciences Students' Association
- FSTSA Faculty of Science and Technology Students' Association
- Boarders' Communication Students' Association
- China Mainland Students' Association
- Honours College Students' Association
- International Students' Association
- Academic Association
  - Accounting Society
  - o American Society of Civil Engineers International Student Group, Department of

Civil and Enviromental Engineering at UM

- Business Analytics Association
- Chinese Society
- Communication Society
- o Computer Society
- Economic Society
- Finance Society
- Geography Studies Association
- History Association
- Ichibankai Club
- o International Law Association
- o Institute of Electrical and Electronics Engineers Inc.,
- o Institution of Mechanical Engineers Student Chapter
- o Marketing Society
- o Mathematical and Interdisciplinary Modeling Association
- Mathematics Society
- Psychological Society
- Robotics Club
- Sociology Association
- The Institute of Engineering and Technology, Hong Kong, Younger Members Section, Macao Students Section
- The Macau Institution of Engineers Student Members Division of University of Macau Students' Union
- o Tourisum, Convention and Hospitality Society
- Cultural & Recreational Association
  - Animation & Comic Society
  - Astronomical Society
  - Cantonese Debate Team
  - o Chamber Music Society
  - o Chinese Opera Society
  - Christian Fellowship
  - o Cocktail & Coffee Learning Society
  - Culinary Art Society
  - Drama Society
  - Drawing and Painting Society
  - English Debating Society
  - Entrepreneurship Society
  - o Guitar Association
  - o Literature Club
  - Magic Society
  - Mandarin Debating Society
  - Model Aircraft Society
  - Model United Nations Association
  - Music Society
  - Percussion Society
  - Photography Society
  - Rap Association
  - Rotaract Club
  - Toastmasters Club
  - Volunteer Society
- Sports Association
  - American Football Club
  - Archery Association
  - Badminton Club
  - Basketball Club

- Dance Society
- Diabolo Sports Association
- Dragon Boat Club
- o Fencing Club
- Football Society
- Handball Club
- o Judo Club
- o Karate Club
- Kin-ball Club
- Korfball Club
- Orienteering Society
- Rock Climbing Club
- Rowing Club
- Squash Society
- o Table Tennis Club
- o Tchoukball Club
- o Tennis Club
- o Track and Field Club
- o Volleyball Club

#### The University of Macau Postgraduate Association

The University of Macau Postgraduate Association (UMPA) was founded in July, 2005. Its office is located at the Postgraduate House (S3-G017). It aims at promoting a benign academic and cultural environment in accordance with the University Motto "Humanity, Integrity, Propriety, Wisdom and Sincerity"; advancing the all-rounded development of UM postgraduate students; enhancing the academic and cultural exchanges among postgraduates and undergraduates; tightening relationships with other associations in UM, Macau and abroad.

There are currently 9 sub-organizations under UMPA:

- Calligraphy Club
- Chinese Herbal Plant Association
- Health Sciences PhD Society
- Institute of Applied Physics and Materials Engineering Postgraduate Association
- Institute of Chinese Medical Sciences Postgraduate Association
- Society of Literature Theory in South China
- UM Mirror Newspaper Office
- Vision & Photography Association
- Youth Association of International Affairs

# Academic Support Services

### ACADEMIC SUPPORT SERVICES Centre for Teaching and Learning Enhancement

The Centre for Teaching and Learning Enhancement (CTLE) is an academic support unit under the Vice Rector for Academic Affairs (VRAA). CTLE works with academic units, University Library, Residential Colleges and relevant administrative units and student bodies to enhance teaching and learning at UM. CTLE organizes professional development events in which local, regional and international experts share their expertise and insights on teaching and learning with UM's seasoned and new academic staff. CTLE works to identify and recognize exemplary teaching and educational initiatives. CTLE also works closely with the Information and Communication Technology Office (ICTO) to help academic staff in the use of technologies for enhancing student learning and engagement. Our website (ctle.um.edu.mo) contains information on professional development events, teaching and learning resources, and e-Learning tools including UMMoodle.

Major functions of the Centre

- To provide teaching enhancement and evaluation services, including scholarly and practical workshops and consultations for academic staff.
- To develop, review and evaluate teaching and learning policies and practices at UM.
- To provide professional development programmes that help faculty develop pedagogies for student-centred teaching.
- To work with academic units in implementing outcome-based teaching and learning (OBTL).
- To support individuals, projects and educational programmes that exemplify excellence in teaching and learning.
- To work with academic and administrative units in implementing e-learning and educational projects.

### ACADEMIC SUPPORT SERVICES Information and Communication Technology Office

The Information and Communication Technology Office (ICTO) provides general IT services and facilities for all UM members on campus, which includes the Internet, wired and wireless network connectivity across the campus, general systems such as email and filing systems, printing services such as Follow-You student printing, WebPrint, Macau Pass printing and copying service, High Performance Computing Cluster (HPCC) service for research, Student Information System (SIS) for course enrolment, course add/drop and study plan, etc.

Besides, ICTO also provides the following computing facilities:

- UM Pass allows students and staff to access various IT services, such as to login computers, to use printing service and to access your e-mail etc. Students may visit myUM Portal through (<u>https://myum.um.edu.mo</u>).
- Virtual Computer Room allows students and staff to access the specialized software from their own personal computer or mobile device remotely. For more details, please visit (<u>https://icto.um.edu.mo/virtual-computer-room/</u>).
- Computer Room are equipped with personal computers installed with Windows operating system and general application software, which located at Central Teaching Building (E5) and (E6). For more details, please visit (https://icto.um.edu.mo/academic-computing-facilities/computer-room/).

In order to facilitate teaching and learning, the elearning systems (<u>https://elearning.um.edu.mo/</u>) below are provided.

- UMMoodle provides a space for teachers to post teaching materials and conduct online activities. Users can have self-learning, online-testing, and lecture discussions, submit assignments and check their learning progress.
- **ePortfolio** is a web system that allows users to record and share evidence of learning. It provides functions of blogs, social networking and learning records.
- Community provides various activity modules for assisting users in managing attendance records and facilitating information sharing for academic research projects.
- Zoom assists UM members in the organization of online meetings, presentations, interviews, teaching and learning activities.

For any general consultation and assistance in using facilities and services, please contact ICTO Help Desk at room E5-2085 of Central Teaching Building, email: icto.helpdesk@um.edu.mo. Moreover, in order to make the best possible use of the computing facilities and services, ICTO regularly offers training courses to our staff and students on the use of our computing facilities.

For more information about ICTO, please visit our homepage at https://icto.um.edu.mo/.

## ACADEMIC SUPPORT SERVICES University Library

### Wu Yee Sun Library – An Academic Library of the 21st Century

The University of Macau Library has moved into the current "University of Macau Wu Yee Sun Library" building in July 2014. Standing in the forefront and occupying a very central location of the new campus, and surrounded by a man-made lake and a man-made river, the Library is the landmark building of the whole campus. The main entrance, facing the Library Square, connects with the Central Teaching Building and Faculties through corridors and bridges. The Library is a magnificent building of 7 floors with two lower wings on its sides. The size of the new library is about 30,000 square meters, and is projected to hold one million volumes of books and journals, and to provide some 3,000 seats. The Library was designed by Professor He Jingtang (何鏡堂 教授), Academician of the Chinese Academy of Engineering. In tune with the design principles of the UM campus, it combines the best features of the Chinese and Western cultural elements in its exterior. Looking from outside, it exudes learning and scholarship, just like any great university library anywhere in the world, and at the same time, it projects warmth and beams welcome on its visitors.

The interior of the Library has an atrium lobby with natural sunlight. There is a sky garden located on the second floor. The sky garden area is decorated with a large number of plants and flowers, infusing natural elements into the reading atmosphere. The hanging round-shape exhibition hall located on the fifth floor contrasts with the square-shape atrium lobby on the ground floor. In Chinese tradition, this kind of contrast is known as 「天圓地方」("round sky and square land"), representing the whole world. This also implies that the Library holds comprehensive and large amount of collections from all over the world.

With over 40 years of development, the Library has become the largest library in Macao. At this moment, the Library holds a collection of about 12.6 million pieces/items, which includes about 850,000 books, 6,000 titles of periodicals, 27,000 rare books, 30,000 items of AV materials, 1,000 paintings/antiques, 3,000 items of special collections and 5,000 rolls of microfilms. With the rapid development of web services, the Library has acquired quite a number of electronic resources, which includes about 260 e-databases, 800,000 e-books, 13,000,000 e-theses, 2,000 titles of e-newspapers and 140,000 titles of e-journals.

The Library continues to integrate the use of innovative technologies into traditional library services, and apply the pioneering and innovative concepts to its functions. Currently, the Library is using UHF RFID management system to manage its book collections. In addition, the books are not simply shelved strictly according to the classification scheme. Instead, they are grouped and shelved in clusters by their subjects. This facilitates better use of the collection and makes it easier for readers to use the collection.

The Library also encourages and emphasizes on discussion, sharing and interaction among students. With easy accessibility of information on the web, libraries these days have to become places for collaborative learning and interaction among their readers. To achieve this aim, the Library provides a large number of group discussion rooms installed with state-of-the-art equipment. In addition, there will be some informal discussion and interaction spaces throughout the Library for students to socialize, interact, and to learn from each other.

However, the Library also has to cater to the needs of other readers who may prefer individual study and, therefore, a quieter environment. For this, the Library is divided up into several different zones to take care of the different requirements of its users. Some parts of the Library are designated as the silent zone, where serious and scholarly study may be conducted. And

some parts of the Library are made into semi-silent zone, where students may study with their friends and generate some discussion whereas other readers just regard the noise thus generated as background noise.

In summary, to support the overall development of the university's teaching, learning and research, and consider the development trend of higher education on the importance of collaborative learning, the Library is designed with a new and open concept, aiming to let teachers and students experience a brand new way of learning and acquiring information.

# Research Centres and Laboratories

### RESEARCH CENTRES AND LABORATORIES

### **Research Centres**

 BUSINESS RESEARCH AND TRAINING CENTRE DIRECTOR 主任 Matthew Ting Chi LIU 劉丁己 BSc (First class, Hons) in Mathematics/Economics, Nankai University, China PhD in Economics, Lancaster University, UK

#### 

DIRECTOR 主任 Chuxia DENG 鄧初夏 BSc, West China Normal University; MSc, Institute of Hydrobiology, Academia Sinica; PhD, University of Utah

#### CENTRE FOR APPLIED MATHEMATICS DIRECTOR 主任

Xiao-Chuan CAI 蔡小川 BSc, Peking University; MSc, PhD, Courant Institute, New York University

CENTRE FOR ARTIFICIAL INTELLIGENCE AND ROBOTICS INTERIM HEAD 代主任 Jiantao ZHOU 周建濤

BA, Dalian University of Technology; MA, Southeast University; PhD, Hong Kong University of Science and Technology

 CENTRE FOR ARTS AND DESIGN DIRECTOR 主任

Lampo LEONG 梁藍波 BFA, Guangzhou Academy of Fine Arts; MFA, California College of the Arts; PhD, Central Academy of Fine Arts

CENTRE FOR CHINESE HISTORY AND CULTURE

DIRECTOR 主任 Shoutong ZHU 朱壽桐 BA, Suzhou University; MA, PhD, Nanjing University

#### DEPUTY DIRECTOR 副主任

Neng Ian CHEANG 鄭寧人 BA, Huaqiao University; MA, University of Macau; PhD, Tianjin Normal University

CENTRE FOR COGNITIVE AND BRIAN SCIENCES

INTERIM HEAD 代主任 Zhen YUAN 袁振 PhD, University of Sciences and Technology of China

## ■ CENTRE FOR CONSTITUTIONAL LAW AND BASIC LAW STUDIES DIRECTOR 主任

#### ■ CENTRE FOR DATA SCIENCE INTERIM HEAD 代主任

Leong Hou U 余亮豪 BA, National Chi Nan University; MA, University of Macau; PhD, The University of Hong Kong

 CENTRE FOR EARLY CHILDHOOD EDUCATION AND CHILD DEVELOPMENT INTERIM DIRECTOR 代主任

Juan ZHANG 張娟 Ph.D., The Chinese University of Hong Kong

 CENTRE FOR ENGINEERING RESEARCH AND TESTING DIRECTOR 主任 Wai Kwok LO 盧偉國 MSc, National Cheng Kung University

 CENTRE FOR INFORMATION AND COMMUNICATION TECHNOLOGY IN EDUCATION DIRECTOR主任 Andy Chun Wai FAN 范進偉

B.Sc., University of Keele; M.Sc., University of Strathclyde; Ph.D., Glasgow Caledonian University

- CENTRE FOR INNOVATION AND ENTREPRENEURSHIP HEAD 主任 Jerome YEN 顏至宏 PhD, University of Arizona
- CENTRE FOR LAW STUDIES DIRECTOR 主任 Manuel Marcelino ESCOVAR TRIGO 尹思哲 LLB, LLM, University of Coimbra
- CENTRE FOR LINGUISTICS DIRECTOR 主任

Jie XU 徐杰 BA, Henan University; MA, Central China Normal University; MA, University of Hawaii; PhD, University of Maryland at College Park

#### DEPUTY DIRECTOR 副主任

Andrew Jackson MOODY BA, Grand Canyon University; MA, University of Louisville; PhD, University of Kansas

## ■ CENTRE FOR PRECISION MEDICINE RESEARCH AND TRAINING DIRECTOR 主任

Chuxia DENG 鄧初夏 BSc, West China Normal University; MSc, Institute of Hydrobiology, Academia Sinica; PhD, University of Utah

#### CENTRE FOR REGIONAL OCEANS INTERIM DIRECTOR 代主任

IN TERM DIRECTOR 代土住 Jie XU 徐杰 BEng, MEng, Zhejiang University; Ph.D., Hong Kong University of Science and Technology

■ CENTRE FOR SCIENCE AND ENGINEERING PROMOTION DIRECTOR 主任

Kam Weng TAM 譚錦榮 B.S., Ph.D., University of Macau; Ph.D., Technical University of Lisbon

CENTRE FOR STUDIES OF TRANSLATION, INTERPRETING AND COGNITION DIRECTOR 主任 Defeng LI 李德鳳

BA, MA, Nanjing Normal University; PhD, University of Alberta, Canada

#### CENTRE FOR THE GUANGDONG-HONG KONG-MACAO GREATER BAY AREA STUDIES DIRECTOR 主任

Richard Weixing HU 胡偉星 B.Law, Peking University; MA, Johns Hopkins University SAIS; PhD, University of Maryland, College Park

■ CENTRE FOR TOURISM AND INTEGRATED RESORT STUDIES DIRECTOR 主任

Amy Siu Ian SO 蘇小恩 PhD, Hospitality and Tourism Marketing, Purdue University, West Lafayette, Indiana, USA

CENTRE OF REPRODUCTION, DEVELOPMENT AND AGING DIRECTOR 主任

Wei GE 葛偉 BSc, Nanjing University; MSc, Institute of Hydrobiology, Academia Sinica; PhD, University of Alberta

## ■ CHINESE-PORTUGUESE BILINGUAL TEACHING AND TRAINING CENTRE DIRECTOR 主任

Jing Ming YAO 姚京明 BA, Beijing Foreign Studies University; MA, University of Macau; Doctor of Arts, Fudan University

#### DEPUTY DIRECTOR 副主任

Ana Margarida Belem Nunes Licenciatura em Ensino de Português - Universidade do Minho; Mestre em Estudos Portugueses; Doutoramento em Tecnologias da Saúde, Universidade de Aveiro

#### ■ CONFUCIUS INSTITUTE

DIRECTOR 院長 Jie XU 徐杰 BA, Henan University; MA, Central China Normal University; MA, University of Hawaii; PhD, University of Maryland at College Park

#### DEPUTY DIRECTOR 副院長

Zhong CHEN 陳忠 BA, Liaocheng Normal University; MA, Shandong Normal University; PhD, Fudan University

### EDUCATIONAL RESEARCH CENTRE

#### DIRECTOR 主任

Mingming ZHOU 周明明 M.A., Northeastern University; M.A., University of Leuven; Ph.D., Simon Fraser University

## ■ EDUCATIONAL TESTING AND ASSESSMENT RESEARCH CENTRE DIRECTOR 主任

Kwok Cheung CHEUNG 張國祥 B.Sc., M.Ed., University of Hong Kong; Ph.D., University of London

#### ■ INSTITUTE FOR ADVANCED LEGAL STUDIES DIRECTOR 主任

Guangjian TU 涂廣建 Diploma of Law, Zhejiang University; Bachelor of Medicine in Forensic Medicine, Tong Ji Medical University; LLM, PhD, University of Aberdeen

## INSTITUTE FOR THE STUDY OF COMMERCIAL GAMING DIRECTOR 所長 Davis Ka Chio FONG 馮家超 BBA, MBA, University of Macau; PhD, Tsinghua University

#### INSTITUTE OF GLOBAL AND PUBLIC AFFAIRS DIRECTOR 主任

Richard Weixing HU 胡偉星 B.Law, Peking University; MA, Johns Hopkins University SAIS; PhD, University of Maryland, College Park  INSTITUTE OF TRANSLATIONAL MEDICINE DIRECTOR 主任

To be confirmed 待定

MACAO CENTRE FOR RESEARCH AND DEVELOPMENT IN CHINESE MEDICINE DIRECTOR 主任

Yitao WANG  $\pm \ddot{B}$  BChinMed, University of Traditional Chinese Medicine; MPharm, Chongqing University of Medicine

- MACAO CENTRE FOR TESTING OF CHINESE MEDICINE DIRECTOR 主任 To be confirmed 待定
- MACAU INSTITUTE FOR TRANSLATIONAL MEDICINE AND INNOVATION HEAD 主任 To be confirmed 结束

To be confirmed 待定

MINISTRY OF EDUCATION FRONTIERS SCIENCE CENTER FOR PRECISION ONCOLOGY, UNIVERSITY OF MACAU CHIEF SCIENTIST 首席科學家

Chuxia DENG 鄧初夏 BSc, West China Normal University; MSc, Institute of Hydrobiology, Academia Sinica; PhD, University of Utah

RESEARCH CENTRE FOR HUMANITIES IN SOUTH CHINA DIRECTOR 主任 Shoutong ZHU 朱壽桐 BA, Suzhou University; MA, PhD, Nanjing University

#### ASSISTANT DIRECTOR 助理主任

Gang GONG 龔剛 BA, Hangzhou University; MA, Doctor of Arts, Peking University

 RESEARCH CENTRE FOR LUSO-ASIAN STUDIES DIRECTOR 主任 Mário Rui Lima de Oliveira Pinharanda NUNES Licenciatura em Línguas e Literaturas Modernas (Variante Inglês/Alemão), University of Lisbon (Classic University); MA, PhD, University of Macau

#### RUSSIAN CENTRE

DIRECTOR 主任 Tianji CAI 蔡天驥 PhD, University of North Carolina

## RESEARCH CENTRES AND LABORATORIES

The University continuously puts in resources to develop various laboratories according to the needs for course development, teaching and research. The various laboratories are listed as follows:

#### List of Laboratories

#### **Biomedical Sciences Laboratories**

- Animal Research Core
- Biological Imaging and Stem Cell Core
- Genomics, Bioinformatics and Single Cell Analysis Core
- Proteomics, Metabolomics and Drug Development Core

#### **CCBS** Laboratories

- Brain Intervention Core
- Cognition and Behavioral Data Collection Core
- High Performance Computing Facility
- Institute of Biophysics of Chinese Academy of Sciences University of Macau Joint Research Laboratory of Brain and Cognitive Sciences
- Neuroimaging Core

#### **Guangdong-Hong Kong-Macao Joint Laboratories**

- Guangdong-Hong Kong-Macau Joint Laboratory for Smart Cities
- Guangdong-Hong Kong-Macao Joint Laboratory of Human-Machine Intelligence-Synergy Systems
- Guangdong-Hong Kong-Macao Joint Laboratory of Photoelectromagnetic Functional Materials
- Guangdong-Hong Kong-Macau Photonic-Thermal-Electrical Energy Materials and Devices Joint Laboratory
- Guangdong-Hong Kong-Macao Neutron Scattering Science and Technology Joint Laboratory
- Guangdong-Macao Joint Laboratory of Advanced and Intelligent Computing

#### Ministry of Education Joint Key Laboratory

 Sun Yat-Sen University – University of Macau Ministry of Education Joint Key Laboratory

#### State Key Laboratories

- The State Key Laboratory of Analog and Mixed-Signal VLSI (University of Macau)
- The State Key Laboratory of Internet of Things for Smart City (University of Macau)
- The State Key Laboratory of Quality Research in Chinese Medicine (University of Macau)

#### University of Macau - Chinese Academy of Sciences Joint Laboratories

- Joint Laboratory of Aerospace Information
- Joint Laboratory of Artificial Intelligence and Robotics
- Joint Laboratory of Ocean Environment and Engineering

#### University of Macau - BoardWare Macau Joint Laboratory

#### University of Macau – Huafa Group Joint Laboratory

#### Science and Technology Laboratories

- Advanced Physics Laboratory
- Analog Electronics Laboratory
- Antenna and Electromagnetic-Wave Laboratory
- Automation Laboratory
- Automotive Engineering Laboratory
- Big Data Processing Laboratory
- Biomedical Engineering Laboratory
- Biomedical Imaging Laboratory
- Chemistry Laboratory
- Clean Room
- Cloud Computing and Distributed Systems Laboratory
- Computational Engineering Laboratory
- Computer Aided Civil Engineering Facilities
- Computer Graphics and Multimedia Laboratory
- Control Laboratory
- Construction Materials Laboratory
- Corrosion & Metallography Laboratory
- Crystal Growth and Atomic Force Microscopy Laboratory
- Crystal Structure Laboratory
- Data Analytics and Collaborative Computing (DACC) Laboratory
- Data-Driven Intelligent Systems Laboratory
- Distributed Systems Laboratory
- Dynamics and Monitoring Laboratory
- E-Commerce Technology Laboratory
- E-Home Healthcare Engineering Laboratory
- Electric Power Engineering Laboratory
- Electrical Machines and Drives Laboratory
- Electricity Utilization Laboratory
- Electron Microscopes Laboratory
- Electronics Workshop
- Embedded Systems Laboratory
- Environmental Biotechnology Laboratory
- Environmental Engineering Laboratory
- General Physics Laboratory
- Geomechanics Laboratory
- Geo-modelling & Wave Laboratory
- Geotechnical Engineering Laboratory
- Green Energy Materials Laboratory
- Hydraulics Laboratory
- Image Processing and Pattern Recognition Laboratory
- Industrial Engineering Laboratory
- Innovative Design and Integrated Manufacturing Laboratory

- Inorganic/Organic Engineering Material Laboratory
- Knowledge and Data Engineering Laboratory
- Laboratory for Ocean and Atmospheric Research
- Laboratory for Ocean Environmental Pollution Analysis and Assessment
- Laboratory for Ocean Environmental Pollution Prevention and Remediation
- Laboratory for Ocean Environmental Simulation and Modelling
- Laser and Optics Laboratory
- Laser Processing Laboratory
- Machine Workshop
- Mathematics Laboratory 1
- Mathematics Laboratory 2
- Measurement and Instrumentation Laboratory
- Mechanical Characterisation and Testing Laboratory
- Mechatronics Laboratory
- Metallography Laboratory
- Microscopy Laboratory
- Motion Capture Laboratory
- Natural Language Processing & Portuguese-Chinese Machine Translation Laboratory (NLP<sup>2</sup>CT)
- Physical Properties Measurement Laboratory
- Quantum Device Fabrication/Testing Laboratory
- Raman Spectroscopy Laboratory
- Scanning Electron Microscope (SEM) Laboratory
- Sensor-based Cooperative Robotics Laboratory
- Sensor Network and Communication Laboratory
- Signal Processing and Communication Laboratory
- Smart and Micro/Nano Systems Laboratory
- Smart Environment & Cybernetics System Laboratory
- Smart Grid Laboratory
- Soft Sensors-Actuators-Robots Laboratory
- Solar Energy Laboratory
- Spectroscopy Laboratory
- Stochastic Mechanics Laboratory
- Strength of Materials Laboratory
- Structures Laboratory
- Surveying Laboratory
- Thermal Engineering Laboratory
- Thin-Walled Structure Laboratory
- Transportation Engineering Laboratory
- Tribology Laboratory
- Ultrafast Laser Laboratory
- Vision and Image Processing Laboratory
- Visual Information Processing Laboratory
- Wireless Communication Laboratory
- X-ray Diffraction Laboratory
- X-ray Photoelectron Spectroscopy Laboratory

#### **Other Laboratories**

- Accounting and Information Management Laboratory I
- Black Box Theatre
- Cognitive Studies Laboratory
- Conference Room/SI Lab
- Creative Media Lab
- Currency Museum
- Exhibition Room

- Finance and Economics Laboratory •
- Hospitality Laboratory •
- ISCG Gaming Laboratory Kinesiology Laboratory Linguistics Laboratory •
- .
- .
- MICE Laboratory .
- Mock Hotel Room .
- Science Laboratory •
- Thomson Reuters Trading Room .

# Appendices

# Honorary Degrees and Titles

### APPENDICES Honorary Degrees and Titles

	Ho Yin 何賢	Doctor of Business Administration honoris causa
4004	Vasco de Almeida e Costa	Doctor of Public Administration honoris causa
1984	J.M. Toscano Rico	Doctor of Philosophy honoris causa
	Stanley Ho Hung-Sun 何鴻燊	Doctor of Social Sciences honoris causa
	Jorge A.H. Rangel	Doctor of Letters honoris causa

1985	Ma Man-Kei 馬萬祺	Doctor of Business Administration <i>honoris</i> causa
1985	Sir Run Run Shaw 邵逸夫	Doctor of Social Sciences honoris causa
	Monsenhor Manuel Teixeira	Doctor of Letters honoris causa

	Cheng Yu-Tung 鄭裕彤	Doctor of Business Administration <i>honoris</i> causa
1986	D. Arquimínio Rodrigues da Costa	Doctor of Philosophy honoris causa
	Eduardo de Arantes e Oliveira	Doctor of Philosophy honoris causa
	Chou Wen-Hsien 周文軒	Doctor of Social Sciences honoris causa
	Chui Tak-Kei 崔德祺	Doctor of Social Sciences honoris causa

	Orales Assurate Dulide Melante	Destant of Destination Administration to a sole
	Carlos Augusto Pulido Valente	Doctor of Business Administration honoris
	Monjardino	causa
	Lee Chau Kee 本业甘	Doctor of Business Administration honoris
	Lee Shau Kee 李兆基	causa
	Yung Yau 翁祐	Doctor of Business Administration honoris
		causa
	John Horlock	Doctor of Science honoris causa
	Qian Wei-Chang 錢偉長	Doctor of Science honoris causa
	Thomas Neil Morris Waters	Doctor of Science honoris causa
1987	Fei Xiaotong 費孝通	Doctor of Social Sciences honoris causa
	Jack Austin	Doctor of Social Sciences honoris causa
	Joaquim Pinto Machado	Doctor of Social Sciences honoris causa
	Fernando Alves Cristovão	Doctor of Letters honoris causa
	Ma Lin 馬臨	Doctor of Letters honoris causa
	Henry A. Kissinger	Doctor of Law honoris causa
	Lord Asa Briggs	Doctor of Law honoris causa
	Lord Kadoorie	Doctor of Law honoris causa
	Pierre E. Trudeau	Doctor of Law honoris causa
	Rayson Huang 黃麗松	Doctor of Law honoris causa

1989	Ye Xuanping 葉選平	Doctor of Public Administration honoris causa

	Charles Boxer	Doctor of Letters honoris causa
4004	José Augusto Seabra	Doctor of Letters honoris causa
1991	Peter Y. L. Eng 吳毓璘	Doctor of Social Sciences honoris causa
	Daisaku Ikeda 池田大作	Honorary Professor

 1992
 Hsueh Shou Sheng 薛壽生
 Doctor of Social Sciences honoris causa

	Mário Alberto Nobre Lopes Soares	Doctor honoris causa
1993	João de Matos Antunes Varela	Doctor of Law honoris causa
	João José Rodiles Fraústo da Silva	Doctor of Social Sciences honoris causa

	Li Tianqing 李天慶	Doctor honoris causa
1995	Rui Nogueira Lobo de Alarcão e Silva de Alarcão	Doctor honoris causa
	Daisaku Ikeda 池田大作	Doctor of Social Sciences honoris causa

	Joaquim Alberto Chissano	Doctor honoris causa
1998	Leung Pai Wan 梁披雲	Doctor of Arts honoris causa
1990	Wei Yu 韋鈺	Doctor of Education honoris causa
	Eduardo Arantes e Oliveira	Doctor of Engineering honoris causa

2002	Yau Shing Tung 丘成桐	Doctor of Science honoris causa
2002	Joseph Stiglitz	Doctor of Social Sciences honoris causa

	João Malaca Casteleiro	Doctor of Letters <i>honoris causa</i> & Honorary Professor
2004	Jao Tsung-I 饒宗頤	Doctor of Humanities <i>honoris causa</i> & Honorary Professor
2004	Liu Chung Laung 劉炯朗	Doctor of Science <i>honoris causa</i> & Honorary Professor
	James Mirrlees	Doctor of Social Sciences <i>honoris causa</i> & Honorary Professor

2005 Yum-Tong Siu 蕭蔭堂 Honorary Professor
--

	João Ruiz de Almeida Garrett	Doctor of Law honoris causa
	Han Qide 韓啟德	Doctor of Science honoris causa
2006	José de Albuquerque Epifânio da Franca	Doctor of Science honoris causa
	Paul Ching-Wu Chu 朱經武	Doctor of Science honoris causa
	Su-Seng Pang 彭樹成	Doctor of Science honoris causa
	Yum-Tong Siu 蕭蔭堂	Doctor of Science honoris causa

	William Richard Eadington	Doctor of Business Administration <i>honoris</i> causa
2008	Li Zhaoxing 李肇星	Doctor of Humanities honoris causa
2000	Henrique Rodrigues de Senna Fernandes	Doctor of Letters honoris causa
	Alfred Yiu Fai Wong 黃燿煇	Doctor of Science honoris causa

	Gu Mingyuan 顧明遠	Doctor of Education honoris causa
	Tu Weiming 杜維明	Doctor of Humanities honoris causa
2009	Wang Meng 王蒙	Doctor of Letters honoris causa
	George Herbert Walker Bush	Doctor of Social Sciences honoris causa
	Franco Maloberti	Honorary Professor

	Lancelote Miguel Rodrigues	Doctor of Humanities honoris causa
	Xu Jialu 許嘉璐	Doctor of Humanities honoris causa
2010	Wang Xiaodong 王曉東	Doctor of Science honoris causa
	Wong King Keung 黃景強	Doctor of Social Sciences honoris causa

	Louis Cha 查良鏞	Doctor of Letters honoris causa
2011	Lei Seng Chon 李成俊	Doctor of Humanities honoris causa
2011	Francisco J. Ayala	Doctor of Science honoris causa
	Chia-Wei Woo 吳家瑋	Doctor of Social Sciences honoris causa

	Master Hsing Yun 星雲大師	Doctor of Humanities honoris causa
2012	Andrew Chi-Chih Yao 姚期智	Doctor of Science honoris causa
2012	Arden Lee Bement, Jr.	Doctor of Science honoris causa
	Ambrose So Shu Fai 蘇樹輝	Doctor of Social Sciences honoris causa

	Jiang Shusheng 蔣樹聲	Doctor of Education honoris causa
2013	Xue Hanqin 薛捍勤	Doctor of Law honoris causa
2013	Yu Kwang Chung 余光中	Doctor of Letters honoris causa
	Sérgio Machado dos Santos	Doctor of Science honoris causa

	Robert C. Merton	Doctor of Business Administration <i>honoris</i> causa
	Mo Yan 莫言	Doctor of Letters honoris causa
2014	Chen-Ning Franklin Yang 楊振寧	Doctor of Science honoris causa
	Lee Chack Fan 李焯芬	Doctor of Science honoris causa
	Siu Yin Wai 邵賢偉	Doctor of Science honoris causa

	Ma lao Lai 馬有禮	Doctor of Business Administration <i>honoris</i> causa
0045	Lap-Chee Tsui 徐立之	Doctor of Education honoris causa
2015	Pai Hsien-yung 白先勇	Doctor of Letters honoris causa
	Mario R. Capecchi	Doctor of Science honoris causa
	Zhong Nanshan 鍾南山	Doctor of Science honoris causa

	Jia Pingwa 賈平凹	Doctor of Letters honoris causa
2016	Tse Chi Wai 謝志偉	Doctor of Social Sciences honoris causa
	Carl Edwin Wieman	Doctor of Science honoris causa

	He Jingtang 何鏡堂	Doctor of Science honoris causa
2017	Henry T. Yang 楊祖佑	Doctor of Science honoris causa
2017	Binglin Zhong 鍾秉林	Doctor of Education honoris causa
	Ada Yonath	Doctor of Science honoris causa

	Joseph Sung Jao-yiu 沈祖堯	Doctor of Education honoris causa
	Anthony Lau Siu Wing 劉少榮	Doctor of Business Administration honoris
2018	·	causa
2010	Lao Ngai Leong 劉藝良 Doctor of Social Sciences ho	Doctor of Social Sciences honoris causa
	Wang Anyi 王安憶	Doctor of Letters honoris causa
	Aaron J. Ciechanover	Doctor of Science honoris causa

	Qiao Xiaoyang 香曉陽	Doctor of Law honoris causa
	Lau Sin Peng 劉羨冰	Doctor of Educatoin honoris causa
2019	Dennis Lo Yuk Ming 盧煜明	Doctor of Science honoris causa
	Chung Chi Ping Roy 鍾志平	Doctor of Business Administration honoris
		causa

	Shuji Nakamura 中村修二	Doctor of Science honoris causa
2020	Kaixian Chen 陳凱先	Doctor of Science honoris causa
	Lawrence Juen-yee Lau 劉遵義	Doctor of Education honoris causa

	Chio Fai Aglaia Kong 江朝暉	Doctor of Science honoris causa
	Zhu Lilan 朱麗蘭	Doctor of Science honoris causa
2021	Lee Hau Leung 李效良	Doctor of Business Administration honoris
		causa
	Li Lanjuan 李蘭娟	Doctor of Science honoris causa

# Arrangements of Classes and Final Examinations during Typhoons or Rainstorms in Macao

#### APPENDICES

# Arrangements of Classes and Final Examinations during Typhoons or Rainstorms in Macao

(Approved by the Senate on 12 August 2020)

- <u>Tropical Cyclone Signal No.1 or No. 3/Yellow or Red Rainstorm Warning Signal</u> When Tropical Cyclone Signal No. 1 or No. 3/Yellow or Red Rainstorm Warning Signal is hoisted, all classes and final examinations will be held as scheduled.
- <u>Tropical Cyclone Signal No. 8 (or above)/Black Rainstorm Warning Signal</u>

When Tropical Cyclone Signal No. 8 (or above)/Black Rainstorm Warning Signal is hoisted or cancelled, the following arrangements will be made for classes and final examinations:

Arrangement of classes and final examinations when the signal is hoisted				
All classes, final examinations and outdoor teaching activities will be suspended until the related signal is cancelled.				
All classes and outdoor teaching activities* will be suspended immediately while final examinations will be continued till the end as scheduled. * The staff responsible should take all students to a safe place and make sure that it is safe for them to leave.				
Arrangement of classes and final examinations when the signal is cancelled Classes and final examinations which begin <u>2 hours after</u> the cancellation of signal will be held as scheduled. All outdoor teaching activities on that day will be cancelled.				

- (E.g.: If the signal is cancelled on 13:00, classes and final examinations which begin at or after 15:00 will be held as scheduled.)
- 1. Academic units will announce arrangements for final examination postponement on their webpages.
- 2. The above arrangements are not applicable to the practicum or internship courses. Students who are doing these courses should follow the related arrangements and guidelines of the host organization.

# Guidelines for Student Conduct in the Classrooms

#### APPENDICES Guidelines for Student Conduct in the Classrooms

(Approved by the University Senate Pedagogic Council on 14 May 2004)

The classrooms are for teaching and learning. Students should pay attention to the lecture and participate actively during the lecture. Students must strictly adhere to the following rules:

- Be punctual and attend the full lecture;
- Be quiet;
- Turn off mobile phones and pagers. These devices are not to be used during class.
- Don't move about or leave the classroom during the lecture unless you have permission of the teacher;
- No smoking;
- No drink or foods;
- Avoid all unauthorized activity that interferes with or interrupts teaching and learning.

If a student violates any of the above rules, he/she will receive a warning from the teacher. The teacher may also ask a student guilty of misconduct to leave the class immediately and may further report the incident to the Head of the Academic Unit concerned for consideration of disciplinary action.

# Acceptable Use Policy - ICTO Computing Facilities, Campus Network and Internet

### APPENDICES Acceptable Use Policy - ICTO Computing Facilities, Campus Network and Internet

(Approved by the Rector on 17 May 2021)

- 1. Introduction
  - 1.1 Purpose

The purpose of this policy is to ensure that the use of information and communication facilities and services provided by Information and Communication Technology Office (ICTO) is consistent with the highest standards and practices of teaching, learning, research and administration.

#### 1.2 Policy

According to the "Regulations of the Organizational Structure of the University of Macau", ICTO is given the major authority to provide the necessary information and communication facilities and services for teaching, learning, research and administration, it also authorizes ICTO to supervise the proper use of rights of the related facilities and services on behalf of the University of Macau. Users shall abide by this policy and are also bound by the applicable laws of Macao and University's related policies as well.

#### 1.3 Scope

All users (staff, students, visitors, contractors and others) who are using the University's information and communication facilities and services are bound by the provisions of this policy.

#### 2. Code of Use

- 2.1 Be consistent with academic, research and administration purposes, policies and goals of the University.
- 2.2 Information and communication facilities and services shall be used appropriately, and only for conduct in accordance with your role in the University.
- 2.3 The establishment or use of information and communication systems, facilities and services shall comply with the laws of Macao.
- 2.4 Do not conduct or attempt to conduct in any manner that endanger information security, including but not limited to improper acts of interference, interruption, intrusion or paralysis of services on any network, information and communication systems or facilities inside and outside the University.
- 2.5 Unless otherwise agreed by ICTO, a user's right to use the related facilities and services is nontransferable.
- 2.6 Unless otherwise agreed by ICTO, the security measures of information and communication systems or facilities shall not be disabled, interfered with or removed, and users are not allowed to install and use any unauthorized computer programs.
- 2.7 Users shall not process, store, publish, broadcast or bulk-distribute the following with information and communication facilities and services:

- Contents that violate the laws of relevant regions and advocate or promote any illegal behavior;
  - Contains any contents of harassment, bullying, curse, intimidation, hatred, defamation, threat, discrimination, extremism or rumor, etc., and that may intensify contradictions and conflicts;
  - Contains objectionable, obscene or indecent contents;
  - Contents used for personal, political, economic, or commercial benefits;
  - Information that is not related to your role in the University.
- 2.8 If you, as a service provider, need to provide information services to users in the University, or set up networks, information and communication systems or facilities in the University, you shall conduct risk assessment, periodic maintenance, defining appropriate security measures and guidelines for related services, systems or facilities. In addition, you shall obtain comment from ICTO first.
- 2.9 When you need to access University's internal data, you shall take appropriate data protection measures, and you shall use suitable facilities to process, store, and transfer the related data.
- 2.10 In case you encounter any information security incident, you shall notify ICTO as soon as possible, and shall provide necessary information for incident investigation.
- 2.11 All users shall follow the Guidelines for User Account and Password, and are responsible for keeping passwords secure and confidential. Password shall be changed periodically or two-factor authentication service shall be enabled for account protection. For any loss occurrence of identity and authorization tools, such as passwords, e-certificates, you shall notify ICTO as soon as possible.
- 2.12 If a research project has a potential violation of relevant policies, you shall obtain comment from ICTO first.
- 2.13 Before visitors, outsourced service personnel or service providers having access to any UM systems, the relevant reception unit and personnel shall ensure that they have signed a non-disclosure agreement, and comply with this policy.
- 3. Relevant examples of the policy mentioned above for reference:
  - 3.1 Abuse of information and communication facilities and services
    - Malicious occupy extra computers in learning common;
    - Eating and playing in the computer room;
    - Unplug the cables of university equipment, such as power cord, network cable etc. in order to connect your own electronic device;
    - Use University's facility to play video games or browse pornographic websites;
    - Loan, rent or sell your user account to let others obtain computer services of the University;
    - Send bulk-mail to the University users to promote promotional activities of your friend's new shop;

- Use the University email address to register a personal online shop for running a business.
- 3.2 Hazard information and communication facilities:
  - Use or access to any computer system without authorization inside or outside the University;
  - Delete, modify or insert data to a system without authorization;
  - Hire or assist hackers to attack the campus network or information system;
  - Unplug the power supply of the wireless network device to interrupt the service;
  - Distribute spam mail or viruses to cause network congestion or interfere with the works of others;
  - To conduct network scanning activities or experiments to test system vulnerabilities without the consent of ICTO, or to monitor or steal information on the campus network or information system;
  - No matter intentionally or unintentionally, whether with or without tangible or intangible damage to information and communication facilities, to alter any university information system, hardware and software without authorization.
- 3.3 Improper handling of information or abusing of information services:
  - Publish tools or methods that can hack the University system in the discussion forum;
  - Pick up external storage devices in campus area and read the content without authorization;
  - Use personal email to process UM's administrative information or data;
  - Store or process any protected information or data by using public cloud services or tools (e.g. online file hosting services or instant messaging tools), or use communication tools or network services in public places to process any protected information or data;
  - Click an hyperlink or open an attachment of an suspicious email;
  - Browse untrusted websites;
  - Use, distribute, or crack any copyright-protected materials, such as computer software, audio-visual products, and works, without the consent of the copyright owner.
- 3.4 Research project potentially violating this policy:
  - Research on wireless network technology (if it would cause interference to the signal of the university's wireless network, users shall obtain comment from ICTO first);
  - Research on new technology of cellular base stations must comply with the laws of Macao, users are recommended to seek legal advice before proceeding.
- 4. Major applicable laws of Macao and the University's policies:
  - Law on Combating Computer Crime
  - The Macau Cybersecurity Law
  - Personal Data Protection Act
  - Electronic Governance (Governação electronica)
  - Privacy Policy, UM
  - University Policy on Use of Computer Software within Campus, UM
  - Guidelines for User Account and Password, UM
  - Other applicable laws against criminal behaviors on Internet, and other University's policies and guidelines

For relevant applicable laws, policies and guidelines, please refer to <u>https://icto.um.edu.mo/infosec</u>.

5. Consequences of breach

In the event of a breach of this policy, ICTO may, in its sole discretion, suspend or terminate all rights of users to use the information and communication facilities and services. The University may also take disciplinary action or other appropriate measures. If it involves illegal activities, the user may take the legal responsibility.

(The University reserves the right of final interpretation of this policy.)

# Academic Computing Facility Room Rules

### APPENDICES Academic Computing Facility Room Rules

(Approved by the Rector on 15 October 2018)

#### 1. Introduction

The academic computing facility room provides several computing facilities for use by staff and students of University of Macau. The following rules and guidelines which governs the use of computer rooms, OMR, personal multimedia computer rooms and printing rooms, may from time to time be amended as necessary.

#### 2. Usage Guidelines

- 2.1 Before using the computing room, user should read and agree with the policies as stated in the document ICTO.04/201210/001 "Acceptable Use Policy - ICTO Computing Facilities, Campus Network and Internet".
- 2.2 Always keep the room environment clean.
- 2.3 User should clear up all their belongings after using the facilities and leaving the room.
- 2.4 In case of any malfunction of any equipment, user should inform ICTO through service hotline or via e-mail to ICTO Help Desk. Under no circumstances should users attempt to repair any equipment themselves.
- 2.5 When there is no further use of the computing facility room, user should leave the room.
- 2.6 User should pay attention and follow the instructions provided by ICTO staff and those guidelines being posted in the room and on the door.
- 2.7 If it was identified that a user had left the computing facility room and the PC he/she had been using was no further in use, ICTO reserves the right to release it for other users to use. ICTO is not responsible for any loss of data/work from the release actions.

#### 3. Usage Rules

- 3.1 User should bring his/her valid campus card when using the computing facility room.
- 3.2 User should only use one computer at any one time.
- 3.3 Smoking is strictly prohibited in computing facility room at all times.
- 3.4 Maintain silence and refrain from disturbing other users.
- 3.5 Do not litter in computing facility room.
- 3.6 Do not bring any food and beverages into or eating or drinking in the computing facility room.

- 3.7 User should make sure that their self-provided portable storage devices are virus free before using them in the computing facility room.
- 3.8 Under any circumstances listening to music, watching movies and playing computer games are not allowed in the computing facility room unless it is for academic purpose.
- 3.9 Users are allowed to use PC speakers only when they are in an instructor-led class or in preparing multimedia files in personal multimedia computer rooms.
- 3.10 Do not move any equipment, sockets, and/or cables from their original locations.
- 3.11 Do not use any account set up for another user; or try to make any attempt to find out the password of a service for which you have not been authorized, including accounts set up for other users.
- 3.12 Do not disturb, delete or tamper with the programme/data files of ICTO and of other users.
- 3.13 Do not run any software or print any job that is not for academic purposes
- 3.14 Computing facility rooms should not be used for any purposes other than the use of computing facilities.
- 3.15 Users are reminded that the use of unlicensed software, as well as the unauthorized copying of software, is strictly prohibited on University equipment. Users are solely responsible for any and all unlicensed software and documentation in their possession.
- 3.16 The use of computing facilities and Audio-video system on the teacher's desk is allowed only under the lead of and/or permitted by the instructor.

#### 4. Penalties for Misconduct and Abuse of Using Computing Facilities and Services

- 4.1 User who had violated any of the above stated usage rules will be warned instantly to stop the said activity or will be asked to leave the room immediately. Records will be marked down for further reference.
- 4.2 User who had violated any of the above stated usage rules, ICTO reserved the right to suspend his/her privileged of using the following ICTO services: computer rooms, virtual computer room, personal multimedia computer rooms, fast-access PCs, loaning devices, printing and copying service for one week in the following working day and report the case to related department;
  - 4.2.1 For student, the case will be forwarded to Student Affairs Office (SAO);
  - 4.2.2 For staff, the case will be forwarded to the related department and Human Resources Section of Office of Administration (ADMO-HRS).
- 4.3 Any user who was identified that he/she had subsequently violated any of the above stated usage rules, ICTO will suspend his/her privileged of using the following ICTO services: computer rooms, virtual computer room, personal multimedia computer rooms, fast-access PCs, loaning devices, printing and copying service for one month in the following working day and report the case to related department;
  - 4.3.1 For student, the case will be forwarded to Student Affairs Office (SAO);
  - 4.3.2 For staff, the case will be forwarded to the related department and Human Resources Section of Office of Administration (ADMO-HRS).

- 4.4 Any user who intentionally damaging the computing facilities, equipment or furniture in the facility room will be required to pay for the cost of repair or replacement.
- 4.5 Any user who commits serious offenses, such as stealing computer items, accessories or furniture; ICTO will report the case to the Security and Transport Section of Campus Management and Development Office (CMDO-STS) and the faculty or department concerned for further action.
- 4.6 During the period of privilege suspension if there is the need of using the computing services for academic or administrative purpose, user can request his/her academic unit or department to send a written request to ICTO to temporarily restore his/her privileges for accessing the services stated in 4.2 and 4.3. ICTO can consider the request but is under no obligation to restore the suspended privileges.

## Fees and Charges for 2022/2023 Newly Admitted Students

## APPENDICES Tuition Fee 2022/2023

#### **Tuition Fees for Postgraduate Programmes**

(All Fees in MOP)

Programmes <sup>3</sup>	Program Tuition Fe Normativ Peri	es within /e Study	Continuation Fees per Semester <sup>2</sup>	
	Local Students⁴	Non- Local Students	Local Students⁴	Non- Local Students
PhD Degree Programmes	150,000	150,000	9,380	9,380
Master's Degree Programmes				
- Offered by the Faculty of Business Administration	97,800	204,000	12,230	25,500
- Offered by other academic units	97,800	174,000	12,230	21,750
Postgraduate Certificate/Diploma Programmes				
- Postgraduate Certificate in Education	20,600	41,300	5,150	10,330
- Introduction to Macau Law	30,600	61,400	3,830	7,680

 Programme full tuition fees are charged in installments (semesters) during normative study period. Students who complete a programme, including those who complete a programme before the end of normative study period, are required to settle their programme full tuition fees, i.e., all installments of tuition fees. The following table shows tuition fees per installment:

	Normative	No. of	Tuition Fees per Installment	
Programmes <sup>3</sup>	Programmes <sup>3</sup> Study Period		Local Students⁴	Non- Local Students
PhD Degree Programmes	4 years	8 installments	18,750	18,750
Master's Degree Programmes				
- Offered by the Faculty of Business Administration	2 years	4 installments	24,450	51,000
- Offered by other academic units	2 years	4 installments	24,450	43,500
- Offered by other academic units (3-year programmes)	3 years	6 installments	16,300	29,000
Postgraduate Certificate/Diploma Programmes				
- Postgraduate Certificate in Education	1 year	2 installments	10,300	20,650
- Introduction to Macau Law	2 years	4 installments	7,650	15,350

2. Continuation fees are charged to students who continue studies beyond normative study period.

 Students of the following postgraduate programmes should refer to faculty websites for their respective tuition fees: Doctor of Business Administration (DBA), Doctor of Public Administration (DPA), Doctor of Education (EdD), and Executive Master of Business Administration (EMBA).

4. Local students refer to Macau SAR resident identity card holders.

#### Notes

- a) Students who are *admitted* in Academic Year 2022/2023 should refer to page 1 of this document for tuition fees.
- b) Students who resume studies in Academic Year 2022/2023 and followed:
  - i) Programme-based tuition fee schemes: **please refer to page 1** of this document for tuition fees.
  - ii) Credit-based tuition fee schemes: **please refer to the following table** for tuition fees per credit. The minimum charge per installment is 3 credits.

	Tuition Fees per Credit		
Programme	Local Students*	Non-Local Students	
PhD Degree Programmes	3,130	3,130	
Master's Degree Programmes			
- Offered by the Faculty of Business Administration (except EMBA)	4,080	8,500	
- Offered by other academic units	4,080	7,250	
Postgraduate Certificate/Diploma Programmes			
- Postgraduate Certificate in Education	1,720	3,440	
- Introduction to Macau Law	1,280	2,560	

\*Local students refer to Macau SAR resident identity card holders.

- c) Retake course fees are charged to students who retake course(s). For retake course fees per credit, please refer to the table under note (b). The retake course fees for a non-credit bearing course is 1 credit. Students of postgraduate programmes listed in Item 3 on page 1 should refer to faculty websites for their respective retake course fees.
- d) Students who join outgoing exchange or study abroad programmes are required to pay tuition fees of the University of Macau according to their tuition fee schemes unless otherwise specified.

#### **Tuition Fees for Doctor of Business Administration Programme**

#### A. Programme Tuition Fee (MOP)

Programme	All Students
Doctor of Business Administration	830,000

#### B. Tuition Fee Summary

Item	Amount (MOP)	Payment Date
Reservation Deposit	30,000	Upon acceptance of admission offer
1 <sup>st</sup> Installment	270,000	Before the class commencement of the 1 <sup>st</sup> semester of the 1 <sup>st</sup> year
2 <sup>nd</sup> Installment	300,000	Before the class commencement of the 1 <sup>st</sup> semester of the 2 <sup>nd</sup> year
3 <sup>rd</sup> Installment	230,000	Before the class commencement of the 1 <sup>st</sup> semester of the 3 <sup>rd</sup> year
Continuation Fee (per semester)	50,000	Before the class commencement of
Retake/Extra Course Fee (per credit)	16,600	the semester starts

Remarks:

- 1. The reservation deposit is non-refundable. This deposit will be offset against the students' first year tuition fee;
- 2. Continuation fee shall be paid by a student who needs to continue beyond normal duration of the programme, i.e. 3 years;
- 3. Additional fees shall be paid by a student who needs to retake course and/or taking extra course;
- 4. A student who completed the whole programme before the end of the normal duration of the programme must also settle the full amount of tuition fees of the programme.

#### C. Residential Workshops

Expenses on residential workshops are excluded in the tuition fee. Students are responsible for the costs of travel, accommodation and subsistence incurred in attending the compulsory workshops in the curriculum.

D. Students who are admitted in or after academic year 2019/2020 should pay the tuition fees according to the above scheme.

## Tuition Fees for Executive Master of Business Administration Programme

#### A. Programme Tuition Fee (MOP)

Programme	All Students
Executive Master of Business Administration	550,000

#### B. Tuition Fee Summary

Item	Amount (MOP)	Payment Date
Reservation Deposit	20,000	Upon acceptance of admission offer
1 <sup>st</sup> Installment	310,000	Before the class commencement of the 1 <sup>st</sup> semester of the 1 <sup>st</sup> year
2 <sup>nd</sup> Installment	220,000	Before the class commencement of the 1 <sup>st</sup> semester of the 2 <sup>nd</sup> year
Continuation Fee (per semester)	27,500	Before the class commencement of
Retake/Extra Course Fee (per credit)	15,000	the semester starts

Remarks:

- 1. The reservation deposit is non-refundable. This deposit will be offset against the students' first year tuition fee;
- 2. Continuation fee shall be paid by a student who needs to continue beyond normal duration of the programme, i.e. 2 years;
- 3. Additional fees shall be paid by a student who needs to retake course and/or taking extra course;
- A student who completed the whole programme before the end of the normal duration of the programme must also settle the full amount of tuition fees of the programme.

#### C. Residential Workshops

Expenses on residential workshops are excluded in the tuition fee. Students are responsible for the costs of travel, accommodation and subsistence incurred in attending the compulsory workshops in the curriculum.

D. Students who are admitted in or after academic year 2020/2021 should pay the tuition fees according to the above scheme.

#### Refund Policy for Programme Withdrawal (For DBA and EMBA Programmes)

#### 1. Purpose

Students are admitted to the University with the understanding that they will remain until the end of the semester unless unforeseen circumstances necessitate their withdrawal, or unless they are discontinued studies. Students who are discontinued from the University forfeit all refunds of tuition and fees.

#### 2. Policy Parameters and Conditions

- a. The completed (1) Application for Deferment of Study/Withdrawal Form, (2) Checkout Form, (3) Application Form for Tuition Fee Refund and (4) supporting document(s) must be submitted to the Postgraduate Office of the Faculty of Business Administration in order to officially withdraw from the programme.
- b. In the event of a prolonged illness, accident, or other circumstances making it impractical or impossible to complete the study, students must contact FBA Postgraduate Office as soon as possible.
- c. Refund will be credited to the student's bank account provided in the record of our University.
- d. Administrative fee of MOP500 will be charged for any successful refund application. The administrative fee of MOP500 will be deducted from the refund of tuition fee.
- e. Any application for Tuition Fee Refund is subject to the approval from the Programme Coordinator, the Dean of the Faculty of Business Administration and the Director of Finance Office.

Date of Applications	Percentage of Tuition Refunded (Excluding non-refundable deposit)
Before class commencement	100 % installment refund
Class commencement – October 15	80 % installment refund
October 16 – November 30	60 % installment refund
December 01 – January 31	40 % installment refund
After January 31	No refund will be issued

#### **Refund Calculations**

#### **Tuition Fees for Doctor of Education Programme**

Fee / Deposit	All Students (MOP)
Programme Full Tuition Fee (within normative study period)	240,000
Non-Refundable Deposit	15,000
Continuation Fee (per semester)	15,000
Retake Course Fee (per credit)	5,000

A. The programme full tuition fee (in MOP) is to be settled in 6 installments (6 semesters).

Installment	Amount
1 <sup>st</sup> to 6 <sup>th</sup> Installment (per installment)	40,000

- B. Students who complete the whole programme before the end of the normative study period must also settle the programme full tuition fee. The normative study period of this programme is 3 years.
- C. Students who join an outgoing exchange programme/study abroad programme should pay the tuition fees of each of the outgoing semesters according to the tuition fee scheme of the University of Macau.
- D. Applicants are required to pay the non-refundable deposit when they accept their admission offers. After student registration, the deposit will offset part of the 1<sup>st</sup> installment of the programme tuition fee.
- E. The continuation fee shall be paid by a student who needs to continue beyond the normative study period.
- F. Students who retake courses shall pay the retake course fees according to the number of credits of the retake courses. For non-credit bearing course, the retake fee shall be 1 credit.

#### **Tuition Fees for Doctor of Public Administration Programme**

Fee / Deposit	All Students (MOP)
Programme Full Tuition Fee (within normative study period)	240,000
Non-Refundable Deposit	15,000
Continuation Fee (per semester)	15,000
Retake Course Fee (per credit)	5,000

A. The programme full tuition fee (in MOP) is to be settled in 6 installments (6 semesters).

Installment	Amount
1 <sup>st</sup> to 6 <sup>th</sup> Installment (per installment)	40,000

- B. Students who complete the whole programme before the end of the normative study period must also settle the programme full tuition fee. The normative study period of this programme is 3 years.
- C. Students who join an outgoing exchange programme/study abroad programme should pay the tuition fees of each of the outgoing semesters according to the tuition fee scheme of the University of Macau.
- D. Applicants are required to pay the non-refundable deposit when they accept their admission offers. After student registration, the deposit will offset part of the 1<sup>st</sup> installment of the programme tuition fee.
- E. The continuation fee shall be paid by a student who needs to continue beyond the normative study period.
- F. Students who retake courses shall pay the retake course fees according to the number of credits of the retake courses. For non-credit bearing course, the retake fee shall be 1 credit.

#### **Tuition Fee for Undergraduate Programmes**

A. Tuition fees

Programme Type	Student Type	Programme Full Tuition Fee within Normal Study Period <sup>#</sup> (MOP)
4-year Bachelor's Degree Programmes	Local Students*	150,000
Degree Programmee	Non-local Students	490,400
5-year Bachelor's Degree Programmes	Local Students*	187,500
Bogios i rogiannios	Non-local Students	613,000

# Tuition fee to be settled by 8 installments (8 semesters) for 4-year programme and by 10 installments (10 semesters) for 5-year programme with fee per installment as follows:

- Local students\*: MOP18,750
- Non-local students: MOP61,300
- B. Students who begin or resume their studies in academic year 2022/2023 have to pay tuition fees according to the above scheme. For resuming students who were admitted before academic year 2022/2023 and followed the credit-based tuition fee scheme, they shall pay their tuition fees on credit-basis with tuition fee per credit as stated in item D.
- C. Students who complete the whole programme before the end of the normal study period must also settle the full amount of tuition fee of the studied programme.
- D. Continuation fee: Students who are not able to complete the programme and continue beyond the normal study period should pay the continuation fee according to the number of credits to be taken as follows:

Student Type	Tuition Fee per Credit (MOP)
Local Students*	1,150
Non-local Students	3,850

\* Local students refer to the students holding Macao SAR identity card.

#### **Tuition Fee for Minor Programme**

#### A. Tuition fees

Student Type	Programme Full Tuition Fee <sup>#</sup> (MOP)	
Local Students*	20,940	
Non-local Students	69,900	

# Tuition fee to be settled by 6 installments (6 semesters), with fee per installment as follows:

- Local students\*: MOP3,490
- Non-local students: MOP11,650
- B. Students who begin or resume their Bachelor's Degree Programme in academic year 2022/2023 and enrol in the Minor Programme have to pay tuition fee for the programme according to the above scheme. For resuming students who were admitted before academic year 2022/2023 and followed the credit-based tuition fee scheme, they shall pay their tuition fee for the programme on credit-basis.
- C. In all circumstances, students must settle the full amount of tuition fee by the time of graduation of the Minor Programme.
- D. No tuition fee refund will be made to students who withdraw from the Minor Programme.

\* Local students refer to the students holding Macao SAR identity card.

#### **Tuition Fee for Honours College Certificate Programme**

A. Tuition fees

Student Type	Programme Full Tuition Fee <sup>#</sup> (MOP)
Local Students*	8,220
Non-local Students	27,180

# Tuition fee to be settled by 6 installments (6 semesters), with fee per installment as follows:

- Local students\*: MOP1,370
- Non-local students: MOP4,530
- B. Students who begin or resume their Bachelor's Degree Programme in academic year 2022/2023 and enrol in the Honours College Certificate Programme have to pay tuition fee for the programme according to the above scheme. For resuming students who were admitted before academic year 2022/2023 and followed the credit-based tuition fee scheme, they shall pay their tuition fee for the programme on credit-basis.
- C. In all circumstances, students must settle the full amount of tuition fee by the time of graduation of the Honours College Certificate Programme.
- D. No tuition fee refund will be made to students who withdraw from the Honours College Certificate Programme.

\* Local students refer to the students holding Macao SAR identity card.

## APPENDICES Fees and Other Charges

The information provided below is intended to provide a concise guide of the fees and charges related to attendance at University of Macau programmes. The University reserves the right to review and adjust the fees and charges regularly.

#### Currency

All fees paid are only acceptable in Macao Patacas (MOP). Cheque payments in foreign currencies are only acceptable in Hong Kong Dollars. An additional charge of MOP50 will be levied for cheques drawn on banks out of Macao.

#### Application Fees (Non-refundable)

Programmes	Student Type	Application Type	Amount (MOP)
		Direct Admission & Transfer Admission	300
Bachelor	Local & Foreign	Admission Examination	250
	Mainland Chinese		300
Destareducts	Local & Foreign		200
Postgraduate	Mainland Chinese		250

#### Non-refundable Deposits (To guarantee a place)

Programmes	Student Type	Amount (MOP)
Postgraduate Certificate	Newly admitted students	3,000
Master Degree	Newly admitted students	5,000
PhD Degree	Newly admitted students	5,000

#### Tuition Fees for Academic Year 2022/2023

For undergraduate students, please refer to the Registry (REG) website of the link below: https://reg.um.edu.mo/current-students/enrolment-and-examinations/tuition-and-other-feesand-charges/

For postgraduate students, please refer to the Graduate School (GRS) website of the link below: https://grs.um.edu.mo/index.php/current-students/tuition-fee/

#### **Security Deposit**

All new registered students required to pay the security deposit of MOP1,000 during the study period. The deposit is refundable to the students upon graduation or withdrawal and settlement of all outstanding liability due to the University. Students can provide the bank information in Student Information System Web Services (ISW) for refund of security deposit.

## Residential College Boarding Fees, Postgraduate House Residence Fees and Related Fees

Please refer to the Student Resources and Services (SRS) and the Residential Colleges (RC) website of the links below:

- SRS website: https://srs.sao.um.edu.mo/accommodation-fee-charges/
- RC website: https://rc.um.edu.mo/

#### **Student Locker Fee**

Please refer to the Student Resources and Services (SRS) website of the link below: https://srs.sao.um.edu.mo/locker-rental/

#### Administrative Charges

Please refer to the Finance Office (FO) website of the link below: https://fo.um.edu.mo/student/fees\_and\_charges/

#### Payment by Installments

To help the students who are in financial difficulties in settling the outstanding fees, he/she may apply to pay by installments to the Dean of Students. In order to do so, the student should submit the required application form and relevant documents to Student Affairs Office within application period.

For details, please visit: https://sds.sao.um.edu.mo/whole-person-nurturing/financial-aid/

#### **Other Fees and Charges**

Description	Amount (MOP)	Remarks
1. Administrative charge for special handling of tuition fees	200	
	55	For each dishonoured cheque drawn on a Macao bank
2. Returned cheque charges	100	For each dishonoured cheque drawn on a bank outside Macao
3. Declaration fee of tuition fee payment	25	
4. Late registration fee	330	
5. Re-admission fee for inactive student	3,000 per inactive semester	Maximum inactive period of a student will be 2 semesters cumulatively
6. Transcript fee		Including postage charges
7. Testimonial fee	55 (1 <sup>st</sup> copy) 50 (2 <sup>nd</sup> copy)	The 2 <sup>nd</sup> copy onwards must be the same as the 1 <sup>st</sup> copy. Testimonials for renewal of the "Special Authorization to Stay" for Mainland China students are free of charge.
8. Course description fee		Per academic year, per language and per major
9. Certificate recognition fee	55	Only for UM programmes recognized by the Ministry of Education of Portugal

Description	Amount (MOP)	Remarks
10. English translation of diploma fee		Issue once only
11. Certifying certificate/transcript fee	15 (1 <sup>st</sup> copy) 10 (2 <sup>nd</sup> copy)	
12. Supplementary/Re-sit examination fees		
12.1 Bachelor's Degree Programme	165	
12.2 Master's Degree Programmes	220	
13. Late withdrawal/Check-out fee	200	
14. UM campus card replacement fee	100	

#### **Library Fees**

Please refer to the Library website of the link below: https://library.um.edu.mo/lib\_info/lib\_regulations\_en

#### **Graduation Gown**

Please refer to the Registry website of the link below: https://reg.um.edu.mo/graduation/graduation-gown/gowns-rental-and-making/

#### Parking Charges

Please refer to the Security and Transport (STS) website of the link below: https://sts.cmdo.um.edu.mo/rules-regulations/

#### **Sports Complex Venues Rental Fees and Charges**

Please refer to the Office of Sports Affairs (OSA) website of the link below: https://facility.osa.um.edu.mo/booking/

#### **UM Campus Bicycle Rental Service**

Please refer to the Security and Transport (STS) website of the link below: https://sts.cmdo.um.edu.mo/um-bicycle-rental-service-um-student-only/

#### **Medical Insurance**

Please refer to the Student Affairs Office (SAO) website of the link below: https://srs.sao.um.edu.mo/medical-insurance/

# Rules Governing the Use of UM Campus Card

#### APPENDICES Rules Governing the Use of UM Campus Card

#### (For Students)

(Approved by the Rector on 31 July 2022)

#### A. INTRODUCTION

A multi-purpose UM Campus Card is issued for all members of the University (academic and administrative staff as well as students) for identification, facility/physical access control and information system access, etc.

#### **B. FUNCTIONS OFFERED BY THE CARD**

The UM Campus Card serves as:

- A traditional identification card;
- A library card;
- A facility access card to various facilities on campus, including the computer rooms, laboratories, offices, etc.

#### C. ACCESS CONTROL TO UNIVERSITY'S FACILITIES

With a valid UM Campus Card, a student is able to access all ICTO computer rooms. However, access to other facilities, such as individual faculty laboratories, has to be approved in advance by the relevant academic units. For further information, please contact ICTO Help Desk.

#### D. CARD REPLACEMENT FEE

Students do NOT need to pay for the first and all subsequent renewal cards issued by the University. However, students have to pay MOP100 for replacement due to loss, damage\*, and theft.

\* If a damaged campus card does not have any physical damage on it (e.g. scratch and bent mark), students are not obliged to pay the replacement fee of MOP100. However, the fee is applicable for the replacement of all other campus cards with physical damages.

#### E. REPORTING THE LOSS OR THEFT OF THE CARD

If your UM Campus Card is lost or stolen, please approach the Registry or Graduate School as soon as possible, to both report the loss/theft and apply for the issuance of a replacement card. Failure to immediately report the loss or theft of one's UM Campus Card to the Registry or Graduate School, will render the original holder liable to any and all negative consequences arising as a result of the loss/theft.

#### F. NOTES FOR USING THE CARD

- 1. All UM Campus Cards remain the property of the University.
- 2. Use of the UM Campus Card constitutes acceptance of all of the terms and conditions stated in the document "Rules Governing the Use of UM Campus Card".
- 3. UM Campus Card is NOT transferable.
- 4. The functions of your card in campus will be invalidated upon termination of the relationship with the University.
- 5. Do not scratch or fold the card.
- 6. The card chip must be stored under normal room temperatures and in a clean environment.
- 7. Students must not tamper with the UM Campus Card (including all information printed or stored on the card) in any way. Any unauthorized attempts for reading/writing the data stored on your Campus Card may be a criminal offence.

## **Academic Prizes**

#### APPENDICES Academic Prizes

Academic Prizes are awarded to the most outstanding potential graduates of Bachelor's and graduates of Master's and Doctoral Programmes.

Potential graduates: The selection will be based on the academic result of 3.5 years (4-year bachelor's programmes) or 4.5 years (5-year bachelor's programmes) plus completion of last semester's study. The recipients' total enrolled credits should have met the required no. of graduation credits at the time of selection.

#### Macao Foundation Academic Prize 演門其全会學術將項

<i>英</i> 门 墨亚 首 字 响 突 有				
Eligibility	:	Bachelor's degree potential graduates		
Criteria	:	Academic performance		
Amount	:	Ten prizes, MOP10,000 each		

#### Henry Fok Foundation Academic Prize

霍英東基金會學術獎項				
:	Bachelor's degree potential graduates			
:	Academic performance			
:	Five prizes, MOP10,000 each			
	新獎 : :			

Bank of China Academic Prize 中國銀行學術獎項				
Eligibility	<ul> <li>Bachelor's degree potential graduates from Faculty of Business Administration, Faculty of Law, Faculty of Social Sciences majoring in Economics, Faculty of Arts and Humanities majoring in Portuguese Studies</li> </ul>			
Criteria	: Academic performance			
Amount	<ol> <li>1. Four prizes of MOP10,000 each for students from Faculty of Business Administration.</li> </ol>			
	<ol><li>Two prizes of MOP10,000 each for students from Faculty of Social Sciences majoring in Economics</li></ol>			
	<ol> <li>One prize of MOP10,000 for student from Faculty of Arts and Humanities majoring in Portuguese Studies</li> </ol>			
	4. One prize of MOP10,000 for student from Faculty of Law			

#### Luso International Bank Academic Prize

澳門國際銀行學術獎項					
Eligibility	:	Bachelor's degree potential graduates from Faculty of Business Administration			
Criteria	:	Academic performance			
Amount	:	Five prizes, MOP10,000 each			

#### ICBC Macau Academic Prize 工銀演門優才學術將項

Eligibility	: Local bachelor's degree potential graduates majoring in Business Economics,
	Financial Controllership, Accounting or Finance
Criteria	: Academic performance
Amount	: Five prizes, MOP10,000 each

	ower - Hung Yip Group Academic Prize 鴻業集團學術獎項
Eligibility	: Local bachelor's degree potential graduates majoring in Civil Engineering or Electromechanical Engineering
Criteria	: Academic performance
Amount	<ul> <li>Four Prize's, MOP10,000 each</li> <li>1. Two prizes of MOP10,000 each for students majoring in Civil Engineering</li> <li>2. Two prizes of MOP10,000 each for students majoring in Electromechanical Engineering</li> </ul>

Akrostar Acac 芯耀輝學術獎功	
Eligibility	: Bachelor's degree potential graduates majoring in Electrical and Computer Engineering, local students preferred
Criteria Amount	Academic performance & R&D result in microelectronics circuit design     Four prizes, MOP5,000 each
Amount	

Choi Kai Yau 蔡繼有學術獎		emic Prize
Eligibility	:	Bachelor's degree potential graduates
Criteria	:	Academic performance
Amount	:	Six prizes, MOP5,000 each
		• • •

. ..

.

Lou Tou Vo 盧道和數學		natics Academic Prize
Eligibility	:	Bachelor's degree potential graduates from Department of Mathematics of
		Faculty of Science and Technology
Criteria	:	Academic performance
Amount	:	Two prizes, MOP5,000 each
		• • •

Jorge Alvare 歐維治基金會	es Foundation Academic Prize ]學術獎項
Eligibility	: Bachelor's degree potential graduates
Criteria	: Academic performance
Amount	<ul> <li>1. One prize of € 2,000 for student from Faculty of Arts and Humanities, Faculty of Business Administration, Faculty of Education, Faculty of Health Sciences, Faculty of Science and Technology and Faculty of Social Sciences</li> <li>2. One prize of € 1,500 for student from Faculty of Law</li> </ul>

Banco Nac 大西洋銀行		tramarino (BNU) Academic Prize
Eligibility	:	Bachelor degree's potential graduates majoring in Finance of Faculty of Business Adminstration and Law in Portuguese Language of Faculty of Law
Criteria	:	Academic performance
Amount	:	Three prizes for students majoring in Finance
		1. One prize of MOP15,000
		2. One prize of MOP10,000
		3. One prize of MOP5,000
		One prize for student majoring in Law in Portuguese Language One prize of MOP10,000

#### X Fintech Asia Academic Prize

亞洲金融科技	支有限公司	學術獎項

Eligibility	:	Local bachelor's degree potential graduates majoring in Computer Science
Criteria	:	Academic performance
Amount	:	Two prizes, MOP5,000 each

# Macau Civil Engineering Laboratory (LECM) Academic Prize 土木工程實驗室學術獎項 Eligibility : Bachelor's degree potential graduates majoring in Civil Engineering Criteria : Academic performance

Amount : One prize of MOP10,000

ERS Academic 易研方案學術獎		ze
Eligibility	:	Bachelor's degree potential graduates in the Department of Communication and
Criteria Amount	:	Department of Computer and Information Science Academic performance Two prizes, MOP5,000 each

#### MIL Law Office Academic Prize 莫綺玲律師事務所學術獎項

Eligibility	: Best bachelor's degree potential graduates majoring in Law in Portuguese language
Criteria	: Academic performance (with minimum scale 15)
Amount	: One prize of MOP10,000

# Scholarships and Studentships

#### APPENDICES Undergraduate Scholarships

#### University of Macau Grand Lotus Scholarship 澳門大學大蓮花獎學金

#### 1. Applicants of Bachelor's Degree Programmes

Eligibility	:	Applicants of bachelor's degree programmes admitted through the Principals'
		Recommended Admission Scheme (PRA)
Criteria	:	Selected students admitted through the PRA scheme who possess very outstanding

- achievements (e.g. international awards) Coverage : 100% reduction of tuition fee and RC fee; scholarship of MOP30,000 per year; early
- Coverage : 100% reduction of tuition fee and RC fee; scholarship of MOP30,000 per year; early admission to the Honours College

#### 2. Scholarship Continuation

#### - 2<sup>nd</sup> to 5<sup>th</sup> year of study for 5-year programmes

#### - 2<sup>nd</sup> to 4<sup>th</sup> year of study for 4-year programmes

 Eligibility
 :
 Full-time students of bachelor's degree programmes

 Criteria
 :
 Students who have been admitted with University of Macau Grand Lotus Scholarship and meet the concerned GPA/SA, credit and RC requirements in each academic year

 Coverage
 :
 100% reduction of tuition fee and RC fee; scholarship of MOP30,000 per year

#### University of Macau Golden Lotus Scholarship 澳門大學令蓮花獎學会

#### 1. Applicants of Bachelor's Degree Programmes

Eligibility	:	Applicants of bachelor's degree programmes admitted through the Principals'
0 ,		Recommended Admission Scheme (PRA)
Criteria	:	Students who have outstanding academic performance and assessment evaluation
Coverage	:	100% reduction of tuition fee: early admission to the Honours College

#### 2. Scholarship Continuation

- 2<sup>nd</sup> to 5<sup>th</sup> year of study for 5-year programmes

- 2<sup>nd</sup> to 4<sup>th</sup> year of study for 4-year programmes
- Eligibility : Full-time students of bachelor's degree programmes
- Criteria : Students who have been admitted with University of Macau Golden Lotus Scholarship and meet the concerned GPA/SA, credit and RC requirements in each academic year
- Coverage : 100% reduction of tuition fee

#### University of Macau Silver Lotus Scholarship 澳門大學銀蓮花獎學金

#### 1. Applicants of Bachelor's Degree Programmes

- Eligibility : Applicants of bachelor's degree programmes admitted through the Principals' Recommended Admission Scheme (PRA)
- Criteria : Students who have outstanding academic performance and assessment evaluation

Coverage : 50% reduction of tuition fee

#### 2. Scholarship Continuation

#### - 2nd to 5th year of study for FLL 5-year programmes

#### - 2<sup>nd</sup> to 4<sup>th</sup> year of study for other programmes

Eligibility	:	Full-time students of bachelor's degree programmes
Criteria	:	Students who have been admitted with University of Macau Silver Lotus Scholarship and meet the concerned GPA/SA, credit and RC requirements in each academic
Coverage	:	year 50% reduction of tuition fee

#### University of Macau First Year Scholarship 澳門大學首年級獎學金

#### 1. Applicants of Bachelor's Degree Programmes

- Eliaibility Applicants of bachelor's degree programmes admitted through the Principals' Recommended Admission Scheme (PRA)
- Criteria Other students admitted through the PRA Scheme
- Coverage One-off scholarship of MOP5,000 tuition fee reduction in the first year of study (no continuation)

#### University of Macau Golden Lotus Scholarship for Admission Examination 澳門大學入學考試金蓮花獎學金

#### 1. Candidates of Bachelor's Degree through Admission Examination

- Eligibility Admission examination candidates
- Criteria Admission examination candidates with the best examination performance in each maior
- 100% reduction of tuition fee; early admission to the Honours College Coverage

#### 2. Scholarship Continuation

#### - 2<sup>nd</sup> to 5<sup>th</sup> year of study for 5-year programmes

- 2<sup>nd</sup> to 4<sup>th</sup> year of study for 4-year programmes

Eligibility Full-time students of bachelor's degree programmes Criteria Students who have been admitted with University of Macau Golden Lotus Scholarship for Admission Examination and meet the concerned GPA/SA, credit and RC requirements in each academic year

#### 100% reduction of tuition fee Coverage

#### University of Macau Full Scholarship for Undergraduate Students 澳門大學學士學生全免獎學金

#### 1. Applicants of Bachelor's Degree Programmes

Eligibility	:	Full-time bachelor's degree students from Mainland China, Hong Kong and Taiwan
Criteria	:	Students who have outstanding academic performance and assessment evaluation
Coverage	:	100% reduction of tuition fee and RC fee; early admission to the Honours College

#### 2. Scholarship Continuation

#### - 2<sup>nd</sup> to 5<sup>th</sup> year of study for 5-year programmes

#### - 2<sup>nd</sup> to 4<sup>th</sup> year of study for 4-year programmes

- Eligibility Full-time students of bachelor's degree programmes
- Students who have been admitted with University of Macau Full Scholarship for Criteria Undergraduate Students and meet the concerned GPA/SA, credit and RC requirements in each academic vear
- 100% reduction of tuition fee and RC fee Coverage

#### University of Macau Full Scholarship for International Undergraduate Students 澳門大學國際學士學生全免獎學金

1. Applicants of	of Ba	chelor's Degree Programmes
Eligibility	:	Full-time bachelor's degree students from Malaysian and other countries, but
		excluding Mainland China, Hong Kong and Taiwan
Criteria	:	Students who have outstanding academic performance and assessment
		evaluation
Coverage	:	100% reduction of tuition fee and RC fee; early admission to the Honours College
0		

#### 2. Scholarship Continuation

#### - 2<sup>nd</sup> to 5<sup>th</sup> year of study for 5-year programmes

#### - 2<sup>nd</sup> to 4<sup>th</sup> year of study for 4-year programmes

Eligibility	:	Full-time students of bachelor's degree programmes
Criteria	:	Students who have been admitted with University of Macau Full Scholarship for International Undergraduate Students and meet the concerned GPA/SA, credit and RC requirements in each academic year
Coverage	:	100% reduction of tuition fee and RC fee

#### University of Macau Half Scholarship for International Undergraduate Students 演門大學國際學十學生半分遊學会

#### 1. Applicants of Bachelor's Degree Programmes

Eligibility	:	Full-time bachelor's degree students from Malaysian and other countries, but
0,		excluding Mainland China, Hong Kong and Taiwan.
Criteria	:	Students who have outstanding academic performance and assessment evaluation
Coverage	:	50% reduction of tuition fee and RC fee

#### 2. Scholarship Continuation

#### - 2nd to 5th year of study for 5-year programmes

- 2 <sup>nd</sup> to 4 <sup>t</sup>	<sup>th</sup> yea	r of study for 4-year programmes
Eligibility	:	Full-time students of bachelor's degree programmes
Criteria	:	Students who have been admitted with University of Macau Half Scholarship for International Undergraduate Students and meet the concerned GPA/SA, credit and RC requirements in each academic year

Coverage : 50% reduction of tuition fee and RC fee

## University of Macau Golden Lotus Scholarship for Outstanding Student-Athletes 澳門大學傑出運動員金蓮花獎學金

#### 1. Applicants of Bachelor's Degree Programmes

Eligibility	:	Applicants of bachelor's degree programmes admitted through the Principals'
		Recommended Admission Scheme for Outstanding Student-Athletes
Criteria	:	Students with excellent athletic results

Coverage : 100% reduction of tuition fee

#### 2. Scholarship Continuation

#### - 2<sup>nd</sup> to 5<sup>th</sup> year of study for 5-year programmes

#### - 2<sup>nd</sup> to 4<sup>th</sup> year of study for 4-year programmes

- Eligibility
   Students of bachelor's degree programmes

   Criteria
   Students of bachelor's degree programmes

   Criteria
   Students who have been admitted with University of Macau Golden Lotus Scholarship for Outstanding Student-Athletes, meet the concerned GPA/SA requirement in each academic year; achieve the required attendance rate of related UM Sports Team regular training and participate in competitions; stay in Residential College and comply with all the related requirement; positive attitude and active participation in all sports team related events
- Coverage : 100% reduction of tuition fee

## University of Macau Silver Lotus Scholarship for Outstanding Student-Athletes 澳門大學傑出運動員銀蓮花獎學金

#### 1. Applicants of Bachelor's Degree Programmes

Eligibility	:	Applicants of bachelor's degree programmes admitted through the Principals'
		Recommended Admission Scheme for Outstanding Student-Athletes
Criteria	:	Students with excellent athletic results
Coverage	:	50% reduction of tuition fee

#### 2. Scholarship Continuation

#### - 2<sup>nd</sup> to 5<sup>th</sup> year of study for 5-year programmes

#### - 2<sup>nd</sup> to 4<sup>th</sup> year of study for 4-year programmes

- Eligibility : Students of bachelor's degree programmes
- Criteria : Students who have been admitted with University of Macau Silver Lotus Scholarship for Outstanding Student-Athletes, meet the concerned GPA/SA requirement in each academic year; achieve the required attendance rate of related UM Sports Team regular training and participate in competitions; stay in Residential College and comply with all the related requirement; positive attitude and active participation in all sports team related events
- Coverage : 50% reduction of tuition fee

## University of Macau First Year Scholarship for Outstanding Student-Athletes 演門大學傑出運動員首年級獎學金

#### 1. Applicants of Bachelor's Degree Programmes

Eligibility	:	Applicants of bachelor's degree programmes admitted through the Principals'
		Recommended Admission Scheme for Outstanding Student-Athletes
Criteria	:	Students with excellent athletic results
Coverage	:	One-off payment of MOP5,000 and eligible for the 1 <sup>st</sup> year only

### University of Macau Outstanding Student-Athletes Award Scheme 演門大學傑出運動員獎勵計劃

1. Applicants	1. Applicants of Bachelor's Degree Programmes (Current Students)					
Eligibility	:	Current students				
Criteria	:	Students with excellent athletic results in previous academic year, meet the concerned GPA requirement in the previous academic year; achieve the required sports team training attendance and sports performance as stipulated by OSA				
Coverage	:	100%/50% reduction of tuition fee; a maximum of MOP5,000 study allowance for the awarded year				

## Macao Foundation Scholarship for Students from Lusophone Countries/Regions and Namibia

#### 澳門基金會葡語地區及納米比亞學生獎學金

Eligibility	:	Full-time	students	of	bachelor's	degree	programme	es from	Lusoph	one
		countries/	regions and	l Na	mibia					
Criteria	:	1. Recom	mendation	oy N	lacao Founda	tion				
		2. To be a	pproved by	UM						
Amount	:	100% red	uction of tui	tion	fee; 12-montl	n RC fee;	12-month	living	subsidy	of
		MOP3,60	) per month	1						

### Macao Foundation Scholarship for Mainland China Undergraduate Students 演門基金會內地學士獎學金

Eligibility	:	Full-time students of bachelor's degree programmes from Mainland China
Criteria	:	1. Students of excellent college entrance examination result
		2. Recommendation by UM
		<ol><li>Final decision to be made by Macao Foundation</li></ol>
Amount	:	MOP30,000 per academic year

## Macao Foundation Scholarship for Children of Workers in the Space Industry 澳門基金會航天工作者子女獎學金

Eligibility	:	Full-time students of bachelor's degree programmes whose parents are working in
		the space industry
Criteria	:	1. Recommendation by the China Space Foundation
		2. To be approved by UM
Amount	:	100% reduction of tuition fee; 12-month RC fee; 10-month living subsidy of
		MOP4,320 per month

		on Scholarship 讀學生獎學金
Eligibility	:	Bachelor's degree local students
Criteria	:	Academic performance
Amount	:	Thirty scholarships, MOP10,000 each

#### Henry Fok Foundation Scholarship 霍英東基金會獎學金

Eligibility	:	Bachelor's degree students
Criteria	:	Academic performance
Amount	:	MOP10,000 for every 200 students (5 quotas for academic prize)

Bank of Chin 中國銀行獎學		cholarship
Eligibility	:	Bachelor's degree students
Criteria	:	Academic performance
Amount	:	<ul> <li>Twelve scholarships, MOP10,000 each</li> <li>Six scholarships for students from Faculty of Business Administration</li> <li>Two scholarships for students majoring in Economics of Faculty of Social Sciences</li> <li>Two scholarships for students majoring in Portuguese Studies of Faculty of Arts and Humanities</li> <li>Two scholarships for students from Faculty of Law</li> </ul>

## Sands China Ltd. Scholarship and Fellowship 金沙中國有限公司獎學金及助學金

Eligibility	:	Bachelor's degree local students
Criteria	:	Academic performance for scholarship and financial situation for fellowship
Amount	:	Total thirty quota of MOP10,000 each for scholarships and fellowships

#### Luso International Bank Scholarship 澳門國際銀行獎學金

Eligibility	:	Bachelor's degree students
Criteria	:	Academic performance
Amount	:	Four scholarships, MOP10,000 each
		<ol> <li>Two scholarships for students from Faculty of Business Administration</li> </ol>
		2. Two schoalrships for students majoring in Economics of Faculty of Social
		Sciences

#### Luso International Bank Whole Person Development Scholarship 演門國際銀行全人發展邀舉会

Eligibility	:	UM students
Criteria	:	1. GPA 2.5 or above
		2. Performance in the Whole Person Development Programme
Amount	:	Ten scholarships, MOP5,000 each

#### Tin Ka Ping Scholarship

#### 田家炳獎學金

Eligibility	:	1. FED bachelor degree students
		2. Macau, Mainland China, Hong Kong and Taiwan residents
Criteria	:	1. Academic perforamance
		2. Financial Difficulties
		<ol><li>Preference will be gien to ethnic minorities</li></ol>
		<ol><li>Participated actively in community services</li></ol>
Amount	:	Ten scholarships, HKD20,000 each

#### Nam Kwong Education Scholarship

#### 南光教育獎學金

Eligibility	:	Bachelor's degree students
Criteria	:	Decided by UM and Nam Kwong Group
Amount	:	MOP200,000 each year

#### UMDF Fellowship - FED Fellowship for Financial Difficulties 澳門大學發展基金會助學金 - 教育學院經濟困難助學金

Eligibility	:	FED full-time bachelor's degree local students
Criteria	:	1. Family economic situation
		2. Applicant's self-statement
Amount	:	Eight fellowships, MOP20,000 each

## UMDF Scholarship - FED Scholarship for Outstanding Student Teacher 演門大學發展基金會獎學金 - 教育學院優秀實習教師獎學金

Eligibility	:	1. FED full-time bachelor's degree students
		2. Year-4 students
Criteria	:	1. Reference letter from TP supervisors and TP school mentors
		2. TP performance
		<ol><li>Preparation of lesson plans</li></ol>
		<ol><li>Applicant's self-statement</li></ol>
Amount	:	Eight scholarships, MOP10,000 each

#### UMDF Scholarship - FED Scholarship for Whole Person Development 演門大學發展基金會獎學金 - 教育學院全人發展獎學金

	~~~~~	
Eligibility	:	1. FED full-time bachelor's degree students
		2. Year-3 and Year-4 students
Criteria	:	1. Performance in the Whole Person Development Award Programme in the past
		3 years (academic-related activities will be given higher priority)
		2. Winners of competitions representing FED, UM, Macao or China in the past
		three years
		3. Applicant's self-statement.
Amount	:	Six scholarships, MOP10,000 each

#### UMDF Scholarship - FED Scholarship for Outstanding Service 澳門大學發展基金會獎學金 - 教育學院優秀服務獎學金

1	J/ J	<u> </u>	
	Eligibility	:	FED full-time bachelor's degree students
	Criteria	:	1. List of services provided during the academic year
			2. Positions in the related services
			3. Applicant's self-statement
	Amount	:	Four scholarships, MOP10,000 each

ICBC Macau Scholarship 工銀澳門優才獎學金			
Eligibility	:	Bachelor's degree students	
Criteria	:	Academic performance	
Amount	:	Ten scholarships, MOP10,000 each 1. Seven scholarships for local students	

2. Three scholarships for Mainland China students

Frank Wong 黃正義獎學金		nolarship
Eligibility	:	Bachelor's degree students from Faculty of Science and Technology, local students preferred
Criteria	:	<ol> <li>Financial difficulties</li> <li>If there are insufficient applications for the scholarship with the above criteria, the remaining quota will be awarded as scholarships for undergraduate students with academic performance</li> </ol>
Amount	:	Ten scholarships, MOP10,000 each

Galaxy Ente 銀河娛樂集團		nment Group Scholarship 昼金
Eligibility	:	Bachelor's degree students
Criteria	:	Academic performance
Amount	:	Ten scholarships, MOP10,000 each 1. Five scholarships for students with specialization in Gaming Management 2. Five scholarships for students with specialization in Convention and Hospitality Management

MECOM Devices Illung Vin Oracus Cabalanahin	
MECOM Power - Hung Yip Group Scholarship	

澳能建設————————————————————————————————————		nung np Group Scholarship 國獎學金
Eligibility	:	Bachelor's degree local students
Criteria	:	Academic performance
Amount	:	1. Three scholarships of MOP10,000 each for students majoring in Civil Engineering
		2. Three scholarships of MOP10,000 each for students majoring in
MGM Elite S	ahal	Electromechanical Engineering
美高梅展才数		•
Eligibility	:	Bachelor's degree local students
Criteria	:	Academic performance
Amount	:	Ten scholarships, MOP10,000 each
		1. Four scholarships for students majoring in International Integrated Resort Management
		2. One scholarship for student majoring in Accounting
		<ol> <li>Two scholarships for students majoring in Eletrical and Computer Engineering</li> </ol>
		4. Two scholarships for students majoring in Computer Science
		5. One scholarship for student majoring in Civil Engineering

#### SJM Scholarship 澳娛綜合獎學金

Eligibility	:	Bachelor's degree students
Criteria	:	Academic performance
Amount	:	Ten scholarships, MOP10,000 each

#### Tai Fung Bank Scholarship

#### 大豐銀行獎學金

Eligibility	:	Bachelor's degree local students
Criteria	:	Academic performance
Amount	:	<ol> <li>One scholarship of MOP20,000 and three schoalrships of MOP10,000 each for students from Faculty of Business Administration (not include students majoring in International Integrated Resort Management)</li> <li>One scholarship of MOP20,000 and three schoalrships of MOP10,000 each for students from Faculty of Science and Technology</li> </ol>

#### Wynn Macau Scholarship

#### 澳門永利獎學金

Eligibility	:	Bachelor's degree students
Criteria	:	Academic performance
Amount	:	Five scholarships, MOP10,000 each
		<ol> <li>Two scholarships for students majoring in Hospitality and Gaming Management or International Integrated Resort Management</li> </ol>
		<ol><li>One scholarship for student majoring in Finance</li></ol>
		<ol><li>One scholarship for student majoring in Management</li></ol>
		<ol><li>One scholarship for student majoring in Marketing</li></ol>

#### Wynn Macau Whole Person Development Scholarship 澳門永利全人發展趣學会

	JX /LX:	
Eligibility	:	UM students
Criteria	:	1. GPA 2.5 or above
		2. Performance in the Whole Person Development Award Programme
Amount	:	Ten scholarships, MOP5,000 each

#### BNU UM Affinity Card Scholarship 大西洋銀行澳門大學信用卡选學金

【四/十戰1] /與	$1V_{c}$	学后用下突学业
Eligibility	:	Bachelor's degree studentsmajoring in Portuguese Studies
Criteria	:	Academic performance
Amount	:	Two scholarships, MOP10,000 each

#### HSBC Scholarship 香港上海匯豐銀行獎學金

	PNIJ.	
Eligibility	:	Bachelor's degree local students in their second or third year of study
		(not include students majoring in Hospitality and Gaming Management)
Criteria	:	Academic performance
Amount	:	Six scholarships, MOP10,000 each

#### Sir Run Run Shaw Scholarship 邵逸夫獎學金

Eligibility	:	Bachelor's degree students
Criteria	:	Academic performance
Amount	:	Eleven scholarships, MOP8,000 each

Lisboa Holdings	Scholarship	
葡京團獎學金		
Scholarship on aca	demic achievements	
Eligibility :	Pachalar'a dograa atudanta	

Eligibility	:	Bachelor's degree students
Criteria	:	Academic performance
Amount	:	Three scholarships, MOP10,000 each

#### China Life Scholarship for Academic Performance 中國人壽學業成績獎學金

Eligibility	:	Bachelor's degree local students
Criteria	:	Academic performance
Amount	:	Three scholarships, MOP10,000 each
		1. Two scholarships for students majoring in Marketing, Finance or Business
		Economics of Faculty of Business Administration
		2. One scholarship for student majoring in Communication or Economics of
		Faculty of Social Sciences

#### China Life Scholarship for Best Student Leaders

#### 中國人壽傑出學生領袖獎學金

Eligibility	:	<ol> <li>Leaders of the UM Students' Union (UMSU), UM Postgraduate Association (UMPA), UMSU sub-organizations and UMPA sub-organizations</li> <li>Undergraduate and Postgraduate (including PhD) local students</li> </ol>
Criteria	:	<ol> <li>Contributions made to the University and UM students</li> <li>Contributions made to the student organization they belong to.</li> <li>Contributions made for the development of student organization</li> <li>Students should submit applications for the scholarship. A designated</li> </ol>
Amount	:	selection committee of UM will be responsible for the selection and the result will be approved by the donor Three scholarships, MOP10,000 each

#### UMDF Scholarship for Faculty of Social Sciences 澳門大學發展基金會社會科學學院獎學金

Eligibility	:	Bachelor's degree local students
Criteria	:	Academic performance
Amount	:	Five scholarships, MOP10,000 each 1. Three scholarships for students majoring in Psychology 2. Two scholarships for students from other majors of Faculty of Social Sciences

Choi Kai Yau 蔡繼有獎學金		olarship
Eligibility	:	Bachelor's degree students
Criteria	:	Academic performance
Amount	:	Two scholarships, MOP10,000 each

CTM Scholarship 澳門電訊獎學金		
Eligibility : Criteria : Amount :	Bachelor's degree local students from the Faculty of Science and Technology Academic performance Five scholarships, MOP10,000 each	
KWCA Fellowship 君慧慈善會助學金		
Eligibility :	Bachelor's degree and postgradue students	

Eligibility	:	Bachelor's degree and postgradue studen
Criteria	:	Financial difficulties
Amount	:	Ten fellowships, MOP5,000 each

## Macau International Airport Company Limited Scholarship 澳門國際機場專營股份有限公司獎學金

Eligibility	:	Bachelor's degree students
Criteria	:	Academic performance
Amount	:	Five scholarships, MOP10,000 each
		1. One scholarship for students majoring in Finance
		<ol><li>One scholarship for student majoring in Marketing</li></ol>
		<ol><li>One scholarship for student majoring in Accounting</li></ol>
		<ol><li>One scholarship for student majoring in Management</li></ol>
		5. One scholarship for student majoring in Business Intelligence and Data Analytics

#### Lou Tou Vo Mathematics Scholarship

#### 盧道和數學獎學金

Eligibility	:	Bachelor's degree students from the Department of Mathematics of the Faculty of Science and Technology
Criteria	:	Academic Performance
Amount	:	<ol> <li>Grand Award: one scholarship of MOP10,000 for student with best academic performance</li> <li>1st Award: six scholarships, MOP5,000 each for students with good academic performance (two quotas for students from each year of study)</li> </ol>

### Jorge Alvares Foundation Scholarship

#### 歐維治基金會獎學金

Eligibility	:	Bachelor's degree students from the Department of Portuguese of the Faculty of Arts and Humanities			
Criteria	:	Student from the Department of Portuguese (DP) of the Faculty of Arts and Humanities for his/her study in Portugal according to a plan recommended by DP			
Amount	:	One scholarship of $\in$ 1,500			

#### CEM Scholarship 澳門電力股份有限公司獎學金

Eligibility	:	Bachelor's degree local students
Criteria	:	Academic performance
Amount	:	Four scholarships, MOP10,000 each
		1. Two scholarships for students majoring in Electrical and Computer
		Engineering
		2. Two scholarships for students majoring in Electromechanical Engineering

#### ASHRAE Macao Chapter Scholarship ASHRAE 遠門分會一供時製冷及空調工程師學會透學金

ASHKAE 澳	门刀曾一供吸袋冷汉空調工怪即字曾唤字壶
1. Bachelor's c	legree local students majoring in Electromechanical Engineering
Eligibility	: Bachelor's degree local students majoring in Electromechanical Engineering
Criteria	: 1. Winning in professional competitions
	2. Academic performance
	3. Participation in community services
	<ol><li>Participation in research project of related fields</li></ol>
	<ol><li>Participation in activities held by ASHRAE Macao Chapter</li></ol>
	6. Selected by Faculty of Science
Amount	: Four scholarships, MOP5,000 each
	m Cheng Yu Tung College, majoring in Electromechanical Engineering are
preferred	
Eligibility	
• •	: Students from Cheng Yu Tung College, majoring in Electromechanical
	Engineering are preferred
Criteria	Engineering are preferred 1. Winning in professional competitions
Criteria	Engineering are preferred : 1. Winning in professional competitions 2. Academic performance
Criteria	Engineering are preferred 1. Winning in professional competitions 2. Academic performance 3. Participation in community services
Criteria	Engineering are preferred : 1. Winning in professional competitions 2. Academic performance

- 6. Selected by Cheng Yu Tung College
- Amount : Five scholarships, MOP2,000 each

#### Banco Comercial de Macau (BCM) Scholarship

#### 澳門商業銀行獎學金

1 11-12/12/14				
Eligibility	:	Bachelor's degree local students majoring in Business Economics, Financial		
		Controllership, Accounting, Finance, Computer Science or Law (Day-time		
		programme taught in Chinese) or Law (Day-time programme taught in Chinese		
		and Portuguese)		
Criteria	:	1. Academic performance		
		<ol><li>Participate actively in extra-curricular activities</li></ol>		
		3. Selected by donor		
Amount	:	Three scholarships, MOP10,000 each		

#### L'Arc Macau Talent Recognition Programme

#### 澳門凱旋門菁英獎學金

Eligibility	:	Bachelor's degree local students in their third year of study
Criteria	:	1. Academic performance
		2. Participate actively in extra-curricular activities
		3. Participate actively in exchange programmes
Amount	:	Three scholarships, MOP10,000 each
		1. One scholarship for student majoring in Hospitality and Gaming Management
		2. Two schoalrships for students majoring in Accounting or Human Resources
		Management in Faculty of Business Administration, Communication in Faculty
		of Social Sciences, and Civil Engineering, Computer Science,
		Electromechanical Engineering or Electrical and Computer Engineering in
		Faculty of Science and Technology

Manulife Scl 宏利獎學金	holarship	
Eligibility	: Bachelor's degree local students majoring in Finance	
Criteria	<ol> <li>Academic performance</li> <li>Participate actively in community services</li> <li>Selected by donor</li> </ol>	
Amount	: Two scholarships, MOP15,000 each	

#### MdME Excellence Scholarship MdME 卓越獎學金

	Eligibility	:	Bachelor's degree students in fourth year of study, majoring in Law (Day-time
			program taught in Chinese and Portuguese)
	Criteria	:	1. Academic performance (with minimum scale 15)
			2. Selected by donor
	Amount	:	One scholarship of MOP15,000 and one scholarship of MOP10,000

#### Rohde & Schwarz Wireless Communications Scholarship 羅德與施瓦茨無綫通訊獎學金

Eligibility	:	Bachelor's degree local students majoring in Electrical and Computer
		Engineering
Criteria	:	Academic performance
Amount	:	Two scholarships, HKD10,000 each

#### China Telecom Scholarship

#### 中國電信獎學金

Eligibility	:	UM students
Criteria	:	<ol> <li>Best Debaters of Mandarin Debating Team (two quotas of MOP5,000 each)</li> <li>Academic performance (one quota of MOP5,000 for Mainland China undergraduate students)</li> </ol>
		<ol> <li>Financial background (one quota of MOP5,000 for Mainland China undergraduate students)</li> </ol>
Amount	:	Four scholarships, MOP5,000 each

#### The Golden Burger (Macau) Charity Association Scholarship and Fellowship 演門金濠漢堡慈善會獎學金及助學金

Eligibility	:	Bachelor's degree local student
Criteria	:	1. Schoalrship: Academic performance and participate actively in community services
		<ol> <li>Fellowship: Financial situation and participate actively in community services</li> <li>Selected by donor</li> </ol>
Amount	:	One scholarship of MOP10,000 and one fellowship of MOP10,000

#### Macao Water Scholarship

澳門自來水有限公司獎學金

Eligibility	:	Bachelor's degree students majoring in Civil Engineering or Electromechanical Engineering
Criteria	:	Academic performance
Amount	:	Two scholarships, MOP10,000 each

#### Nuno Simões & Associados Scholarship 施展雕律師事務所過聲令

Eligibility	:	Bachelor's degree students form the Faculty of Law (Day-time programme)	
Criteria	:	Academic performance	
Amount	:	Four scholarships, MOP5,000 each, one scholarship each for Year 1 to Year 4	

#### OCT Law Firm Scholarship

#### OCT 律師事務所獎學金

- Eligibility : Bachelor's degree local students from Faculty of Law
- Criteria : Academic performance
- Amount : Two scholarships, MOP10,000 each
  - 1. One scholarship for student in third year of study, majoring in Law in Chinese Language
  - One scholarship for student in fourth year of study, majoring in Law (Day-time programme taught in Chinese and Portuguese)

Everbright Su 光大新鴻基商		ung Kai School of Business Scholarships 獎學金
Eligibility	:	Bachelor's degree students majoring in Accounting or Finance

- Criteria : Academic performance
- Amount : Two scholarships, MOP10,000 each

WICH Law Firm Scholarship 永晉律師事務所獎學金			
Eligibility		achelor's degree students in third year of study, majoring in Law in Chinese anguage	
Criteria	: Ao	cademic performance	
Amount		wo scholarships, MOP10,000 each, one scholarship each for Daytime and vening Programme	

Wong Seng Hong Scholarship				
黃昇雄獎學金				
Eligibility	:	Bachelor's degree local students		
Criteria	:	Academic performance		
Amount	:	Two scholarships, MOP10,000 each		

#### X Fintech Asia – AI & Data ScholarshipScholarship 亞洲金融科技有限公司 – AI & Data 獎學金

Eligibility	:	Bachelor's degree local students in second year of study, majoring in Business
		Intelligence and Data Analytics of Faculty of Business Administration
Criteria	:	Academic performance
Amount	:	Two scholarships, MOP5,000 each

## Alumni Association of University of Macau Students' Union Scholarship for Best Student Leaders

#### 澳門大學學生會校友會傑出學生領袖獎學金

Eligibility	:	Leaders and members of UM Students' Union (UMSU) and leaders of its sub-
		orgnizations, at least one quota for local student
Criteria	:	<ol> <li>Contributions made to the University and UM students</li> </ol>
		<ol><li>Served in UMSU or sub-organizations for at least two years</li></ol>
		<ol><li>Contributions made for the development of the student organization</li></ol>
		4. GPA 2.3 or above
Amount	:	Two scholarships, MOP5,000 each.

#### leong Kim Long Whole Person Development Scholarship 楊劍龍全人發展獎學金

Eligibility	:	UM students
Criteria	:	1. GPA 2.5 or above,
		2. Performance in the Whole Person Development Programme
Amount	:	Two scholarships, MOP5,000 each

#### Gloria Man Wai So Students Scholarship

蘇張文慧獎學金

****		
Eligibility	:	Bachelor's degree Mainland China students from the Department of Chinese Language and Literature of the Faculty of Arts and Humanities
Criteria	:	Academic performance
Amount	:	Two scholarships, MOP5,000 each

#### Mak Heng Ip Law Firm Scholarship 麥興業大律師樓獎學金

· · · · · · · · · · · · · · · · · · ·	~~~ *	
Eligibility	:	Bachelor's degree students from Faculty of Law
Criteria	:	Academic performance
Amount	:	One scholarship of MOP10,000

#### AAAUM Scholarship

澳門大學校友會獎學金

Eligibility	:	Bachelor's degree students
Criteria	:	Academic performance
Amount	:	Two scholarships, MOP5,000 each

#### University of Macau (Hong Kong) Alumni Association Scholarship 澳門大學(香港)校友會獎學金

Eligibility	:	Bachelor's degree students from the Faculty of Business Administration
Criteria	:	Academic performance
Amount	:	Two scholarships of MOP3,000 each
		1. One scholarship for local student

2. One scholarship for non-local student

#### **APPENDICES** Postgraduate Scholarships and Assistantship

#### Macao SAR Government Postgraduate Scholarships - Mainland China Master's **Degree Students**

演門特區政府研究生獎學金 - 內地碩士研究生

Eligibility	:	Mainland China bachelor's degree holders
Criteria	:	1. Academic performance
		2. Recommendation of PRC Ministry of Education
Amount	:	Covers tuition fee and hostel fee and provides a living allowance

<b>Master International</b>	Student Scholarship
-----------------------------	---------------------

#### 碩十國際學生幾學金

Eligibility	:	International* applicants of full-time Master's degree programmes of UM
		(excluding executive degree programmes)
Criteria	:	1. Academic excellence;
		<ol><li>Research abilities or potential; and/or</li></ol>
		3. Communication and interpersonal skills.
Amount	:	1. Tuition fee waiver
		2. Postgraduate House (sharing room) fee waiver
		3. Maximum for 2 academic years / 3 academic years for awardees who admit to
		3-year Master's programme

3-year Master's programme

\* Nationality of an applicant is China (including Macao SAR, Hong Kong SAR and Taiwan China) is not considered as an international applicant.

#### Instituto de Estudos Europeus de Macau Scholarship 演門歐洲研究學會趨學令

Eligibility	:	Full-time master's degree students majoring in European Union Law, International
		Law, or Comparative Law
Criteria	:	Academic performance
Amount	:	MOP15,000 (total amount), quota and amount per recipient determined by faculty
		according to the performance of students of the year

#### Instituto de Estudos Europeus de Macau Academic Prize 澳門歐洲研究學會學術獎項

Eligibility	:	Best graduate from Master of Law in European Union Law
Criteria	:	Academic Performance
Amount	:	MOP15,000 (total amount), quota and amount per recipient determined by the faculty according to the performance of students of the year

Bank of China S 中國銀行獎學金	Scholarship
Eligibility	: Master's degree students
Criteria	: Academic Performance
Amount	<ul> <li>Five scholarships, MOP20,000 each</li> <li>Four scholarships for students from Faculty of Business Admistration (at least 1 student from each related department)</li> <li>One scholarship for student majoring in Economics of Faculty of Social Sciences</li> </ul>

#### Luso International Bank Scholarship 澳門國際銀行獎學金

Eligibility	:	Master's degree students
Criteria	:	Academic Performance
Amount	:	Four scholarships, MOP20,000 each
		<ol> <li>Two scholarships for students from Faculty of Business Admistration</li> </ol>
		2. Two scholarships for students majoring in Economics of Faculty of Social
		Sciences

# UMDF Scholarship - FED Scholarship for Outstanding Master Thesis 演門大學發展基金會獎學金 - 教育碩士優秀論文獎學金

Eligibility	:	1. FED Master students (year-2/year-3)
		2. Completion of oral defense
Criteria	:	Quality of the thesis writing
Amount	:	Eight scholarships, MOP10,000 each
		1. Four scholarships for quantitative research
		2. Four scholarships for qualitative research
	Criteria	Criteria :

#### UMDF Scholarship - FED Scholarship for Outstanding Doctoral Thesis 澳門大學發展基金會獎學金 - 教育博士優秀論文獎學金

Eligibility	:	<ol> <li>FED Doctoral students (year-3/year-4)</li> <li>Completion of oral defense</li> </ol>
Criteria	:	Quality of the thesis writing
Amount	:	Four scholarships, MOP10,000 each

#### UMDF Scholarship - FED Scholarship for Outstanding Postgraduate Research Outcomes

#### 澳門大學發展基金會獎學金 - 教育學院研究生優秀研究成果獎學金

Eligibility	:	FED graduate students (both Master and Doctoral students)
Criteria	:	1. Publications in high quality journals (e.g., SSCI, TSSCI, SCI, AHCI, etc.)
		2. Journal impact factor
		3. Order of the authorship
Amount	:	Four scholarships, MOP10,000 each
		-

#### Akrostar Academic Prize

芯耀輝學術獎項		
Eligibility	:	Postgraduate graduates (including PhD) majoring in Electrical and Computer
		Engineering of Faculty of Science and Technology or Microelectronics of
		Institute of Microelectronics, local students preferred
Criteria	:	Academic performance & R&D result in microelectronics circuit design
Amount	:	Three prizes, MOP10,000 each

Academic priz 最佳葡語學術論		the Best Portuguese Thesis
Eligibility	:	PhD/Master graduate from Faculty of Law and Faculty of Arts and Humanities- Department of Portuguese. If there is no qualified graduate thesis in Faculty of Law, the quota will be transferred to Faculty of Arts and Humanities-Department of Portuguese, vice versa
Criteria	:	<ol> <li>Graduate thesis written in Portuguese Language</li> <li>Faculty's recommendation</li> </ol>
Amount	:	Two prizes, MOP10,000 each

#### BNU UM Affinity Card Scholarship 大西洋銀行澳門大學信用卡捲學金

八四件戰11與	コノシュ	
Eligibility	:	Postgraduate students
Criteria	:	Academic performance
Amount	:	Three scholarships, MOP10,000 each
		1. Two scholarships for students from Institute of Chinese Medical Sciences
		2. One scholarship for student majoring in majoring in Translation Studies of
		Faculty of Arts and Humanities

#### HSBC Scholarship 香港上海匯豐銀行趨學金

他上海進夏戴	11%	学立
Eligibility	:	Master local students
Criteria	:	Academic performance
Amount	:	Three scholarships, MOP10,000 each

#### Bank of China Macau Branch Elite Athletes Scholarship 中國銀行澳門分行精英運動員獎學金

#### Scholarship on sports achievements

Eligibility	• :	Full-time students
Criteria	:	Sports performance
Amount	:	Three scholarships, MOP20,000 each and Four scholarships, MOP10,000 each

<b>Lisboa Holdings</b>	Scholarship
葡京集團獎學金	

#### Scholarship on sports achievements

Eligibility		Full-time students
Criteria	:	Sports performance
Amount	:	One scholarship, MOP20,000 and Two scholarships, MOP10,000 each

Victormap Gro 飛萬里集團獎學	up Scholarship 金
Scholarship on s	ports team development and sports achievements
Eligibility	: UM Dragon Dance Team; students from UM Fencing Team and UM Martial Arts
	Team
Criteria	: Sports performance
Amount	Three scholarships, MOP10,000 each

#### Neoson Men's Basketball Team Development Scholarship 上澳男子籃球隊發展獎學金

Scholarship on sports team development				
Eligibility	:	UM Men's Basketball Team		
Criteria	:	Sports performance		
Amount	:	One scholarship, MOP20,000		

#### Parry Group Sports Teams Development Scholarship 百齡集團運動校隊發展獎學金 Scholarship on sports team development

cholarship on s	sports	team development
Eligibility	:	UM Men's Soccer Team, UM Women's Basketball Team, UM Dragon Boat Team,
		UM Fencing Team, UM Squash Team and UM Swimming Team
Criteria	:	Sports performance
Amount	:	Two scholarships, MOP20,000 each and Four scholarships, MOP10,000 each

# Kangaroo King Men's Soccer Team Development Scholarship 袋鼠王男子足球隊發展獎學金

Scholarship of	on sports	team dev	/elopment
The second states of		1184 84	

Eligibility	:	UM Men's Soccer Team
Criteria	:	Sports performance
Amount	:	One scholarship, MOP20,000

#### University of Macau Outstanding Student-Athletes Award Scheme 澳門大學傑出運動員獎勵計劃

Eligibility	: Full-time students
Criteria	<ul> <li>Students with excellent athletic results; meet the GPA requirement; achieve the required sports team training attendance and sports performance as stipulated by OSA</li> </ul>
Amount	<ul> <li>100%/50% wavier of tuition fee in the following academic year, and/or a maximum of MOP5,000 study allowance</li> </ul>

UM Macao Ph 澳大濠江博士生			ship
Eligibility	:	1.	Anyone seeking full-time PhD degree studies at the UM is eligible to apply, regardless of nationality, ethnic background, or prior work experience
		2.	programmes and any additional admission requirements for certain programmes
Criteria	:	1.	Academic excellence
		2.	Research abilities or potential
		3.	Innovation skills
		4.	Communication and interpersonal skills
		5.	Leadership abilities
Amount	:	1.	A monthly stipend of MOP20,000 for a support period up to four years (48 months)
		2.	A conference or research-related travel allowance of MOP10,000 per calendar year (January to December) on a reimbursement basis during the support period. Applications for the travel allowance are accepted starting from the second semester upon registration

UM PhD Assist 澳大博士生助學		,
Eligibility	:	. Anyone seeking full-time PhD degree studies at the UM is eligible to apply, regardless of nationality, ethnic background, or prior work experience
		<ul> <li>Applicants should fulfill all general admission requirements for PhD degree programmes and any additional admission requirements for certain programmes</li> </ul>
Criteria	:	Academic excellence
		. Research abilities or potential
		. Innovation skills
		. Communication and interpersonal skills
		. Leadership abilities
Amount	:	starting monthly stipend of MOP12,500 with an upper limit of MOP14,000 for a upport period up to four years (48 months)

## Research Assistantships 研究助理助學金

丌九助生助学並		
Eligibility	:	PhD students and Master's students
Criteria	:	Determined by individual supervisors.
Amount	:	Determined by individual supervisors. Maximum monthly stipend as follows: - PhD students (before approval of PhD candidacy): MOP12,500 - PhD students (after approval of PhD candidacy): MOP14,000 - Master's students: MOP8,000

Teaching Assis 教學助理助學金	tantshij	ps
Eligibility	: P	hD students and Master's students
Criteria		tudents with good academic performance, research potential and ability are ligible to apply.
Amount	-   -	etermined by academic unit concerned. Maximum monthly stipend as follows: PhD students (before approval of PhD candidacy): MOP12,500 PhD students (after approval of PhD candidacy): MOP14,000 Master's students: MOP8,000

## Funding Guidelines for PhD and Master Students

#### Guidelines for the UM Macao PhD Scholarship and the UM PhD Assistantship

(Approved by by the Rector on 17 December 2020)

#### 1. Objective

The University of Macau (UM) established the UM Macao PhD Scholarship (*MPDS*) and the UM PhD Assistantship (*Assistantship*) to recruit outstanding PhD students worldwide.

#### 2. Application

- 2.1. Eligibility
  - 2.1.1. Anyone seeking full-time PhD degree studies at the UM is eligible to apply, regardless of nationality, ethnic background, or prior work experience.
  - 2.1.2. Applicants should fulfill all general admission requirements for PhD degree programmes and any additional admission requirements for certain programmes.
- 2.2. Application procedures
  - 2.2.1. Applications for the MPDS and the Assistantship should be submitted along with applications for admission to PhD degree programmes.
  - 2.2.2. Degree certificates, research publications, academic awards, and other documents of academic achievements (if any), should be provided in their applications.

#### 3. Selection

- 3.1. Applicants are assessed by the UM Selection Panel according to the following criteria:
  - 3.1.1. Academic excellence
  - 3.1.2. Research abilities or potential
  - 3.1.3. Innovation skills
  - 3.1.4. Communication and interpersonal skills
  - 3.1.5. Leadership abilities
- 3.2. The availability of the MPDS and the Assistantship is subject to quota limitation and decision of the UM Selection Panel.
- 3.3. The MPDS is awarded to top-ranked applicants with excellent performance on the selection criteria. The results of the MPDS or the Assistantship are subject to the final decision of the UM Selection Panel.

#### 4. Offers

- 4.1. Successful applicants of the MPDS or the Assistantship are notified along with their PhD programme admission offers.
- 4.2. Successful applicants will be asked to provisionally accept their MPDS or Assistantship offers before registration. All conditions (if any) stated in the offers must be fulfilled.
- 4.3. Offer holders are strongly encouraged to complete registration at the UM on or before the 15<sup>th</sup> of the designated month of initial registration (usually August) in the 1<sup>st</sup> semester of an academic year. Late registration in the 1<sup>st</sup> semester will result in shortened support period (please refer to "7. Financial Support for MPDS Awardees" and "8. Financial Support for Assistantship Recipients").
- 4.4. If an offer holder applies for deferment of studies before registration, he/she should also submit a separate application for suspension of support (please refer to "12. Deferment of Studies" and "13. Suspension of Support").
- 4.5. Following the completion of registration, offer holders are required to sign their offer letters of the MPDS or the Assistantship with their respective academic units. If an offer holder fails to sign the offer letter, the UM may withhold or cancel the offer.
- 4.6. When signing the offer letters, offer holders should ensure that:
  - 4.6.1. They are not undertaking any form of paid employment.
    - 4.6.2. They are not receiving any other form of scholarships and assistantships.

4.6.3. They are not concurrently registered at any other higher education institutions (except those with Joint Agreements approved by the UM).

#### 5. Requirements for MPDS Awardees and Assistantship Recipients

- 5.1. To be eligible for MPDS or Assistantship, students must comply with the following requirements throughout their support period:
  - 5.1.1. Remain without any form of paid employment (please refer to "14. Termination of Support"). Services for the UM with non-monetary rewards or benefits (e.g. meals or accommodation) are not considered as paid employment.
  - 5.1.2. Remain without any other form of scholarships or assistantships (please refer to "14. Termination of Support").
  - 5.1.3. Study exclusively at UM as full-time students of their enrolled PhD degree programmes (except those with Joint Agreements approved by the UM).
  - 5.1.4. Maintain an active status throughout the support period.
  - 5.1.5. Fulfill duties assigned by the UM (please refer to "10. Duties").
  - 5.1.6. Submit progress reports on time (please refer to "13. Suspension of Support" and "14. Termination of Support").
- 5.2. Failure to comply with any of the above requirements will result in suspension or termination of the MPDS or the Assistantship, unless justifications are endorsed by the Deans/Directors of the academic units concerned, and approved by the Vice Rector (Academic Affairs) via the Graduate School.

#### 6. Renewal

- 6.1. The MPDS or the Assistantship is renewed on an annual basis. Awardees or recipients should confirm and accept their renewal with their respective academic units.
- 6.2. Renewal of the MPDS or the Assistantship is based on academic performance, duty performance, and evaluation by supervisor.

#### 7. Financial Support for MPDS Awardees

- 7.1. The support period for all eligible awardees begins in the designated month of initial registration (usually August) in the 1<sup>st</sup> semester of an academic year, except special cases approved by the UM.
- 7.2. Shortened support period due to late registration will not be compensated.
- 7.3. Monthly stipend
  - 7.3.1. The MPDS provides each eligible awardee with a monthly stipend of MOP20,000 for a support period up to four years (48 months).
  - 7.3.2. Eligible awardees who complete their initial registration on or before the 15<sup>th</sup> of that month will be provided with full-month support starting from the month of registration. If registration is completed only after the 15<sup>th</sup> of that month, no support will be provided for that month.
  - 7.3.3. Tuition fees will be offset by the monthly stipend before stipend disbursement (please refer to "9. Tuition Fees Offset").
- 7.4. Conference or research-related travel allowance
  - 7.4.1. The MPDS provides each eligible awardee with a conference or researchrelated travel allowance. Awardees should refer to the *Guidelines for Conference or Research-Related Travel Allowance of the UM Macao PhD Scholarship* for details.

#### 8. Financial Support for Assistantship Recipients

- 8.1. The support period for all eligible recipients begins in the designated month of initial registration (usually August) in the 1<sup>st</sup> semester of an academic year, except special cases approved by the UM.
- 8.2. Shortened support period due to late registration will not be compensated.
- 8.3. Monthly stipend
  - 8.3.1. The Assistantship provides each eligible recipient with a starting monthly stipend of MOP12,500 for a support period up to four years (48 months).

- 8.3.2. Recipients who submit both progress reports on time in an academic year, and are graded Scale 5 ("Excellent") in both progress reports in the same academic year by their supervisors, will be entitled to a MOP500 increase in monthly stipend starting from the next academic year (usually August). The upper limit of the monthly stipend amount is MOP14,000.
- 8.3.3. Recipients who postpone their registration to the 2<sup>nd</sup> semester and thus have only one progress report rating will not be entitled to the MOP500 increase in the next academic year.
- 8.3.4. Eligible recipients who complete their initial registration on or before the 15<sup>th</sup> of that month will be provided with full-month support starting from the month of registration. If registration is completed only after the 15<sup>th</sup> of that month, no support will be provided for that month.
- 8.3.5. Tuition fees will be offset by the monthly stipend before stipend disbursement (please refer to "9. Tuition Fees Offset").

#### 9. Tuition Fees Offset

- 9.1. The tuition fees offset mechanism begins on 1 February 2021. For all MPDS awardees and Assistantship recipients, tuition fees will be offset in monthly installments by the monthly stipend before stipend disbursement. In other words, they do not need to settle the tuition fees by themselves during their support period.
- 9.2. The following are the amounts of tuition fees offset per month for MPDS awardees and Assistantship recipients admitted or resuming studies in different academic years (examples in "Appendix"):
  - 9.2.1. For awardees admitted in Academic Year 2018/2019 or 2019/2020 and recipients admitted in Academic Year 2019/2020 and are following a creditbased tuition fee scheme, the amount of tuition fees offset will be the monthly average of three credits per semester. For the tuition fees due to enrolled credits beyond this amount, the awardees and recipients will need to pay by themselves.
  - 9.2.2. For awardees and recipients who begin or resume their studies from Academic Year 2020/2021 onwards and are following a programme-based tuition fee scheme, the amount of tuition fees offset will be the monthly average of the programme full tuition fees.
  - 9.2.3. In the first five months upon registration (except late registration), tuition fee will also be offset by the monthly average of the non-refundable deposit.
  - 9.2.4. Awardees and recipients who register late at UM will need to settle tuition fees not covered by the monthly stipend for the corresponding installment. A Debit Note will be issued to them by the Finance Office and they would need to settle the outstanding fees before registration.
- 9.3. After the end of the support period or when support is suspended or terminated, students will need to begin settling tuition fees by themselves.
- 9.4. In case of suspension or termination of support, any outstanding tuition fees not offset by the monthly stipend are payable by the students. The payable amount will be shown in the Debit Note provided by the Finance Office.

#### 10. Duties

- 10.1. MPDS awardees and Assistantship recipients are required to fulfil one or more of the following types of duties:
  - 10.1.1. Ancillary teaching
  - 10.1.2. Administrative service
  - 10.1.3. Research
- 10.2. Duties are assigned by academic units and/or supervisors, and should be between 5 and 10 hours per week.
- 10.3. Satisfactory duty performance is a prerequisite for the renewal of the MPDS or the Assistantship.
- 10.4. If awardees or recipients fail to fulfill their assigned duties on schedule without justifications, the MPDS or the Assistantship will be suspended or terminated.

#### 11. Responsibilities of Supervisors

- 11.1. Supervisors should schedule regular meetings with their students and provide them with guidance.
- 11.2. Supervisors should maintain a fair and professional manner in accordance with relevant regulations, rules, and guidelines of the UM.

#### 12. Deferment of Studies

- 12.1. MPDS awardees or Assistantship recipients who defer their studies should submit a separate application for the suspension of support if deemed necessary. Only medical or other exceptional cases with strong justifications will be accepted for suspension. Otherwise, the MPDS or the Assistantship will be terminated.
- 12.2. The suspension of support due to deferment of studies should be endorsed by supervisors and approved by the Deans/Directors of academic units concerned. The Graduate School should then be informed accordingly.
- 12.3. MPDS awardees or Assistantship recipients can only apply for suspension once and the suspension period should not exceed two semesters. Special cases are subject to the approval by the Vice Rector (Academic Affairs).
- 12.4. Monthly stipend for the starting month and the ending month of suspension is provided on a pro rata basis, while no financial support is provided during other months of suspension.
- 12.5. The starting month and the ending month of suspension are counted in whole months towards the support period, regardless of the amounts of monthly stipend disbursed. However, the period of suspension between the starting month and the ending month will not be counted towards the support period.

#### 13. Suspension of Support

- 13.1. The MPDS or the Assistantship will be suspended in any of the following cases:
  - 13.1.1. Deferment of studies (please refer to "12. Deferment of Studies").
  - 13.1.2. Failure to fulfill duties assigned by the UM (please refer to "10. Duties").
  - 13.1.3. Failure to submit progress reports on time (please refer to Item 3.8. of the Rules on the Progress Report of the Postgraduates of the University of Macau).
- 13.2. The starting month and the ending month of suspension are counted in whole months towards the support period, regardless of the amounts of monthly stipend disbursed. For suspension due to conditions stated in Item 13.1.2 and 13.1.3, the period of suspension between the starting month and the ending month will be counted towards the support period.

#### 14. Termination of Support

- 14.1. The MPDS or the Assistantship will be terminated in any of the following cases:
  - 14.1.1. Failure to maintain an active status, except conditions stated in Item 12.1.
    - 14.1.2. Completion of the PhD degree programme.
    - 14.1.3. Awardees or recipients undertaking any forms of paid employment.
    - 14.1.4. Awardees or recipients receiving any other form of scholarships and assistantships.
    - 14.1.5. Concurrent registration at other higher education institutions (except those with Joint Agreements approved by the UM).
    - 14.1.6. Two Scale 1 ("Unsatisfactory") or Scale 2 ("Marginally Satisfactory") ratings on progress reports given by supervisors during the support period. For one Scale 1 rating, supervisors may suggest support termination with justifications to the Dean/Director of the academic unit concerned for endorsement, and to the Dean of Graduate School for approval.
    - 14.1.7. Unsatisfactory duty performance (please refer to "10. Duties").
    - 14.1.8. Violation of regulations, rules, and guidelines of the UM.
    - 14.1.9. Misrepresentation, fraudulence, and non-disclosure of information in the applications of the MPDS or the Assistantships.
- 14.2. Terminated MPDS and Assistantship cannot be resumed.

- 14.3. Monthly stipend for the effective month of termination is provided on a pro rata basis.
- 14.4. Termination does not exempt students from the payment of any outstanding fees.
- 14.5. For cases from 14.1.3 to 14.1.5, the UM reserves the right to collect any financial support previously provided to the awardees or recipients.

#### 15. Special Cases

- 15.1. For MPDS awardees and Assistantship recipients under the "1+3 PhD Programme", tuition fees offset will apply after their tuition fee waiver period and duties will apply after the completion of their arranged master degree programmes.
- 15.2. For duly justified exceptions, special approval from the Vice Rector (Academic Affairs) should be sought.

#### 16. Administration

The MPDS and the Assistantship are administered by the Graduate School. For uncertain or ambiguous cases, discretion from the Graduate School should be sought.

#### 17. Applicability

This set of Guidelines is only applicable to MPDS awardees and UM PhD Assistantship recipients (UM-centralized funding).

#### 18. Remark

The Guidelines are subject to revisions by the UM. When revisions are made, MPDS awardees and Assistantship recipients will be informed accordingly.

#### Appendix Examples of Tuition Fees Offset

#### Example 1

Admission Year: Academic Year 2018/2019 or 2019/2020 Tuition Fee Scheme: Credit-based Residence: Mainland China

	MPDS Awardee	Assistantship Recipient
Details	Amount (MOP)	Amount (MOP)
Original monthly stipend	20,000	12,500
Tuition fees offset (MOP3,310 per credit x 3 credits ÷ 6 months)	-1,655	-1,655
Monthly stipend disbursed to awardee/recipient	18,345	10,845

#### Example 2

Admission Year: Academic Year 2020/2021 Tuition Fee Scheme: Programme-based Residence: Mainland China

	MPDS Awardee	Assistantship Recipient
Details	Amount (MOP)	Amount (MOP)
Original monthly stipend	20,000	12,500
Tuition fees offset (MOP111,760 per programme ÷ 48 months)	-2,328.33	-2,328.33
Monthly stipend disbursed to awardee/recipient	17,671.67	10,171.67

#### Example 3

Admission Year: Academic Year 2021/2022 Registration Date: 10 August 2021 Tuition Fee Scheme: Programme-based Residence: Mainland China

	MPDS Awardee	Assistantship Recipient
Details Period: August to December 2021 (5 months)	Amount (MOP)	Amount (MOP)
Original monthly stipend	20,000	12,500
Tuition fees offset (MOP111,760 per programme ÷ 48 months) – (MOP5,000 Non-refundable deposit ÷ 5 months)	-1,328.33	-1,328.33
Monthly stipend disbursed to awardee/recipient	18,671.67	11,171.67
Details Period: January 2022 onwards	Amount (MOP)	Amount (MOP)
Original monthly stipend	20,000	12,500
Tuition fees offset (MOP111,760 per programme ÷ 48 months)	-2,328.33	-2,328.33
Monthly stipend disbursed to awardee/recipient	17,671.67	10,171.67

#### Example 4

Admission Year: Academic Year 2021/2022 Registration Date: 10 August 2021 Tuition Fee Scheme: Programme-based Residence: Mainland China Termination Date\*: 18 May 2025

	MPDS Awardee	Assistantship Recipient
Details Period: May 2025 (the 46 <sup>th</sup> month of support)	Amount (MOP)	Amount (MOP)
Monthly stipend (MOP20,000 ÷ 30 days x 18 days) or (MOP12,500 ÷ 30 days x 18 days)	12,000	7,500
Tuition fees offset (MOP111,760 per programme ÷ 48 months)	-2,328.33	-2,328.33
Monthly stipend disbursed to awardee/recipient	9,671.67	5,171.67

\*Termination of the MPDS or the Assistantship due to circumstances mentioned in the current Guidelines. Monthly stipend for the effective month of termination is provided on a pro rata basis.

# Guidelines for Conference or Research-Related Travel Allowance of the UM Macao PhD Scholarship

(Approved by the Rector on 17 December 2020)

#### 1. General Guidelines

- 1.1. The UM Macao PhD Scholarship (MPDS) provides each eligible awardee with a conference or research-related travel allowance of MOP10,000 per calendar year (January to December) on a reimbursement basis during the support period.
- 1.2. Applications for the travel allowance are accepted starting from the second semester upon registration.
- 1.3. The travel allowance covers a maximum of two trips per calendar year.
- 1.4. The unused travel allowance in a calendar year cannot be carried forward to the next calendar year.
- 1.5. Trips taken by eligible awardees must be finished before the end of a calendar year and their support periods.

#### 2. Applications

- 2.1. Each application for travel allowance consists of two steps:
  - 2.1.1. Trip application: to obtain approval for the trip and budget from Deans/Directors of academic units concerned, which should be completed <u>before</u> the trip and expenses.
  - 2.1.2. Reimbursement application: to obtain reimbursement for the expenses paid for the trip, which should be completed <u>after</u> the trip.

#### 3. Trip Application

- 3.1. <u>At least 30 days before conference registration or the start of research trip</u>, applicants should submit trip applications to their respective academic units (faculty/institution). Late submissions will not be processed.
- 3.2. No expenses should be paid before approval.
- 3.3. Applicants must be invited or accepted to present at conferences (conference trips) or to conduct research at destination universities or institutions (research trips).
- 3.4. Expenses covered by the travel allowance:
  - 3.4.1. Conference registration fee (if applicable)
  - 3.4.2. Accommodation
  - 3.4.3. Intercity transportation (limited to standard economy class flights, trains, buses, or ferries. Other types of economy class, e.g. premium economy, are not covered)
  - 3.4.4. Local transportation at destination
- 3.5. Trip period:
  - 3.5.1. Trip period should not exceed the duration of conference or research work.
  - 3.5.2. For destinations outside the Hong Kong Special Administrative Region and Guangdong Province, the trip period can be extended for two days: one for the outgoing trip and one for the return trip.
  - 3.5.3. For destinations outside Asia, the trip period can be extended for another additional day, either for the outgoing trip or the return trip.
  - 3.5.4. Special cases should be backed up with justifications.
  - 3.5.5. Trip period includes weekends and public holidays in Macau.
- 3.6. Documents required for conference trip application:
  - 3.6.1. Conference and registration information
  - 3.6.2. Invitation or acceptance letter from the conference organizer
  - 3.6.3. Abstract
  - 3.6.4. Proposed budget
  - 3.6.5. Written consultation (quotations) for accommodation and transportation

- 3.7. Documents required for research trip application:
  - 3.7.1. Invitation or acceptance letter from the destination university or institution
  - 3.7.2. Brief description of the trip, including:
    - 3.7.2.1. Research topic
    - 3.7.2.2. Purpose of the trip
    - 3.7.2.3. Expected outcome(s)
    - 3.7.2.4. Daily schedule
    - 3.7.2.5. Justification(s) for conducting the research work outside Macau
  - 3.7.3. Proposed budget
  - 3.7.4. Written consultation (quotations) for accommodation and transportation

#### 4. Reimbursement Application

- 4.1. <u>Within one week after the end of the trip</u>, applicants should submit reimbursement applications to their respective academic units (faculty/institution). Late submissions will not be processed.
- 4.2. <u>For trips in December</u>, reimbursement applications must be submitted within three days after the end of the trips or by the last working day of the month, whichever comes earlier.
- 4.3. Only one application per trip is accepted.
- 4.4. Documents required for reimbursement application:
  - 4.4.1. All original receipts of accommodation, transportation, and conference registration (if applicable)
  - 4.4.2. Trip report (with signature by supervisor)

#### 5. Remarks

- 5.1. Budget should reflect actual need for the trip.
- 5.2. Any special cases not covered in the current Guidelines are subject to approval from the Vice Rector (Academic Affairs).

#### Funding Guidelines for Research Assistantships

(Approved by the Rector on 17 December 2020)

#### 1. Purpose

The Funding Guidelines for Research Assistantships apply to any PhD or master's students who receive financial support from their supervisors for performing duties related to research projects (except consultancy projects). The sources of funding include all internal and external sources recognized by the Research Services and Knowledge Transfer Office (RSKTO). For the purpose of this set of Guidelines, the financial support received by a PhD student or a master's student is known as "PhD Assistantship" or "Master's Assistantship".

#### 2. Amount of PhD Assistantship and Master's Assistantship

2.1

PhD Students	Maximum Support		
Before approval of PhD candidacy	MOP12,500/month		
After approval of PhD candidacy	MOP14,000/month		
	Maximum Support		
Master's Students	MOP8,000/month		

- 2.2 The amount of stipend to be received by a student will be subject to the available research funding of his/her supervisor.
- 2.3 The total stipend that a student can receive in a calendar month must not exceed the maximum support amount, regardless of the source(s) of financial support involved in the same period. Otherwise, the exceeding amount of stipend shall not be remunerated.
- 2.4 Stipend for support period less than one month is provided on a pro rata basis.
- 2.5 Students will be eligible to receive the new ceiling of stipend (i.e., maximum MOP14,000 per month) starting from the subsequent semester upon approval of their PhD candidacy.
- 2.6 Benefits or rewards not in monetary form (e.g. meals, accommodations, etc.) granted to students in return for services that they provide on campus shall not be considered as a component of the PhD or master's assistantship as stipulated in these Guidelines.
- 2.7 The RSKTO and the Finance Office (FO) should be informed on any change in stipend arrangements at least one month before the change takes effect.

#### 3. Duties of Assistantship Recipients

- 3.1 All research assistantship recipients are required to engage in duties related to research as assigned by his/her supervisor, ancillary teaching and/or student services.
- 3.2 In addition to research, every PhD assistantship recipient is required to engage in a maximum of 10 hours of ancillary teaching per week.
- 3.3 Considering that an assistantship recipient may have more than one appointment at UM, the number of hours stated above may be fully/partially waived, subject to the approval of the respective Dean/Director.

3.4 Satisfactory performance of such duties is one of the preconditions for the renewal of the research assistantships.

#### 4. Change of Supervisor and Suspension/Termination of Assistantship

- 4.1 If change of supervisor occurs, the availability and the amount of Assistantship should be determined by the new supervisor. This arrangement is not applicable to cases where the change of supervisor is due to the unsatisfactory performance of the student, which includes but not limited to performance in study, and/or his or her duties as assistantship recipient stipulated in article 3 of the Guidelines, is found to be unsatisfactory, or when the student has violated any other UM regulations, rules and guidelines.
- 4.2 Research assistantships may be suspended or terminated by the supervisor when the performance of the student, which includes but not limited to performance in study, and/or his or her duties as assistantship recipient stipulated in article 3 of the Guidelines, is found to be unsatisfactory, or when the student has violated any other UM regulations, rules and guidelines. However, such decision must be well justified according to the relevant regulations, rules and guidelines of UM. Normally two weeks' notice in writing for suspension/termination should be given.
- 4.3 A research assistantship recipient may relinquish the offer with one month's advance notice in writing.
- 4.4 The suspension/termination of assistantship, or relinquishment of the assistantship by the recipient, does not release the recipient concerned from his or her duty to settle any outstanding fees owed to the UM.
- 4.5 The academic unit concerned should inform RSKTO and FO about any change in the recipient's status as referred to in this provision immediately.

#### 5. Duty and Role of Supervisors

Supervisors should meet their PhD or master's students regularly, monitor their study progress, and treat them in a fair and equal way according to the relevant regulations, rules and guidelines of UM.

#### 6. Special Cases

Any special cases not covered in the current Guidelines are subject to the endorsement from the Director of RSKTO and the approval from the Vice Rector (Research).

#### 7. Administration

Research Assistantships are administered by RSKTO. For uncertain or ambiguous cases, discretion from RSKTO should be sought.

#### 8. Applicability

The current Guidelines are applicable to all Research Assistantship recipients (except Research Assistantships for Consultancy Projects).

#### 9. Remark

The Guidelines are subject to revisions by the UM. When revisions are made, assistantship recipients will be informed accordingly.

#### Funding Guidelines for Teaching Assistantships

(Approved by the Rector on 17 December 2020)

#### 1. Purpose

The *Funding Guidelines for Teaching Assistantships* apply to all PhD and master's students who receive financial support from academic units for their services as teaching assistants (TAs) or research assistants for consultancy projects (RAs for Consultancy Projects). For the purpose of these Guidelines, the financial support received by a TA is known as "Teaching Assistantship", and the financial support received by a RA for Consultancy Projects is known as "Research Assistantship for Consultancy Projects".

#### 2. Eligibility

Students with good academic performance, research potential and ability are eligible to apply.

#### 3. Amount and Duration

3.1

PhD Students	Maximum Support
Before approval of PhD candidacy	MOP12,500/month
After approval of PhD candidacy	MOP14,000/month

	Maximum Support
Master's Students	MOP8,000/month

- 3.2 The duration and amounts of Teaching Assistantships and Research Assistantships for Consultancy Projects are determined by the academic unit concerned.
- 3.3 Research Assistantship for Consultancy Projects can be provided in monthly or hourly format.
- 3.4 The total stipend that a student can receive in a calendar month must not exceed the maximum support amount, regardless of the source(s) of financial support involved in the same period. Otherwise, the exceeding amount of stipend shall not be remunerated.
- 3.5 Monthly stipend for support period less than one month is provided on a pro rata basis.
- 3.6 Students will be eligible to receive the new ceiling of stipend (i.e., maximum MOP14,000 per month) starting from the subsequent semester upon approval of their PhD candidacy.
- 3.7 Benefits or rewards not in monetary form (*e.g.*, meals, accommodations, etc.) granted to students in return for services that they provide on campus shall not be considered as a component of the Assistantships as stipulated in these Guidelines.
- 3.8 The Finance Office (FO) should be informed on any change in stipend arrangements.

#### 4. Duties of Assistantship Recipients

4.1 Every TA or RA for Consultancy Projects is required to engage in duties in addition to research, including ancillary teaching and/or administrative services as assigned by the academic unit concerned for 5 to 10 hours per week.

4.2 Satisfactory performance of such duties is one of the preconditions for the renewal of the Assistantships.

#### 5. Suspension/Termination of Assistantships

- 5.1 Suspension of Teaching Assistantship or Research Assistantship for Consultancy Projects may be allowed due to medical reasons, family emergency, or other reasons with strong justification. If a recipient is also deferring his/her studies, a separate application for the suspension of assistantship should be submitted. All applications must be approved by the Dean/Director of academic unit concerned.
- 5.2 Teaching Assistantship or Research Assistantship for Consultancy Projects may be terminated by the academic unit concerned when the performance of the student in study and/or the duties as assistantship recipient stipulated in article 4 of the Guidelines is considered unsatisfactory, or when the student has seriously violated UM regulations, rules and guidelines. However, such decision must be well justified according to the relevant regulations, rules and guidelines of UM, and approved by the Dean/Director of academic unit concerned. Normally two weeks' notice in writing for termination should be given.
- 5.3 The suspension/termination of Assistantship does not release the recipient concerned from his/her duty to settle any outstanding fees owed to the UM.
- 5.4 The academic unit concerned should inform FO of any change in the recipient's status as referred to in this provision as soon as possible.

#### 6. Special Cases

Any special cases not covered in the current Guidelines are subject to endorsement from the Deans/Directors of academic units concerned. For cases related to Teaching Assistantships, final approval from the Vice Rector (Academic Affairs) should be sought. For cases related to Research Assistantships for Consultancy Projects, final approval from the Vice Rector (Research) should be sought.

#### 7. Administration

Teaching Assistantships are administered by academic units and supervised by the Vice Rector (Academic Affairs) Office. Research Assistantships for Consultancy Projects are administered by academic units and supervised by the Vice Rector (Research) Office.

#### 8. Applicability

The current Guidelines are applicable to all recipients of Teaching Assistantships and Research Assistantships for Consultancy Projects.

#### 9. Remark

The Guidelines are subject to revisions by the UM. When revisions are made, recipients of Teaching Assistantships and Research Assistantships for Consultancy Projects will be informed accordingly.

## APPENDICES Principals' Recommended Admission Rules

(Approval by the Rector on 31 December 2021)

#### 1. Introduction

As the primary comprehensive university in the region, the University of Macau (UM) is committed to fostering local high quality and well-round talents as our mission. To this end, the **"Principals' Recommended Admission Scheme"** is established to allow local secondary school principals to recommend outstanding students for direct admission. Under the scope of general Principals' Recommended Scheme, two sub-schemes namely the **"Chinese and Portuguese Bilingual Talent Nurturing Scheme"** and **"Outstanding Student-Athletes Admission Scheme"** are also devised so as to cultivate outstanding local Chinese and Portuguese talents for Macao S.A.R. as well as to encourage local student-athletes to pursue higher academic qualifications and to continue to make breakthrough in their sports achievement.

Scheme	Application Qualification	
"Principals' Recommended Admission Scheme"	Excellent academic performance and good conduct; Currently studying in Form 6 or equivalent of Macao secondary school; Ranked among top 10% in terms of academic performance amongst all Form 5 (or equivalent) students (among total students from arts, commerce, science and other streams). Applicants who may not meet criteria of item 3 but possess any of the following outstanding academic performance, talents or achievements may also be recommended:	
	✓ Academic awards/ qualifications achieved (e.g. public academic competitions or public exams);	
	<ul> <li>Non-academic awards/ qualifications achieved (e.g. talents of the musicianship or sports area).</li> </ul>	
"Chinese and Portuguese Bilingual Talent Nurturing Scheme"	<ol> <li>Excellent academic performance and good conduct;</li> <li>Currently studying in Form 6 or equivalent of Macao secondary school;</li> <li>Ranked among the top 30% in terms of academic performance amongst all Form 5 (or equivalent) students (including all students in arts, commerce, science and other streams);</li> <li>Attained the proficiency of CIPLE Level A2 (Certificado Inicial de Português Língua Estrangeira) or equivalent (or such proficiency proof can be declared by</li> </ol>	
	<ul> <li>the school);</li> <li>Applicants must apply for admission to Bachelor of Arts in Portuguese Studies of Faculty of Arts and Humanities.</li> </ul>	
"Outstanding Student-Athletes Admission Scheme"	<ol> <li>Excellent sports performance and good conduct;</li> <li>Currently studying in Form 6 or equivalent of Macao secondary school;</li> <li>Represented Macao S.A.R. to participate in international/regional sports competition within the last two years;</li> <li>Applicants, who may not fulfil the condition of above point 3 but have represented Macao S.A.R. with good sports performance, can also apply by submitting the recommendation letter from sports association together with the recommendation by the school principal.</li> </ol>	

#### 2. Recommended Qualification

#### 3. Application Procedures and Documents

3.1 Recommended applicants must submit an on-line application for Principals' Recommended Admission together with all required documents within the application period. (Please refer to the "User Manual of Online Application System for Principals' Recommended Admission 2022/2023").

# 3.2 Recommended applicants need to scan and upload the following documents on to the system:

Documents(in A4 size except photo)	Remarks
Valid Macao I.D. card	Both sides on one paper
One passport size color photo	<ul><li> 3.5cm X 4.5cm</li><li> white background is preferred</li></ul>
<ul> <li>Official transcript of academic records for the recent two years of secondary education</li> </ul>	Academic records for Form 4 to Form 5
<ul> <li>Applicants being recommended with qualification of specific talents or outstanding achievements:</li> <li>Related certificates or proof for supplementary information of special talents, awards or community service</li> </ul>	<ul> <li>Qualification or award attained only during secondary school study is accepted.</li> <li>Photo of medal/trophy cannot serve as proof of award, which should be provided in the form of a testimonial issued by related authority/association or secondary school.</li> </ul>
<ul> <li>Applicable to applicants for "Chinese and Portuguese Bilingual Talent Nurturing Scheme" only:</li> <li>Related certificates or proof for proficiency of CIPLE Level A2 (Certificado Inicial de Português Língua Estrangeira) or equivalent</li> </ul>	If such proof is not available, a declaration to support applicants' equivalent proficiency issued by the school is accepted.
<ul> <li>Applicable to applications for "Outstanding Student-Athletes Admission Scheme" only:</li> <li>Related certificates or proof of representing Macao S.A.R. to participate in international/regional sports competition within the last two years, or a written recommendation from sports association.</li> </ul>	

3.3 Interview will be conducted for qualified applicants.

#### 4. Successful Applicants

- 4.1 Admission and Scholarship
  - 4.1.1 For admission selection of "Principals' Recommended Admission Scheme" and "Chinese and Portuguese Bilingual Talent Nurturing Scheme":
    - 4.1.1.1 The admission assessment is made by a holistic approach including factors of students' school performance, ranking, academic and non-academic talents, community service and interview, etc.,
    - 4.1.1.2 Successful students admitted to our bachelor programme 2022/2023 intake may be granted one of the following scholarships:

• Admitted with "University of Macau Grand Lotus Scholarship";

• Admitted with "University of Macau Golden Lotus Scholarship";

• Admitted with "University of Macau Silver Lotus

Scholarship";

• Admitted with "University of Macau First Year Scholarship".

4.1.1.3 Scholarship Content				
Scholarship Type	Content	Remarks		
University of Macau Grand Lotus Scholarship	<ul> <li>Full waiver of tuition fee for 1<sup>st</sup> academic year;</li> <li>Full waiver of Residential College fee for 1<sup>st</sup> academic year for around 10 months of 2 semesters;</li> </ul>			
University of Macau Grand Lotus Scholarship (continue)	<ul> <li>A scholarship of MOP 30,000 for 1<sup>st</sup> academic year;</li> <li>Eligibility of conditional admission to Honours College Certificate Programme upon passing the screening interview</li> </ul>	<ul> <li>The Lotus Scholarships are renewable. Please refer to item 8 of Continuation Rules for details on the continuation scheme.</li> <li>Students must stay in Residential College for the 1<sup>st</sup> academic year as to enjoy the full waiver of Residential College fee for "University of Macau Grand Lotus Scholarship" recipients. If</li> </ul>		
University of Macau Golden Lotus Scholarship	<ul> <li>Full waiver of tuition fee for 1<sup>st</sup> academic year;</li> <li>Eligibility of conditional admission to Honours College Certificate Programme upon passing the screening interview</li> </ul>	students are waived to stay in Residential College during the study period, the fee of the full waiver will not be granted.		
University of Macau Silver Lotus Scholarship	<ul> <li>Half waiver of tuition fee for 1<sup>st</sup> academic year.</li> </ul>			
University of Macau First Year Scholarship	One-off MOP5,000 scholarship.	<ul> <li>The amount will be used to offset part of the tuition fee payable for the 1<sup>st</sup> semester of 1<sup>st</sup> academic year.</li> </ul>		

4.1.1.3 Scholarship Content

4.1.2 For students to be admitted through "Outstanding Student-Athletes

Admission Scheme", admission assessment will base on applicants' sports achievements, faculty interview and sports skill test performance (if applicable). For more information about the scholarship, please visit the website at https://sports.osa.um.edu.mo/scholarshipscheme/.

- 4.1.3 Eligible scholarship recipients must hold a valid Macao I.D. card.
- 4.1.4 If a successful applicant defers study in the first academic year, the scholarship qualification will be terminated (inclusive of tuition fee waiver, Residential College fee waiver and related eligibility).
- 4.2 Successful applicants are not permitted to change their programmes of study once they have confirmed acceptance to the University. After a successful applicant has accepted the admission (returning the "Statement of Acceptance"), he/she is not permitted to apply for admission to the Bachelor's degree programmes of the University by other channels. If he/she is found to be admitted through other channels, the University reserves the rights to cancel his/her admission qualifications.
- 4.3 All students admitted through the Principals' Recommended Admission Scheme will follow the Admission Rules Governing Bachelor's Degree Programmes. Please visit the website at https://reg.um.edu.mo/admissions/ for details.
- 4.4 Obligation
  - 4.4.1 Upon admission, scholarship recipients of "Principals' Recommended Admission Scheme" and "Chinese and Portuguese Bilingual Talent Nurturing Scheme" are obliged to participate and assist in any university activities which aim to cultivate students' sense of community service and their practical competence during the undergraduate study.
  - 4.4.2 Upon admission, scholarship recipients of "Outstanding Student-Athletes Admission Scheme" are obliged to participate and assist in any university sports activities and represent UM to participate in any sports competitions during the undergraduate study.

Date	Event
25 September 2021	Principals' Recommended Admission Talk
20 September – 8 October 2021	Application period
8 – 14 November 2021	Release of interview eligibility (interview permit will be released via online application system)
13 – 14 November 2021	Interview
Early December 2021	<ul> <li>Announcement of interview result</li> <li>Confirmation of admission by offered applicants</li> </ul>
Late January 2022	Submission of "Statement of Acceptance"
Late July 2022	Submission of registration documents (students are advised to proceed the medical examination from mid-May)
Mid-August 2022	New students move in Residential Colleges and Orientation
18 August 2022	Class commencement 2022/2023 (please visit to website at <u>https://reg.um.edu.mo/university-almanac/</u> for the University Almanac 2022/2023)

#### 5. Important Dates to Note

#### 6. Admission Policy for Students with Disability

To provide equal admission opportunities, necessary study environment and facilities for students with disability, the University has devised the "Admission Policy for Students with Disability". Please visit the website at <a href="https://reg.um.edu.mo/admissions/macao-students/admission-policy/">https://reg.um.edu.mo/admissions/macao-students/admission-policy/</a> for details.

#### 7. Disqualification of Application, Admission or Study

- 7.1 The University reserves the rights to reject any applications from students beyond the top 10% in terms of academic performance in their Form 5/Grade 11/Senior Middle 2 study.
- 7.2 Applicants must guarantee that the information given in the application form is TRUE. The University of Macau reserves the rights to terminate an application, admission or study at any time if :
  - any information given in his/her application form is found later to be untrue and/or incorrect;
  - an applicant offered with admission is found to have violated any of the regulations of the University of Macau or misconduct behavior.

Should such cases occur, any fees paid will not be refunded and all documents submitted will not be returned.

7.3 Student should not enroll/register in any other universities upon registration at the University of Macau.

#### 8. Continuation Rules of University of Macau Lotus Scholarship 2022/2023

- 8.1 For students admitted through "Principals' Recommended Admission Scheme" and "Chinese and Portuguese Bilingual Talent Nurturing Scheme"
  - 8.1.1 Qualifications
    - 8.1.1.1 All students granted with the University of Macau Lotus Scholarship, subject to their yearly academic performance, can continue enjoying half or full tuition fee waiver during 2<sup>nd</sup> to 4<sup>th</sup> academic year of study (during 2<sup>nd</sup> to 5<sup>th</sup> academic year of study for Bachelor of Law five-year programmes);
    - 8.1.1.2 Evaluation is based on each academic year's performance (yearly GPA);
    - 8.1.1.3 The students must complete at least 24 credits or the number of credits required by the designated study plan of the academic year at the University.
  - 8.1.2 Requirement of Academic Performance

Scholarship Type	For students of the Faculty Humanities, Faculty of B Administration, Faculty of I Faculty of Health Sciences, Social Sciences and Faculty o Technology	For students of the Faculty of Law		
	Grade Point Average*	% of Tuition Exempted	20-Point System	% of Tuition Exempted
University of Macau Grand Lotus Scholarship/ University of Macau Golden Lotus Scholarship	GPA: 3.30-4.00	100%	14	100%
University of Macau Silver Lotus Scholarship	GPA: 3.30-4.00 50 <sup>4</sup>		14	50%

\* The highest letter grade is A (GPA=4.00)

- 8.1.3 Termination of Scholarship The University reserves the rights to terminate the scholarship (inclusive of tuition fee waiver, Residential College fee waiver and related eligibility) if a student:
  - 8.1.3.1 cannot achieve the academic year's performance mentioned above;
  - 8.1.3.2 cannot complete his/her study within the normal period of study;
  - 8.1.3.3 cannot achieve the Residential College requirements.
- 8.2 For students admitted through "Outstanding Student-Athletes Admission Scheme", please visit Office of Sports Affairs website at https://osa.um.edu.mo/ for details of Continuation Rules of University of Macau Lotus Scholarship.

#### APPENDICES

# Rules on University of Macau Lotus Scholarship for Admission Examination

(Approval by the Rector on 14 December 2020)

To recognize candidates for their outstanding performance in the Admission Examination, the "University of Macau Golden Lotus Scholarship for Admission Examination" is awarded to the most competent students.

#### 1. Target students

- 1.1 All eligible candidates must hold a valid Macao I.D. card; and
- 1.2 Must have sat for the Admission Examination and be registered students of offered programme of the current year. Candidates who have been exempted from taking particular Admission Examination subject(s) will not be eligible for selection of the scholarship for Admission Examination.

Scholarship selection is based on a candidate's Admission Examination result, but not including any bonus marks added through the Preferential Admission Scheme.

#### 2. Scholarship Content

- 2.1 "University of Macau Golden Lotus Scholarship for Admission Examination" includes:
  - 2.1.1 Full waiver of tuition fee for 1<sup>st</sup> academic year;
  - 2.1.2 Eligibility of conditional admission to Honours College Certificate Programme upon passing the screening interview;
  - 2.1.3 Tuition fee for Honours College Certificate Programme (if applicable);
  - 2.1.4 Tuition fee for the first registered minor programme (if applicable).
- 2.2 For the continuation scheme of scholarship, please refer to point 3 for "Continuation Rules for Scholarship". If a successful applicant defers study in the first academic year, the scholarship qualification will be terminated.
- 2.3 Scholarship recipients are obliged to participate and assist in any university activities which aim to cultivate students' sense of community service and their practical competence during the undergraduate study.

#### 3. Continuation Rules for Scholarship

- 3.1 All students granted with the "University of Macau Golden Lotus Scholarship for Admission Examination", subject to their yearly academic performance, can continue enjoying full tuition fee waiver during 2<sup>nd</sup> to 4<sup>th</sup> academic year of study (during 2<sup>nd</sup> to 5<sup>th</sup> academic year of study for Bachelor of Law five-year programmes);
- 3.2 Evaluation is based on each academic year's performance (the yearly GPA), not cumulative performance (such as cumulative GPA);
- 3.3 Students must complete at least 24 credits or the number of credits required by the designated study plan of the academic year at the University.

#### 3.4 Requirement of academic performance:

Scholarship Type	For students of the Faculty of Arts and Humanities, Faculty of Business Administration, Faculty of Education, Faculty of Health Sciences, Faculty of Social Sciences and Faculty of Science and Technology		For students of the Faculty of Law	
	Grade Point Average (GPA)* % of Tuition Exempted		20-Point System	% of Tuition Exempted
University of Macau Golden Lotus Scholarship for Admission Examination	3.30-4.00	100%	14	100%

\* The highest letter grade is A (GPA=4.00).

#### 4. Termination of Scholarship

- 4.1 If a candidate accepts a scholarship through "Principals' Recommended Admission" of the current year, he/she is not permitted to attend the Admission Examination of our University. If he/she is found to have applied for or to have attended the Admission Examination and is granted a scholarship for Admission Examination, the University reserves the right to remove his/her qualification for both scholarships (inclusive of tuition fee waiver and related eligibility).
- 4.2 The University reserves the right to disqualify the candidate's scholarship (inclusive of tuition fee waivers stipulated in item 2.1) if the candidate:
  - 4.2.1 cannot achieve the academic year's performance mentioned above;
  - 4.2.2 cannot complete his/her study within the normal period of study;
  - 4.2.3 cannot achieve Residential College requirements.
- 4.3 Please refer to point 2 for details of scholarship.

#### APPENDICES

# Scholarship Continuation Policy for UM's Outgoing Exchange Students

(Approved by the Financial Management Committee on 31 October 2018)

[For Undergraduate Programmes Only]

This scholarship continuation policy applies to all UM's outgoing exchange students who are awarded scholarships by UM when admitted. UM's outgoing exchange students are advised to read this policy before they go abroad so as to know what requirements they should fulfil in order to continue their scholarships for the next academic year.

To be eligible for scholarship continuation, an outgoing exchange student should:

- 1. fulfil the exchange study plan which they have agreed with the academic unit concerned before they go abroad; and
- achieve an overall result of Grade B, 3.0 on the 4-point GPA scale, or 13 on the 20-point scale at the exchange university. If the exchange university does not adopt any of these grading systems, the academic unit concerned could decide whether the student achieves such requirement based on the grading system adopted by the exchange university.

If the above 3 requirements are fulfilled, scholarship continuation would be granted and tuition fee would be exempted based on the student's academic result achieved at UM accordingly.

- For students joining the one-year exchange programme, tuition fee exemption would be based on their yearly GPA achieved at UM in the previous academic year.
- For students joining the one-semester exchange programme, tuition fee exemption would be based on their GPA achieved in the semester at UM in the exchange academic year.

For details of the related scholarship schemes, please visit the Registry's webpage at <a href="https://reg.um.edu.mo/current-students/enrolment-and-examinations/scholarships/">https://reg.um.edu.mo/current-students/enrolment-and-examinations/scholarships/</a>.

# Statistics of Registered Students for Academic Year 2021/2022

## APPENDICES Statistics of Registered Students for Academic Year 2021/2022

(by headcount)

		Non-incoming exchange students	Incoming exchange students	Total
	FAH	109	1	110
	FBA	142	0	142
	FED	74	0	74
	FHS	258	5	263
PhD	FLL	85	0	85
	FST	404	0	404
	FSS	126	0	126
	IAPME	132	3	135
	ICMS	192	5	197
Sub-total		1522	14	1536
	FAH	410	10	420
	FBA	523	0	523
	FED	322	1	323
	FLL	348	11	359
Master's Degree	FST	491	0	491
	FSS	357	0	357
	ICMS	127	0	127
	ICI	264	0	264
	IME	28	0	28
Sub-total		2870	22	2892
Postgraduate	FED	50	0	50
Certificate/Diploma	FLL	20	0	20
Sub-total		70	0	70
	FAH	1070	44	1114
	FBA	2347	14	2361
	FED	761	7	768
Bachelor's Degree	FHS	192	0	192
209100	FLL	636	12	648
	FST	1014	13	1027
	FSS	1589	11	1600
Sub-total		7609	101	7710
Total		12071	137	12208

# Staff List

(data as at July 2022)

### APPENDICES / STAFF LIST Fundamental Academic Units

### **Faculty of Arts and Humanities**

#### DEAN 院長

Jie XU 徐杰 BA, Henan University; MA, Central China Normal University; MA, University of Hawaii; PhD, University of Maryland at College Park

#### ASSOCIATE DEAN 副院長

Defeng LI 李德鳳 BA, MA, Nanjing Normal University; PhD, University of Alberta, Canada

Qingjie WANG 王慶節 BA, Nanjing University; MA, Peking University; PhD, Tulane University

#### ASSISTANT DEAN 助理院長

Io Kei KUONG, Joaquim 鄺耀基 BA (Hons), University of Macau; MA, Guangdong University of Foreign Studies; PhD, Georgetown University

Lai Cheng LEI, Victoria 李麗青 LLB, Jinan University; MPhil, PhD, University of Glasgow

#### HEAD OF DEPARTMENT 系主任

Department of Chinese Language and Literature 中國語言文學系

Yulin YUAN 袁毓林 MA, Hangzhou University; PhD, Peking University

#### Department of English 英文系

Andrew Jackson MOODY BA, Grand Canyon University; MA, University of Louisville; PhD, University of Kansas

### Department of History 歷史系

Bin YANG 楊斌 PhD, Northeastern University

Department of Philosophy and Religious Studies 哲學與宗教學系 Victoria S. HARRISON 何瑞芬 BA hons, PhD, Heythrop College, University of London

Department of Portuguese 葡文系 João Manuel PIRES DA SILVA E ALMEIDA VELOSO BA, MA, PhD, University of Porto

#### Department of Arts and Design 藝術與設計系

Lampo LEONG 梁藍波 B.F.A. Guangzhou Academy of Fine Arts; M.F.A. California College of the Arts; PhD, Central Academy of Fine Arts

HEAD OF CENTRE 中心主任 Centre for Japanese Studies 日本研究中心 Wenjiang YANG 楊文江 BA, Tianjin University; MA, Nankai University, PhD, Peking University

English Language Centre 英語中心 Hoi Ying CHEN 陳海瑛 BA, MPhil, University of Hong Kong; MA, PhD University of Michigan

Centre for Chinese History and Culture 中國歷史文化中心 Shoutong ZHU 朱壽桐 BA, Suzhou University; MA, PhD, Nanjing University

#### CHAIR PROFESSOR 講座教授

Haijian MAO 茅海建 MA, East China Normal University, Shanghai, China

Billy Kee-Long SO 蘇基朗 BA, MPhil, The Chinese University of Hong Kong; PhD, Australian National University

Yifeng SUN 孫藝風 BA, University of Nanjing; MA, University of Cambridge; PhD, University of Leiden

Di WANG 王笛 BA, Sichuan University, Johns Hopkins University; PhD, Johns Hopkins University; PhD, Johns Hopkins University

Yulin YUAN 袁毓林 MA, Hangzhou University; PhD, Peking University

#### DISTINGUISHED PROFESSOR 特聘教授

Qingjie WANG 王慶節 BA, Nanjing University; MA, Peking University; PhD, Tulane University

Jie XU 徐杰 BA, Henan University; MA, Central China Normal University; MA, University of Hawaii; PhD, University of Maryland at College Park

Shoutong ZHU 朱壽桐 BA, Suzhou University; MA, PhD, Nanjing University

#### EMERITUS PROFESSOR 榮休教授

Maria Antónia ESPADINHA PhD in Romance Languages and Cultures University of Salzburg, Austria Christopher KELEN MA, University of Sydney; PhD, University of Western Sydney

Ping LI 李慿 MA, Shanxi University; PhD, Peking University

Martin Mathew MONTGOMERY BA, MA, University of Birmingham; PhD, University of Strathclyde

Antonio Vasconcelos de SALDANHA 薩安東 BLaw, MA, PhD, University of Lisbon

Jianguo SHI 侍建國 BA, Nanjing Normal University, MA, Nanjing University, PhD, The Ohio State University

Yee Tui SZE 施議對 MA, Doctor of Arts, Chinese Academy of Social Sciences

Kaijian TANG 湯開建 MA, Lanzhou University

Keng Pan TANG 鄧景濱 BA, Sun Yat-sen University; MA, South China Normal University; PhD, Jinan University

Kwok Kwong TANG 鄧國光 BA, Chinese University of Hong Kong; MA, New Asia Institute of Advanced Chinese Studies; PhD, University of Hong Kong

George Chuxiong WEI 魏楚雄 MA, PhD, Washington University

Yi YANG 楊義 BA, Renmin University of China; MA, Graduate College of Chinese Academy of Social Sciences; PhD, Wuhan University

Meifang ZHANG 張美芳 BA, Sun Yat-sen University; PhD, Hong Kong Baptist University

Dehua ZHENG 鄭德華 BA, MA, Sun Yat-sen University; PhD, University of Hong Kong

#### PROFESSOR 教授

Gang GONG 龔剛 BA, Hangzhou University; MA, Doctor of Arts, Peking University

Victoria S. HARRISON 何瑞芬 BA hons, PhD, Heythrop College, University of London

William HUGHES BA, MA, PhD, University of East Anglia

Defeng LI 李德鳳 BA, MA, Nanjing Normal University; PhD, University of Alberta, Canada Hans-Georg MOELLER 梅勒 MA, PhD, Universität Bonn

Andrew Jackson MOODY BA, Grand Canyon University; MA, University of Louisville; PhD, University of Kansas

Nicholas Michael PARKER-GROOM BA, MA, PhD, University of Oxford

João Manuel PIRES DA SILVA E ALMEIDA VELOSO BA, MA, PhD, University of Porto

Chon Chit TANG 鄧駿捷 BA, MA, University of Macau; MA, Sun Yat-sen University; PhD, Shangdong University

Bin YANG 楊斌 PhD, Northeastern University

Jing Ming YAO 姚京明 BA, Beijing Foreign Studies University; MA, University of Macau; Doctor of Arts, Fudan University

Ellen Ying ZHANG 張穎 BA, Beijing Normal University; MA, Renmin University; PhD, Rice University

#### ASSOCIATE PROFESSOR 副教授

Gabriel ANTUNES DE ARAUJO Phd in Linguistics: Vrije Universiteit Amsterdam, Netherlands

Mario CAMS 康言 BA, MA, PhD, University of Leuven

Hok-Shing CHAN, Brian 陳學成 BA, Hong Kong Polytechnic University; MA, Chinese University of Hong Kong; PhD, University of London

Hoi Ying CHEN 陳海瑛 BA, MPhil, University of Hong Kong; MA, PhD University of Michigan

Zhong CHEN 陳忠 BA, Liaocheng Normal University; MA, Shandong Normal University; PhD, Fudan University

Man Yin CHIU 趙敏言 BA, University of Macau; PhD, University of Hong Kong

Nevia DOLCINI 杜雪雅 BA, MA (cum laude), PGrad, PhD, University of Macerata; PGrad, University of Siena

Matthew Ian GIBSON BA, The University of Birmingham; PhD, Royal Holloway and Bedford New College

Lai Cheng LEI, Victoria 李麗青 LLB, Jinan University; MPhil, PhD, University of Glasgow Hongyong LIU 劉鴻勇 BA, MA, Peking University; PhD, The Chinese University of Hong Kong

Ana Margarida Belem NUNES Licenciatura em Ensino de Português - Universidade do Minho; Mestre em Estudos Portugueses; Doutoramento em Tecnologias da Saúde, Universidade de Aveiro

Damian John SHAW BA, BA (Hons), University of Cape Town; PhD, Cambridge University

Ricardo Moutinho Rodrigues da SILVA Licenciatura em Letras, Mestrado em Linguística, PhD, Universidade Federal de São Carlos; PhD in Linguistics, University of Macau

Mei Leng TAM 譚美玲 BA, MA, Fu Jen Catholic University; Doctor of Arts, Sun Yat-sen University

See Kam TAN 陳時鑫 BA, La Trobe University; BA, Murdoch University; PhD, Melbourne

Glen TIMMERMANS BA, MA, University of Cape Town; PhD, University of Oxford

Hari VENKATESAN 何立慧 BA, MA, Jawaharlal Nehru University; PhD, National University of Singapore

Mingyu WANG 王銘宇 BA, MA, Nankai University; PhD, Ritsumeikan University

Sihao WANG 王思豪 BA, Anqing Normal University; MA, Anhui University; PhD, Nanjing University

Xian WANG, Vincent 王憲 BEng, Beijing University of Science and Technology; MA, PhD, University of Queensland

Katrine Ka Ki WONG 王嘉祺 BA, MPhil, Chinese University of Hong Kong; PhD, University of Leeds

Wenjiang YANG 楊文江 BA, Tianjin University; MA, Nankai University, PhD, Peking University

Yue ZHANG 張月 BA, Liaoning Normal University; MA, Beijing Normal University; PhD, University of Toronto

Guanfang ZHAO 趙冠芳 BA, Tianjin University of Commerce; MA, The Ohio State University; PhD, New York University

Tianshu ZHU 朱天舒 BA, MA, Northwest University; MA, PhD, Ohio State University

#### ASSISTANT PROFESSOR 助理教授

Manuela Maria Ferreira CARVALHO BA, Mondern Languages and Literature, Portuguese and English Studies, University of Coimbra, Portugal; PhD, Hispanic Studies, University of Birmingham, UK

Catherine See CHAN 陳家怡 BA, Hong Kong Bapist University, M. Phil. Hong Kong Bapist University, PhD, University of Bristol

Jeremy DE CHAVEZ BA, University of the Philippines; MA, The National University of Singapore; PhD, Queen's University, Kingston

Chap Fun CHEONG 張集歡 BA, Meijo University; MA, University of Macau; PhD, Hokkaido University

Joshua Parr EHRLICH 夜華 BA, University of Chicago; AM, Harvard University; PhD, Harvard University

Ronald Ion Wa FONG 馮潤華 BA, University of Macau; MPhil, University of Glasgow; PhD, The University of Hong Kong

Younhee KIM BA, Korea University; MA, PhD, University of Hawai'i at Manoa

lo Kei KUONG, Joaquim 鄺耀基 BA (Hons), University of Macau; MA, Guangdong University of Foreign Studies; PhD, Georgetown University

Ching-Yin KWAN, Nathan 關正衍 BA, University of Texas School at Austin; AM, Harvard University; PhD, University of Hong Kong and King's College London

Ana Luísa Varani LEAL Doutor em Informática, Universidade de Évora

Ting-mien LEE 李庭編 BA, National Taiwan University; MA, PhD, University of Leuven

In Fat LO 羅言發 BA, Beijing Normal University, MA, PhD, Peking University

Tsang Wing MA 馬增榮 BA, MA, The Chinese University of Hong Kong. PhD, University of California

Hoi Ling PANG 彭海鈴 BA, National Cheng Kung University; MA, South China Normal University; PhD, Sun Yat-sen University

Raimundo Enedino dos SANTOS Licenciado, Bacharel em Letras - Universidade de São Paulo; Mestre, Doutor em Linguística Histórica, Universidade Federal da Bahia

Sara Goncalves dos SANTOS MA, University of Macau; PhD, Linguistics (Portuguese), University of Macau

Roberval Teixeira e SILVA Bachelor in Portuguese and Literatures in Portuguese Language, Universidade Federal do Rio de Janeiro; Master in Interactional Sociolinguistics, Doctor in Linguistics and in Portuguese as a Second Language, Pontifícia Universidade Católica do Rio de Janeiro

Yuqi SUN 孫語崎 BA, International Communication in Portuguese, Communication University of China, Nanjing; MA, Linguistics, Pontifical Catholic University of Rio Grande do Sul, Brazil; PhD, Linguistics, Pontifical Catholic University of Rio Grande do Sul, Brazil

Chio leong SIO 邵朝陽 BA, Qinghai Normal College; MA, Tianjin Normal University; Doctor of Literature, Beijing Language and Culture University

Cheng-Yu TSAI 蔡承佑 BA, National Chung Cheng University; MA, National Tsing Hua University; PhD, Harvard University

Matthew Patrick WALLACE BA, Piedmont College; MA, Columbia University; PhD, NIE at NTU

Shan WANG 王珊 BA, Qingdao University; MA, Xiamen University; PhD, The Hong Kong Polytechnic University

Jingzhen XIE 謝靜珍 BA, MA, Peking University; PhD, Johns Hopkins University

Yuhang XU 徐宇航 BA, Jinan University; MA, PhD, The Chinese University of Hong Kong

Chengcheng YOU 尤呈呈 BA, Huaqiao University; MA, Jinan University; PhD, University of Macau

Jianbo ZHANG 張劍波 BA, Portuguese Language and Culture, Beijing University of Foreign Studies; MA, Linguistics, University of São Paulo, Brazil; PhD, Literary Studies(Portuguese), University of Macau

Jing ZHANG 張靜 BA, MA, University of Macau; MBA, Macau University of Science and Technology; Doctor of Philosophy, University of Macau

Jingwei ZHANG 張璟瑋 BA, MA, Nanjing University; PhD, Utrecht University

#### SENIOR INSTRUCTOR 高級導師

Raquel ABI-SAMARA MAGALHÃES BA, Faculdade de Comunicação e Turismo Hélio Alonso; MA, PhD, University of the State of Rio De Janeiro

Miho ANDO 安藤美保 BA, Soka University; MA, Aichi University of Education; PhD, Guangdong University of Foreign Studies

Sio Heng AO 區少卿 BA, University of Macau; PGDip, MSc, Inter-University Institute of Macau; PhD, Linguistics, University of Macau

Dalila Carmen de Sousa ARAUJO BA, University of Macau; Pós-Graduação em Relações Interculturais, Asia International Open University

Paula Cristina Figueiredo de CAMPOS BA, MA, University of Macau

Vivian Felicio CHAPLIN BS, University of Santo Tomas; MS, University of Leicester

Neng Ian CHEANG 鄭寧人 BA, Huaqiao University; MA, University of Macau; PhD, Tianjin Normal University

Im Lan CHEONG 張艷蘭 BA, MA, Beijing Normal University, China

Kee Hung CHEUNG 張紀紘 BA, MA, Universite de Lyon II

Ana Cristina da Silva Santos Pereira Fernandes DIAS BA, MA, University of Macau; PhD, University of Lisbon/École Pratique des Hautes Études-Sorbonne

Jean-Paul Lafayette DUQUETTE BA, University of California Irvine; MA, University of Hawaii; EdD, Temple University, Philadelphia

Carlos Filipe Guimarães FIGUEIREDO BA, University of Lisbon; PhD, University of Macau

Lili GAO 高力力 BA, Beijing Foreign Studies University; MA, University of Macau

Sean William GRANT BBus, Manukau Institute of Technology; MA, PhD, University of Auckland

Liliana GONÇALVES BA, MA, University of Porto

Sumiko ITO BA, MA, University of Macau

Júlio Reis JATOBÁ BA Universidade de Brasilia, MA University of Macau

Kumiko KIMURA 木村久美子 BA, Soka University; MA, Tokyo Gakugei University

Sze Lui LAM, Teresa 林思磊 BA, University of Macau; MS, Inter-University Institute of Macau

Alice S. LEE BA, University of California Berkeley; MA, California State University Los Angeles; PhD, Indiana University of Pennsylvania

Joshua LEE BA, University of California; MA, San Francisco State University & University of California Irvine

Weng Hong LEI 李永康 (RC TEACHING STAFF 住宿式書院教學人員) BS, The University of Texas at Austin; MA, Golden Gate Baptist Theological Seminary and Santa Clara University

Nga Ut LEONG, Joan 深雅月 BEd, University of Macau; MA, Birmingham University

Michael C LICHTENSTEIN BA, State University of New York at Stony Brook; MA, State University of New York, College at Buffalo

Sin I MA, Miranda 馬倩兒 BA, University of Macau; MA, Southern Illinois University Carbondale

Kevin Michael MAHER BS, Central Michigan University; MEd, Framingham State University

Maria Isabel da Silva MATOS Mestrado em Língua e Cultura Portuguesas variante Estudos Linguísticos, University of Macau

Manuel António NORONHA (RC TEACHING STAFF 住宿式書院教學人員) BA, University of East Asia; MA, University of Lancaster; Ph.D, University of Saint Joseph

Mário Rui Lima de Oliveira Pinharanda NUNES Licenciatura em Línguas e Literaturas Modernas (Variante Inglês/Alemão), University of Lisbon (Classic University); MA, PhD, University of Macau

José Fernando Lino PASCOAL BA Hons in English and German, MA-MPhil in Applied Linguistics, University of Lisbon Raquel ABI-SAMARA; PhD in Arts, Comparative Literature, State University of Rio de Janeiro, Brazil

Carla Alexandra SANTOS LOPES BA, Catholic University Portugal; MA, PhD, University of Macau

Fun Hei TANG 鄧歡喜 BA, National Taiwan Normal University; MA University of London; EdD, University of Durham

Hwai Ping WONG, Mark BS, Walla Walla College; MEd, University of Wollongong

Xiaofei ZHANG 張曉非 BA, Beijing Foreign Studies University; MA, University of Macau

Qiongyan ZHUO 卓琼妍 BA, Northeast Normal University; MA, National University of Singapore

#### INSTRUCTOR 導師

I Lei CHAN 陳依莉 BA, University of Macau; MA, Boston University

Ka Lon CHAN 陳嘉麟 BEd, University of Macau; MA, University of Macau

Qingzhen DENG 鄧慶真 BA, Guangdong University of Foreign Studies; MA, Kobe City University of Foreign Studies; PhD, Nara's Women University, The University of British Columbia

Chi Man KUOK 郭梓雯 BA, University of Macau; MA, University of Macau & King's College London

Tao LI 李韜 BEd, University of Macau; MA, University of York

Chunhui LU 盧春暉 BA, Journalism (Journalism in Portuguese), Communication University of China, Nanjing; MA, Translation Studies (Chinese-Portuguese), University of Macau

Hugo Alexandre MARQUES TEIXEIRA BA, San Jose State University; MA, Rochester Institute of Technology; MA, The Open University

Janet Elizabeth RANDALL BA, MA, Georgia State University

Weijie REN 任衛杰 BA, Central China Normal University; MA, Guangdong University of Foreign Studies

Rui Manuel Esteves da SILVA Bachelor in Oriental Languages and Cultures, University of Minho; Master in Intercultural Studies in Portuguese and Chinese: Translation, Education and Corporate Communication, University of Minho

Lian XUE 薛蓮 BA, Beijing International Studies University; MA, Middlebury College

### VISITING PROFESSOR 客座教授

Maria José Dos Reis GROSSO MA, PhD University of Lisbon

### VISITING SENIOR INSTRUCTOR 客座高級導師

Wan Cham MA 馬雲駸 BA, University of Macau; MA, PhD, Peking University

Xinyi JIN 金心藝 MA, Europena Language and Literature, Beijing Foreign Studies University BA, Portuguese Language, Beijing Foreign Studies University

### VISITING INSTRUCTOR 客座導師

Nim Ian CHAN 陳念恩 B. Ed., University of Macau; MA, University of York

Weng Kuan CHOI 蔡泳君 BA, Catholic University of Portugal; MA, Catholic University of Portugal

Ge GAO 高鴿 BA, Macau University of Science and Technology; MA, University of Leicester

Yuzhe LI 李羽喆 BA, Huaqiao University MA, Kyoto University, PhD, Waseda University

Sheyla Schuvartz ZANDONAI PhD, École des Hautes Études en Sciences Sociales (EHESS), Paris, France

### ADJUNCT PROFESSOR 客席教授

Tianhong FU 傅天虹 Honorary Degree of Doctor of Literaturefrom World Academic of Arts and Culture, USA

Jianrong SUN 孫建榮 PhD, Ohio University (USA)

Jianzhong WU 吳建中 PhD, University of Wales

Zhiliang WU 吳志良 PhD, Nanjing University

### ADJUNCT ASSISTANT PROFESSOR 客席助理教授

Kai Chun LEUNG 深佳俊 MA, the Chinese University of Hong Kong; PhD, University of Hong Kong

### ADJUNCT LECTURER 客席講師

Hoi Keng IEONG 楊開荊 MA, Charles Sturt University; PhD, Peking University

Guo Jie CAI 蔡國傑 BA, MA, Taiwan University of Arts; PhD, China Academy of Arts

Wang Lap WONG 黃霐雲 BA, University of East London; MA, Newport, University of South Wales

### ASSOCIATE PROFESSOR (BY COURTESY) 禮任副教授

Siu Kwai YEUNG 楊兆貴 PhD, Beijing Normal University

Zexun ZHANG 張澤珣 PhD, Chinese University of Hong Kong

# APPENDICES / STAFF LIST Fundamental Academic Units

# **Faculty of Business Administration**

## INTERIM DEAN 代院長

Wei GE 葛偉 BSc, Nanjing University; MSc, Institute of Hydrobiology, Chinese Academy of Sciences (CAS); PhD, University of Alberta, Canada

## ASSOCIATE DEAN 副院長

## Curriculum and Teaching 課程及教學

Glenn James MCCARTNEY 默希濂 BA (Hons) Business Studies, University of Teesside; Dip. Law (Co.), University of Wolverhampton; Dip. Social Science Research Methods, Inter-University Institute of Macau; PhD, University of Surrey

American Hotel & Lodging Educational Institute (Certified Hospitality Educator)

# Research and Development 研究及發展

Ricardo Chi Sen SIU 蕭志成 BSc, MA, University of Maine; PhD, Renmin University of China

# ASSISTANT DEAN 助理院長

# International and External Relations 國際及對外關係

Amy Siu Ian SO 蘇小恩 BSc, University of Indianapolis; MSc, PhD, Purdue University

# Planning and Engagement 規劃及參與

Iris Lin YUAN 袁琳 Bachelor of Finance, Master of Economics, NanKai University; PhD, National University of Singapore

# Student Affairs 學生事務

# HEAD OF DEPARTMENT 系主任

# Department of Accounting and Information Management 會計及資訊管理學系

Jason Zezhong XIAO 蕭澤忠 MSc Business Administration (Information Technology), the University of Central Lancashire; PhD, Edinburgh Napier University

# Department of Finance and Business Economics 金融及商業經濟學系

Guoqiang LI 李國強 BScEng, MScEng, Northwestern Polytechnical University; PhD, National University of Singapore; PhD, Xi'an Jiaotong University

#### Department of Integrated Resort and Tourism Management 綜合度假村及旅遊管理學系 Li MIAO 苗莉

B.A., Nankai University, P. R. China; M.S., Oklahoma State University, USA; Ph.D., The Pennsylvania State University, USA

### Department of Management and Marketing 管理及市場學系

Jacky Fok Loi HONG 洪福來 BBA, MBA, University of Macau; PhD, Lancaster University

## EMERITUS CHAIR PROFESSOR 榮休講座教授

Jacky Yuk-Chow SO 蘇育洲 BS (eqv.), Hong Kong Baptist College; MBA, Western Illinois University; PhD, the Ohio State University Certificate in Management Development Programme, Harvard University

## CHAIR PROFESSOR 講座教授

Jean Jinghan CHEN 陳靖涵 BSc (First class, Hons) in Mathematics/Economics, Nankai University, China Ph.D in Economics, Lancaster University

Michael King Man HUI 許敬文 Bachelor of Business Administration (First Class Honors), The Chinese University of Hong Kong; CAAE, IAE Aix-en-Provence, France; Doctor of Philosophy, London Business School

Rob LAW 羅振雄 Bachelor of Arts and Science, University of Lethbridge; Master of Science, University of Regina; Doctor of Philosophy, University of Regina

# PROFESSOR 教授

Davis Ka Chio FONG 馮家超 BBA, MBA, University of Macau; PhD, Tsinghua University

Jacky Fok Loi HONG 洪福來 BBA, MBA, University of Macau; PhD, Lancaster University

Wenjing KANG 康文津 B.S., Biotechnology, Peking University; Ph.D., Management, UCLA

Rose Neng LAI  $\,\,$ 

Desmond Chee Shiong LAM 藍志雄 Bachelor of Engineering, National University of Singapore; Bachelor of Business in Marketing, La Trobe University; MBA, University of Melbourne; PhD, University of Western Australia

### Rico Long Wai LAM 林朗為

BBA, The Chinese University of Hong Kong; MBA, Michigan State University; PhD, University of Oregon; Certified Facilitator, Zenger-Miller Inc.

Zhaotong LIAN 練肇通 BSc, Beijing Normal University; MSc, Sun Yat-sen University; PhD, Hong Kong University of Science and Technology

Matthew Ting Chi LIU 劉丁己 BA, National Taiwan University; MBA, National Sun Yat-sen University; PhD, Peking University

Raymond Chi Ho LOI 雷智豪 BSocSc, MBA, MPhil, PhD, The Chinese University of Hong Kong

Li MIAO 苗莉 B.A., Nankai University, P. R. China; M.S., Oklahoma State University, USA; Ph.D., The Pennsylvania State University, USA

Jet Lianjie SHU 舒連杰 BSc, Xi'an Jiaotong University; PhD, Hong Kong University of Science and Technology

Charlie Byung Cherl SOHN BBA, Seoul National University; MBA, Massachusetts Institute of Technology; PhD, Seoul National University

Jason Zezhong XIAO 蕭澤忠 MSc Business Administration (Information Technology), the University of Central Lancashire; PhD, Edinburgh Napier University

#### ASSOCIATE PROFESSOR 副教授

Mary Lai Ping CHAI 柴麗萍 BBA, MAcc, University of Hawaii at Manoa; PhD, University of Hong Kong Certified Public Accountant, Washington State, USA

Joanne Sow Hup CHAN BSc, Deakin University; MBA, University of Nottingham; PhD, Bangkok University

Robin Chi Hang CHARK 翟智恆 BBA, MSc, PhD, Hong Kong University of Science and Technology

Linda Xiaoyun CHEN 陳曉雲 BEcon, Beijing International Studies University; PhD, University of Hong Kong

Cheris Wing Chi CHOW 周詠芝 BBA, MPhil, PhD, City University of Hong Kong

Clement Siu Fung CHOW 鄒少峰 BSc, University of London; MBA, The Chinese University of Hong Kong; DBA, Hong Kong Polytechnic University

Javier Calero CUERVO BSc, De La Salle University; MSc, University of Asia and the Pacific; MSc, National University of Singapore; Ph.D, National University of Singapore

Lawrence Hoc Nang FONG 馮學能

BBA, University of Macau; M.Sc. in Management, University of Surrey; PhD, Hong Kong Polytechnic University

Grace Qi FU 付琦 B.E., M.E., Huazhong University of Science and Technology; PhD, Hong Kong University of Science and Technology

Maggie Xiaoqing FU 傅曉青 BSc, Hunan University; MSc, Wuhan University; PhD, City University (UK)

Xinhua GU 顧新華 BSc, MS, Nanjing University; MA, Concordia University; PhD, University of Toronto

Yuansi HOU 侯遠思 Bachelor of Management, Fudan University, China; PhD in Business Administration, The Chinese University of Hong Kong

Siew Huat KONG 江紹發 BSc, University of Malaya; MBA, Asia International Open University (Macau); PhD, University of Sheffield

Jennifer Yuen Man LAI 黎婉雯 BA, MPhil, City University of Hong Kong; PhD, University of Hong Kong

Patrick Chang Boon LEE 李壯文 BBA (Hons), National University of Singapore; PhD, University of Queensland

Adrian Cheuk Hung LEI 李卓雄 BFin, MEcon, PhD, University of Hong Kong

Guoqiang LI 李國強 BScEng, MScEng, Northwestern Polytechnical University; PhD, National University of Singapore; PhD, Xi'an Jiaotong University

Christine Mei Lai LIM Bachelor of Economics, University of Western Australia; Master of Economics, University of Western Australia; Doctor of Philosophy, University of Western Australia

Lucy Xiaowan LIN 林曉婉 Bachelor in Psychology, Master in Psychology, Beijing Normal University; PhD, City University of Hong Kong

Minghua LIU 劉明華 BEcon, Renmin University of China; MSc, PhD, Univesity of Wales

Morris Ming LIU 劉明 BBA, Zhejiang University; MBA, Shanghai Academy of Social Sciences; PhD, Hong Kong Baptist University

Rose Xiaoming LIU 劉曉明 BSc, MSc, Lanzhou University; PhD, Hong Kong University of Science and Technology

Glenn James MCCARTNEY 默希濂

BA (Hons) Business Studies, University of Teesside; Dip. Law (Co.), University of Wolverhampton; Dip. Social Science Research Methods, Inter-University Institute of Macau; PhD, University of Surrey; American Hotel & Lodging Educational Institute (Certified Hospitality Educator)

Carlos NORONHA BBA, University of East Asia; MBA, Asia International Open University (Macau); PhD, University of Sheffield Fellow (FCPA), CPA Australia; Fellow (FAIA), Association of International Accountants Chanthika PORNPITAKPAN BA, Chulalongkorn University; MBA, Sasin GIBA of Chulalongkorn University; PhD, The University of British Columbia Zhuo QIAO 香卓 BEng, Harbin Institute of Technology; Master in Management, Xi'an Jiaotong University; PhD, National University of Singapore Tingting QUE 關婷婷 B.B.A. Business Administration. Sun Yat-sen University. China: M.A. Economics. Ph.D. Finance, University of Iowa Susan Jiniuan REN 仟錦娟 Bachelor in Accounting, Fudan University; MPhil, PhD, The University of Hong Kong Ricardo Chi Sen SIU 蕭志成 BSc, MA, University of Maine; PhD, Renmin University of China Amy Siu Ian SO 蘇小恩 BSc, University of Indianapolis; MSc, PhD, Purdue University Simon Man Shing SO 蘇文成 BBA. MBA. University of Macau: PhD. University of South Australia Lewis Hon Keung TAM 譚漢強 BBA, PhD, Hong Kong University of Science and Technology Priscilla Pui Sun TAM 遭珮璇 BSocSc, MEcon, University of Hong Kong; PhD, The Chinese University of Hong Kong Anna Pou lu VONG 黃寶儀 BBA, MBA, University of Macau; PhD, Instituto Superior de Ciências do Trabalho e da Empresa Jia YUAN 袁嘉 BA in Economics, MA in Economics, Peking University; PhD, University of Minnesota Iris Lin YUAN 袁琳 Bachelor of Finance. Master of Economics. NanKai University: PhD. National University of Singapore Desmond Chun Yip YUEN 袁振業 MBA. University of Wales: MA. University of Hull: PhD. University of South Australia. Hao ZHANG 張皓 BA (English), University of Richmond; PhD (Financial Economics), Texas A&M University

Lida Ling Ling ZHANG 張玲玲

BA in Marketing, Peking University; MS in Management Science and Engineering, Peking University; PhD in Marketing, University of Macau; PhD in Management of Organizations,

Hong Kong University of Science & Technology

Brenda Yang ZHANG 張洋 BEng, Tianjin University; PhD, Nanyang Technological University

Steven Xu ZHANG 張旭 BSc, Fudan University; Master in Accounting, Central University of Finance and Economics; PhD, Hong Kong Baptist University

#### ASSISTANT PROFESSOR 助理教授

Brenda Wing Han CHAN 陳詠嫻 BBA, MBA, University of Macau; PhD, Universidade Do Algarve

Faye Feier CHEN 陳菲兒

B.Sc. in Hotel Management, The Hong Kong Polytechnic University; M.S. in Hospitality Management, The Pennsylvania State University; Ph.D. in Hospitality Management, The Pennsylvania State University, 2022

Monica Can CHEN 陳燦

B.A. in Accounting, Taiyuan University of Technology; M.B.A., University of Macau; Ph.D. in Accounting, City University of Hong Kong

Toro Tao CHEN 陳濤 Bachelor of Economics, Master of Economics, Sun Yat-Sen University; PhD in Finance, The City University of Hong Kong

Kraivin Paripont CHINTAKANANDA B.A., Economics, University of North Carolina at Chapel Hill; M.Sc., Organisational Behaviour, London School of Economics and Political Science; Ph.D., Organisational Behaviour and Human Resources. Singapore Management University

Jacey Ja Young CHOE BS, MS, Ewha Womans University; PhD, Hong Kong Polytechnic University

Patrick Kuok Kun CHU 朱國權

BBA, MBA, University of Macau; PhD, Royal Melbourne Institute of Technology University Certificate in Statistical Theory, The University of Hong Kong SPACE, Hong Kong; Higher Certificate Examination in Statistics, The Royal Statistical Society, The United Kingdom

Teresa CHU 朱善欣 BBA, MBA, University of Macau; PhD, The Chinese University of Hong Kong

Isabel Siu Fong FU 傅小鳳

BBA, University of Hawaii at Manoa; MBA, Chaminade University of Honolulu; PhD, Hong Kong Polytechnic University

Grace Ying HO 何瑛

BBA, The Chinese University of Hong Kong; MSc, University of Manchester (the programme was delivered by the University of Manchester Institute of Science and Technology (UMIST)); PhD, The Chinese University of Hong Kong

Tianyou HU 胡天佑

Bachelor of Arts, Bachelor of Economics, MBA, Peking University; Ph. D. in Management

(Strategy), National University of Singapore

Huiling HUANG 黃慧靈 B.Eng., Environmental Engineering, M.Eng., Environmental Engineering, Sun Yat-sen University; M.S., Hospitality Management, Minor in Statistical Data Analysis, The Ohio State University; Ph.D., Hospitality Management, The Ohio State University

Hung Wan KOT 葛鴻雲 B.B.A.in Finance, Hong Kong Baptist University; Ph.D. in Finance, Hong Kong University of Science andTechnology

Philip Kin Fun LAW 羅建勛

BSc, University of Hull; MBA, Heriot-Watt University, DBA, University of Newcastle Certified Public Accountant, HK, The Hong Kong Institute of Certified Public Accountants; Chartered Certified Accountant, UK, The Association of Chartered Certified Accountants; Chartered Management Accountant, UK, The Chartered Institute of Management Accountants; International Accountant, UK, The Association of International Accountants; Certified Fraud Examiner, USA of The Association of Certified Fraud Examiners; Certified Financial Services Auditor, USA, The Institute of Internal Auditors

Jimmy Chi Ming LEE 李志明 BBA, MBA, University of Macau; PhD, Instituto Superior de Ciências do Trabalho e da Empresa

Henry Chun Kwok LEI 李振國 BSocSc, MA, University of Macau; MSc, Hong Kong University of Science and Technology PhD, Middlesex University

Leona Shao Zhi LI 李少知

B.A. in Economics, Peking University; M.A. in Quantitative Methods, Columbia University; Ph.D. in Economics, The Chinese University of Hong Kong

Yan LIN 林龑 B.E., University of Science and Technology of China; Ph.D. Nanyang Technological University, Singapore

Duncan Jiancheng LIU 劉鍵程

Bachelor of Economics, Liaoning University, China; Master of Economics, Liaoning University, China; MRes in Accounting and Financial Management, The University of Lancaster, UK; Ph.D. in Accounting and Finance, The University of Lancaster, UK

Rachel Xiaorong MA 馬笑蓉 B.A.in Applied Mathematics, East China Normal University; Master of Business Administration

(International), Ph.D. in Finance, the University of Hong Kong

Lancy Vai Iun MAC 麥慧妍 BBA, MBA, University of Macau; PhD, Instituto Superior de Ciências do Trabalho e da Empresa

Tony Zhenjiang QIN 秦振江

M.Sc., Probability and Statistics, B.Sc., Mathematics and Applied Mathematics, Central South University; Ph.D., Finance, Aarhus University

Tony Kin Meng SAM 岑健明 BBA, MSc, University of Macau; PhD, University of Sussex Kao SI 司考 PhD in Marketing, The Chinese University of Hong Kong

Joseph Adea SY-CHANGCO BBA, MBA, University of the Philippines; Ph.D, Aston University

Feng TANG 唐豐

Bachelor of Management, Xiamen University; Master of Philosophy, Lingnan University; PhD, The Hong Kong University of Science and Technology

Anthony Heng TANG 唐恒 BSc, MSc, Yunnan University; PhD, City University of Hong Kong

Peng Chun VONG 黃炳銓 BSc, MSc, University of Missouri (Rolla); MBA, University of Missouri (St. Louis)

Endong YANG 楊恩東 B.Sc. in Mathematics, Nanyang Technological University; Ph.D in Finance, Nanyang Technological University

Fiona Xi YANG 楊曦 B.Sc. in Probability and Statistics, Peking University; Ph.D. in Industrial Engineering and Logistics Management, The Hong Kong University of Science and Technology

Liwen ZHANG 張麗文

B.S. in Business English, Jinan University; M.S. in Human Resources and Employment Relations, Pennsylvania State University; Ph.D. in Organizational Behavior & Human Resources Management, Florida State University

#### SENIOR INSTRUCTOR 高級導師

Derek Weng Hang CHAN 陳永亨 BA, State University of New York – College at Brockport; MAcc, University of Southern California

Peter Man Wai CHUI 徐文威 BBA, MBA, University of Macau

Winnie Un Fong KUAN 關婉芳 BBA, MBA, University of Macau

Kim Oi Mei KUOK 郭愛媚 BBA, MBA, University of Macau; PhD, ISCTE- Instituto Universitário de Lisboa

Jonty Man Kin LAM 林文堅 BSc, MBA, MPhil, The Chinese University of Hong Kong

Rebecca Wun Lei LAO 劉煥莉 BBA, MBA, University of Macau

Carry Ka Yee MAK 麥嘉怡 BBA, MBA, PhD, University of Macau

Moody Yuko MASTUMOTO 松本雄子 BA, MA, California State University at Fullerton Philip Sau Tak PUN 潘守德 BSc, University of Waterloo; MBA, Asia International Open University (Macau); MSc, Simon Fraser University

Stella leng SAM 沈鷹 BBA, MBA, University of Macau

Vanessa Sio Tan SI TOU 司徒小丹 BSocSc, MBA, University of Macau; PhD, Shanghai University of Finance and Economics

Theresa Van Kam TCHIANG 鄭蘊琴 BA, State University of New York – College at Brockport; MAcc, University of Southern California

Simon lok Kuan WU 胡玉均 BBA, University of East Asia; MBA, Asia International Open University (Macau); PhD, Macau University of Science and Technology

Steve Fu YANG 楊福 MBA in Management, Hong Kong Baptist University; Ph.D. in Medical Science, The University of Edinburgh

# ADJUNCT DISTINGUISHED PROFESSOR IN PRACTICE 特邀實務特聘教授

Albert Yuk-keung IP 葉毓強

#### ADJUNCT PROFESSOR 特邀教授

Weian LI 李維安 Ph.D. in Business and Administration, Keio University; Ph.D. in Economics, Nankai University

### ADJUNCT PROFESSOR IN PRACTICE 特邀實務教授

Shuguang MAO 毛曙光 PhD in Applied Statistics/Geostatistics and PhD minor in Computer Sciences, Standford University

Qin ZOU 鄒晴 Doctor of Business Administration, Shanghai Jiao Tong University/United Business Institute

# APPENDICES / STAFF LIST Fundamental Academic Units

# **Faculty of Education**

# DEAN 院長

Chuang WANG 王闆 BA, Xi'an Jiaotong University; MA, Northwest Polytechnical University; MS, The Ohio State University; PhD, The Ohio State University

## ASSOCIATE DEAN (TEACHING) 副院長(教學)

Zhaowei KONG 孔兆偉 BSc, MEd, Beijing Sports University; PhD, Hong Kong Baptist University

# INTERIM ASSOCIATE DEAN (RESEARCH) 代副院長(研究)

Mingming ZHOU 周明明 BA, Northeastern University, P. R. China; MA, University of Leuven, Belgium; PhD, Simon Fraser University, Canada

## ASSISTANT DEAN FOR STUDENT AFFAIRS 助理院長(學生事務)

Ping Cheng WANG, Dennis 王秉正 BMu, MMusic, Oklahoma City University; Doctor of Musical Arts, University of Miami

# ASSISTANT DEAN FOR SCHOOL ENGAGEMENTS AND EXTERNAL RELATIONS

助理院長(學校協作與對外關係) Chun Wai FAN, Andy 范進偉 BSc, University of Keele; MSc, University of Strathclyde; PhD, Glasgow Caledonian University

# PROFESSOR 教授

Kwok Cheung CHEUNG 張國祥 BSc, MEd, University of Hong Kong; PhD, University of London

Kit THOMPSON MA, PhD, University College London

# ASSOCIATE PROFESSOR 副教授

Wei Wen CHEN 陳薇文 BSc, Fu-Jen Catholic University, Taiwan; MEd, University of Pennsylvania; PhD, University of California, Santa Barbara, USA

Chun Wai CHENG, George 鄭振偉 BA, MPhil, PhD, University of Hong Kong; MEd, University of Southern Queensland Wai Po CHEUNG 張偉保

Hon. Dip., Hong Kong Shue Yan College; MA, PhD, New Asia Institute of Advanced Chinese Studies; PhD, Beijing Normal University

Zhengdong GAN 甘正東 BA, Anhui Normal University, China; PhD, The Hong Kong Polytechnic University, Hong Kong

Biying HU 胡碧穎 BS, MEd,PhD, University of Central Florida

Chun Seng KAM 甘俊生 BA, The University of Waterloo, Canada; MA, The Chinese University of Hong Kong; PhD, The University of Western Ontario, Canada

Ronnel B. KING 龔仁崇 PhD, University of Hong Kong; Advanced Cert, East China Normal University, China; BA, Ateneo de Manila University, Philippines

Shing On LEUNG 梁成安 BSocSc, University of Hong Kong; MSc, PhD, University of London; PGCertCA, Open University of Hong Kong

Yuen-yi LO 羅婉儀 Diploma in Communication Design, HK Polytechnic University; MA, PhD, University of Surrey

Pey-Tee OON 溫佩娣 BSc(Hons), Universiti Teknologi Malaysia (UTM), Malaysia; Med, Universiti Sains Malaysia (USM), Malaysia; PhD, Nanyang Technological University (NTU), Singapore

Pou Seong SIT 薛寶嫦 BEd, MA, University of Macau, PhD, Beijing Normal University

Tat Ming SZE 施達明 BA, National Taiwan Normal University; MA, PhD, Michigan State University

Keang leng VONG, Peggy 黃鏡英 BA, University of Hawaii; MSc, PhD, University of London

Sou Kuan VONG, Teresa 黃素君 BEd, PhD, University of Nottingham

Bing WEI 魏冰 Dip of Chemistry, Chuzhou Teacher's College; MEd, Beijing Normal University; PhD, University of Hong Kong

Ming Wai WONG, Matilda 黃明蕙 BA, MA, University of Warwick; PhD, University of Toronto

Siu Kwai YEUNG 楊兆貴 BA, The Chinese University of Hong Kong; MA, National Tsing Hua University; PhD, Beijing Normal University

Shulin YU 于書林 BA, China University of Petroleum, Dongying, Shandong, P. R. China; MA, Zhejiang University, Hangzhou, Zhejiang, P. R. China; PhD, The Chinese University of Hong Kong, Hong Kong

Rui YUAN, Eric 袁睿 BA, Tianjin Foreign Studies University; MA, Beijing Normal University; PhD, The Chinese University of Hong Kong

Juan ZHANG 張娟 BS, MEd, South China Normal University; PhD, The Chinese University of Hong Kong

Ze Xun ZHANG 張澤珣 BA, Tianjin Institute of Fine Arts; MA, Academy of Arts; MPhil, PhD, The Chinese University of Hong Kong

Yisu ZHOU 周憶粟 BS, East China Normal University, Shanghai; PhD, Michigan State University, East Lansing

#### ASSISTANT PROFESSOR 助理教授

Kan Kan CHAN, Regina 陳勤勤 BSc, MSc, University of Macau; PhD, Durham University

Fu CHEN 陳孚 BS, Med, Beijing Normal University; PhD, University of Alberta

Cho Kee CHENG 鄭祖基 BA, Taiwan National Chengchi University; PGCE, University of Macau; MA, Hong Kong Baptist University; PhD, Zhong Shan University

Boby Ho-Hong CHING 程浩航 BSocSc, Mphil, The Chinese University of Hong Kong; Msc, PhD, University of Oxford

Yang GONG 龔陽 BA, MA, Zhengzhou University; PhD, University of Hong Kong

King Yan HO, Walter 何敬恩 BEd, Edith Cowan University; MEd, PhD, University of Sydney

Tien-Ping HSIANG 向天屏 PhD, National Taiwan Normal University

Chun Lian JIANG 江春蓮 BSc, MEd, Central China Normal University; PhD, Nanyang Technological University

Kin Wing LAM 林建榮 BA, Concordia College; MA, Trinity International University; Postgraduate Diploma, Bond University; Doctor of Education, The Chinese University of Hong Kong

Si Man LEI, Alice 李思敏 BEd, National Taiwan Normal University; MEd, University of Macau; PhD, Shanghai University of Sport

Nai-Hua LIU, Natalia 劉乃華 BA, Chiayi University; MA, Nanhua University; PhD, East China Normal University Barry Lee REYNOLDS 雷貝利 BA, Morehead State University; MA, Murray State University; PhD, National Central University, Taiwan

Jin-Jy SHIEH 謝金枝 BEd, MEd, Taipei Municipal Teachers College; MA, University of London; PhD, National Taiwan Normal University

XuHua SUN 孫旭花 BA, MA, North-east Normal University; PhD, The Chinese University of Hong Kong

Min-Chuan SUNG, Audrey 宋明娟 BA, Hsing-chu Teachers College; MA, PhD, Taiwan Normal University

Xiaowei TANG 唐小為 BS, Sichuan University; MS, University of Vermont; PhD, University of Maryland, College Park

Yan WANG 王燕 BA, Sichuan International Studies University; MA, University of Central Oklahoma PhD, Illinois State University

Zhi Sheng WANG 王志勝 BA, Shandong Unversity; MA, Beijing Language and Culture University; PhD, Southwest University

Mei-Jiun WU, Michael 呉梅君 BA, Union Institute; MS, PhD, University of Southern California

#### SENIOR INSTRUCTOR 高級導師

Kam Leng CHAN, Ginger 陳錦翎 BSc, Sun Yat-Sen University, MA, Chinese Academy of Governance

Chi Meng CHEANG 鄭智明 BA, Macao Polytechnic Institute; MA, University of Macau

leng Wai HONG, Alice 洪盈惠 BA, Macau Polytechnic Institute; MA, University of Macau

Heung Chin HUI, Walter 許向前 BEd, National Taiwan Normal University; MEd, University of Macau

Pui Kei LAU, Peggy 劉沛棋 BA, Wright State University; MM, DMA, Michigan State University

Wai Chung LI 李慧中 BA, MPhil The Chinese University of Hong Kong; ProDip, HKMA; PhD, The University of Texas at Austin

Ching-hui LU, Diane 呂靜慧 BA, Soochow University; MA, Taiwan Normal University

Soi Po WONG, Water 黃水波 BEd, National Taiwan Normal University; MEd, University of Macau; PhD, Beijing Sports University

U Kei WONG, Frankie 黃宇棋 BEd, Macao Polytechnic Institute; MEd, Beijing Sports University

Chi Chong WU, Lantz 胡梓聰 BEMP, Lincoln University, New Zealand; MEd, University of Macau

## INSTRUCTOR 導師

Chi Hong LEONG, Gasper 梁梓康 BEd, Macao Polytechnic Institute; MEd, University of Macau

## ADJUNCT PROFESSOR 客座教授

Hoi Yan CHEUNG 張凱欣 BA in Psychology; Ph.D. in Education

Hsu-Min CHIANG 江旭敏 BEd, National Tainan Teachers College; MEd, Monash University; PhD, Macquarie University

Sao Leng IEONG 楊秀玲 BA, MA and PhD, Sun Yat-sen (Zhongshan) University

Shuh Ren JIN 金樹人 BEd, MEd, National Taiwan Normal University; PhD, University of Illinois

Ronnel B. KING 龔仁崇 PhD, University of Hong Kong; Advanced Cert, East China Normal University, China; BA, Ateneo de Manila University, Philippines

Zihao LI 李自豪 BEd, MA, York University, Toronto ; PhD, University of Toronto

Chi Kuan LOU 老志鈞 BA, National Taiwan Normal University; MPhil, PhD, University of Hong Kong

Mark Feng TENG 滕鋒 PhD in Applied Linguistics, Hong Kong Baptist University

Ping Man WONG 黃炳文 MA, The Chinese University of Hong Kong; MEd, PhD, University of Hong Kong

Tianshu ZHU 朱天舒 BA, MA, Northwest University, China; MA, The Ohio State University, USA; PhD, The Ohio State University, USA

### PART-TIME ACADEMIC STAFF 兼職教學人員

Baby Wina Umacob ALEGRE Master, Manuel L. Quezon University, Philippines

Guo Jie CAI 蔡國傑 MA, Taiwan University of Arts, China Cheng Tak CHAN 陳政德 Master, University of Oxford, United Kingdom

Hong Cheng CHAU 周康政 MEd, University of Macau

Chi Seak CHONG 鍾子石 MEd, University of Macau

Chon Fai CHONG 鍾春暉 PhD, Peking University

Cheong Hin HONG 孔祥騫 MA, University of Newcastle

Hon Kei IP 葉漢基 Master, Macau University of Science and Technology

Kuai Wa IP 葉貴華 MA, Guangzhou Physical Education

Ka Chon LAM 林嘉俊 MEd, University of Macau

Ka Lai LAM, 林嘉麗 PhD, University of Macau

Keng Chong LAO 劉景松 PhD, Beijing Normal University

Hung Po LEONG 梁洪波 PhD, Shanghai Physical Education Institute

Kin Wa LEONG 梁健華 MEd, University of Macau

Wai Man LEONG 梁偉民 Master, Guangzhou Sport University

Chou Nei LON 倫藻妮 MEd, University of Macau

Chao Fong KOU SI TOU 高司徒秋芳 MSocSc, Beijing Sport University

Ian Chun NG 吳恩銓 MPhil, University of Cambridge

Kim Cho NG 伍劍佐 PhD, City University of Macau

Kai Chong SAM 沈繼忠 MEd, Shanghai Institute of Physical Education Mei SHENG 盛梅 PhD, University of Macau

Man Leng SIO 蕭敏玲 MEd, University of Macau

Chi Man TONG 董志文 PhD, City University of Macau

Weng Chon VONG 黃穎駿 MA, The University of Warwick, United Kingdom

Soi Cheong WONG 王瑞璋 MEd, University of Macau

Hou Keong WU 胡浩強 MEd, Xi'an Physical Education University

Chengqing XI 席成清 MEd, University of Macau

Sijia XUE 薛思佳 PhD, The University of Hong Kong

# APPENDICES / STAFF LIST Fundamental Academic Units

# **Faculty of Health Sciences**

DEAN 院長

Chuxia DENG 鄧初夏 BSc, West China Normal University; MSc, Institute of Hydrobiology, Academia Sinica; PhD, University of Utah

## ASSOCIATE DEAN (RESEARCH) 副院長(研究)

Renhe XU 徐仁和 BMed, University of South China; MMed, Central South University; DSc, University of Tokyo

# ASSOCIATE DEAN (TEACHING) 副院長(教學)

Guokai CHEN 陳國凱 BSc, Sichuan University; PhD, Baylor College of Medicine

## ASSISTANT DEAN (STUDENT AFFAIRS) 助理院長(學生事務)

Xuanjun ZHANG 張宣軍 BEng, Shandong Institute of Light Industry; MSc, Anhui University; DSc, University of Science and Technology of China

# HEAD OF DEPARTMENT 系主任

### Department of Biomedical Sciences 生物醫學系

Hanming SHEN 沈漢明 BMed, MMed, Zhejiang Medical University; PhD, National University of Singapore

Department of Pharmaceutical Sciences 藥物科學系 Ying ZHENG 鄭穎

BSc, Beijing Medical University; MPhil, PhD, The Chinese University of Hong Kong

Department of Public Health and Medicinal Administration 公共衛生及醫藥管理學系 Yutao XIANG 項玉濤

BMed, MMed, Capital Medical University; PhD, The Chinese University of Hong Kong

# ASSOCIATE HEAD OF DEPARTMENT 副系主任

Department of Biomedical Sciences 生物醫學系

Kathy Qian LUO 羅茜 BSc, MSc, Peking University; PhD, University of British Columbia

## Department of Pharmaceutical Sciences 藥物科學系

Ligen LIN 林理根 BE, Zhejiang University; PhD, Shanghai Institute of Materia Medica, CAS

#### Department of Public Health and Medicinal Administration 公共衛生及醫藥管理學系

Yuanjia HU 胡元佳 BSc, MSc, China Pharmaceutical University; MSc, PhD, University of Macau

### CHAIR PROFESSOR 講座教授

Chuxia DENG 鄧初夏 BSc, West China Normal University; MSc, Institute of Hydrobiology, Academia Sinica; PhD, University of Utah

Wei GE 葛偉 BSc, Nanjing University; MSc, Institute of Hydrobiology, Academia Sinica; PhD, University of Alberta

Hanming SHEN 沈漢明 BMed, MMed, Zhejiang Medical University; PhD, National University of Singapore

Yitao WANG  $\pm -\bar{} \begin{tabular}{c} \begin{tabular}{c} Yitao WANG & \pm -\bar{} \begin{tabular}{c} \begin{tabu$ 

### DISTINGUISHED PROFESSOR 特聘教授

Renhe XU 徐仁和 BMed, University of South China; MMed, Central South University; DSc, University of Tokyo

Xin CHEN 陳新 BMed, MMed, Hubei University of Chinese Medicine; PhD, Guangzhou University of Chinese Medicine; PhD, Radboud University Nijmegen Medical Centre

Simon Ming Yuen LEE 李銘源 BSc (Hon), City University of Hong Kong; PhD, The Chinese University of Hong Kong

Shaoping LI 李紹平 MSc, PhD, China Pharmaceutical University

### PROFESSOR 教授

Guokai CHEN 陳國凱 BSc, Sichuan University; PhD, Baylor College of Medicine

Meiwan CHEN 陳美婉 BSc, Guangdong Pharmaceutical University; MSc, Jinan University; PhD, Sun Yat-sen University

Xiuping CHEN 陳修平 MB, Jining Medical College; MSc, Zunyi Medical College; PhD, Peking Union Medical College, Tsinghua University Edwin Chong Wing CHEUNG 張仲榮 BA, University of California, Berkeley; PhD, University of Manchester

Hao HU 胡豪 MSc, PhD, Sichuan University

Yuanjia HU 胡元佳 BSc, MSc, China Pharmaceutical University; MSc, PhD, University of Macau

Duncan Chung Hang LEUNG 深重恒 BSc, PhD, City University of Hong Kong

Lai Han LEUNG 梁麗嫻 BSc, MPhil, PhD, The Chinese University of Hong Kong, Hong Kong

Kathy Qian LUO 羅茜 BSc, MSc, Peking University; PhD, University of British Columbia

Huanxing SU 蘇煥興 BSc, Zhejiang University; MSc, The Chinese University of Hong Kong; PhD, The University of Hong Kong

Sanming WANG 王山鳴 BMed, Jiangxi Medical College of Nanchang University; MMed, Shandong Medical University; MD, University of Lausanne

Chunming WANG 王春明 BSc, MSc, Nanjing University; PhD, Nanyang Technological University

Gary WONG 黃值富 BSc, University of California; MSc, PhD, North Carolina State University

Yutao XIANG 項玉濤 BMed, MMed, Capital Medical University; PhD, The Chinese University of Hong Kong

Ru YAN 燕茹 BSc, MPhil, China Pharmaceutical University; PhD, The Chinese University of Hong Kong

Zhen YUAN 袁振 BEng, Henan University of Science and Technology; MEng, Chinese Academic of Mechanical Sciences; DEng, University of Science and Technology of China

Ying ZHENG 鄭穎 BSc, Beijing Medical University; MPhil, PhD, The Chinese University of Hong Kong

Wenhua ZHENG 鄭文華 BMed, MMed, Sun Yat-Sen University of Medical Sciences; PhD, McGill University

### ASSOCIATE PROFESSOR 副教授

Ying BIAN 卞鷹 MSc, PhD, Shangdong University Ging CHAN 陳勁 PhD, University of Illinois

William Chong Hang CHAO 周昶行 MBiochem, University of Oxford; PhD, University of London

Yunlu DAI 代雲路 BEng, Harbin Engineering University; DSc, Chinese Academy of Sciences

Lijun DI 狄利後 BSc, University of Inner Mongolia; MSc, Chinese Academy of Sciences; PhD, Tsinghua University

Chengwei HE 何承偉 MSc, Guangdong Medical College; PhD, Sun Yat-sen University of Medical Sciences

Maggie Pui Man HOI 許貝文 BSc(Hon), University College London; PhD, University of Cambridge

Henry Hang Fai KWOK 郭珩輝 BSc, PhD, University of Ulster

Leo Tsz On LEE 李子安 BSc, MPhil, The Chinese University of Hong Kong; PhD, The University of Hong Kong

Gang LI 李剛 BMed, MMed, Shanxi Medical University; MD, Academy of Military Medical Sciences

Peng LI 李鵬 BSc, MSc, Chengdu University of TCM; MSc, PhD, University of Macau

Ligen LIN 林理根 BE, Zhejiang University; PhD, Shanghai Institute of Materia Medica, CAS

Tzu-ming LIU 劉子銘 BEng, PhD, Taiwan University

Jiahong LU 路嘉宏 BSc, MSc, Central South University; PhD, Hong Kong Baptist University

Jinjian LU 陸金健 BSc, Zhejiang Normal University; PhD, Shanghai Institute of Materia Medica, CAS

Defang OUYANG 歐陽德方 BSc, MSc, Shenyang Pharmaceutical University; PhD, University of Queensland

Terence Chuen Wai POON 潘全威 BSc, The Chinese University of Hong Kong; MSc, University of Manchester; PhD, The Chinese University of Hong Kong

Joong Sup SHIM 沈仲燮 BSc, MSc, Dongguk University; DEng, Sejong University Kin Yip TAM 譚建業 BSc, Hong Kong Baptist College; MPhil, Hong Kong Polytechnic University; PhD, University of Oxford Jianbo WAN 萬建波 BSc, Wuhan University; MSc, China Pharmaceutical University; MSc, PhD, University of Macau Peng WANG 王鵬 BSc, Peking University; MEng, Cornell University; PhD, University of Wisconsin-Madison Ruibing WANG 王瑞兵 BSc, University of Jilin; PhD, Queen's University Vivien Yafan WANG 王雅凡 BSc, MSc, PhD, University of California, San Diego Ying WANG 王穎 BSc, Shenyang Pharmaceutical University; BSc, MSc, Jilin University; PhD, The University of Hong Kong Chris Koon Ho WONG 黃冠豪 BSc, PhD, University of Melbourne Ruiyu XIE 謝瑞瑜 BSc, Sun Yat-Sen University; PhD, University of Arizona Xiaoling XU 徐曉玲 BSc, West China Normal University; MSc, Institute of Hydrobiology, Academia Sinica; PhD, University of Maryland Hua YU 余華 BSc, China Pharmaceutical University; MSc, China Pharmaceutical University; MSc, University of Macau; PhD, University of Macau Hongjie ZHANG 張紅杰 BEng, MEng, Zhengzhou University; DEng, University of Tokushima Qingwen ZHANG 張慶文 BE. PhD. China Pharmaceutical University Xuanjun ZHANG 張宣軍 BEng, Shandong Institute of Light Industry; MSc, Anhui University; DSc, University of Science and Technology of China Jing ZHAO 趙靜 BSc, Chengdu University; MSc, University of Macau; PhD, China Pharmaceutical University BSc. MSc. Jilin University: PhD. The Chinese University of Hong Kong ASSISTANT PROFESSOR 助理教授 Wa Kam CHANG 曾華鑫 BSc, Peking University; MPhil, PhD, Yale University

956

Anna Wai San CHEANG 鄭慧珊 BSc (Hon), PhD, The Chinese University of Hong Kong

Qiang CHEN 陳強 BAg, Jimei University; MSc, Ocean University of China; DSc, Xiamen University

Xiaojia CHEN 陳肖家 BSc, MSc, Peking University; MSc, PhD, University of Macau

Cheong Meng CHONG 鐘昌明 PhD, University of Macau

Kai MIAO 苗凱 BSc, Hebei Normal University of Science & Technology; DAg, China Agricultural University

Ningyi SHAO 邵寧— BMed, Nanjing Medical University; DSc, Chinese Academy of Sciences

Robert David SMITH BSc, Coventry University; MMedSc, Karolinska Institutet; PhD, University of Keele

Carolina Oi Lam UNG 吳靄琳 BPharm, Master of Health Informatics, The University of Sydney; PhD, University of Macau

Shengpeng WANG 王勝鵬 BSc, Chengdu University of TCM; PhD, University of Macau

Jinchao WEI 魏金超 BSc, Henan University; MMed, Tianjin University of Traditional Chinese Medicine; PhD, University of Macau

Yonghua ZHAO 趙永華 Master of Integrative Clinical Medicine, Liaoning University of Traditional Chinese Medicine; Doctor of Chinese Internal Medicine, Guangzhou University of Chinese Medicine

Zhangfeng ZHONG 鍾章鋒 BSc, Guangdong Medical University; MSc, PhD, University of Macau

# SENIOR INSTRUCTOR 高級導師

Weiwei LIU 劉蔚蔚 BSc, Peking University; PhD, Baylor College of Medicine; PharmD, University of Wisconsin

Jung Woo PARK 朴政友 BSc, MSc, PhD, Michigan State University

Kaeling TAN 陳凱靈 BSc, PhD, University of Melbourne

Li WANG 主題 BSc, Shandong Normal University; MSc, Capital Normal University; PhD, Peking Union Medical College

### UM Macau Fellow 澳大濠江學者

Chon Lok LEI 李俊樂 BSc, Imperial College London; PhD, University of Oxford

Chon Kit CHOU 曹俊傑 MSc, PhD, Kao Hsiung Medical University

### RESEARCH ASSISTANT PROFESSOR 助理研究教授

Ping CHEN 陳平 BSc, MSc, DSc, Sichuan University

Bei LI 李蓓 BSc, MEng, Beijing University of Chemical Technology; PhD, The University of Queensland

Heng SUN 孫恆 BSc, Shandong Normal University; PhD, University of Chinese Academy of Sciences

## ADJUNCT CHAIR PROFESSOR 客席講座教授

Aaron CIECHANOVER DSc, Israel Institute of Technology; MSc, MD, Hebrew University

Fu GAO 高福 BSc, DVM, Shanxi Agricultural University; MSc, Beijing Agricultural University; DPhil, Oxford University

Nan-Shan ZHONG 鐘南山 BMed, Beijing Medical University

# ADJUNCT DISTINGUISHED PROFESSOR 客席特聘教授

Gregory CHENG 鄭彥銘 MD, PhD, University of Toronto

# ADJUNCT PROFESSOR 客席教授

Chi-Chung CHAN 陳誌中 BSc, The Chinese University of Hong Kong; PhD, University of Ottawa

Ligang CHEN 陳禮剛 BS, The Southwest Medical University; PhD, Sichuan University

Yanzheng HE 何廷政 BS, Luzhou Medical College; PhD, The Second Military Medical University, Shanghai

Ligong LU 陸驪工 MD, Sun Yat-sen University; PhD, Guangdong Cardiovascular Institute of Guangdong Province

Guang Hui LUO 羅光輝 MD, Guangzhou Medical University; MSc, Norman Bethune University of Medical Science; PhD, Chinese Academy of Sciences Baoquan PAN 潘寶全 MD, Sun Yat-sen University; PhD, Jinan University

Valter SERGO "LAUREA" BS, University of Trieste; PhD, Italian Ministry of University

Jingbo WU MD, Chongqing Medical University; MSc, Cancer Hospital of Sun Yet-sen University

Ting XIE 解亭 BSc, MSc, Beijing Agricultural University; PhD, Rutgers University

Qiang YU 于强 MB, Qingdao University; MSc, Chinese Academy of Medical Sciences; PhD, Queen's University

Weide ZHONG 鐘帷德 BMed, Sun Yat-sen University; MMed, DMed, Central South University

# ADJUNCT PROFESSOR IN PRACTICE 客席教授(實務)

Tai Ip CHAN 陳泰業 MD, Shanghai Medical University

Chun Wing CHEUNG 張振榮 MD, Jinan University

Feng HU 胡峰 MD, MSc, Nanchang University

Shui Meng LIU 劉水明 MD, Chongqing Medical University

Hok Cheung MA 馬學章 MD, University of Hong Kong; PhD, University of Minnesota

Gangli XIAO 肖光莉 MD, Sichuan Medical University

Xue Bin XIE 謝學斌 MD, Jiang Xi Medical University; MSc, Sun Yat-sen University

De Li XU 徐德利 MD, China Medical University

# ADJUNCT ASSOCIATE PROFESSOR 客席副教授

Wenli ZHU 朱文立 MD, Sun Yat-sen University; PhD, Jinan University

# ADJUNCT ASSOCIATE PROFESSOR IN PRACTICE 客席副教授(實務)

Yabing CAO 曹亞兵 MD, Henan Medical University; MSc, Sun Yat-sen University Kin long CHAN 陳建勇 MD, MSc, Jinan University

Ian CHE 謝昕 MD, Sun Yat-sen University

Wai Kuok CHU 朱偉國 MD, Sun Yat-sen University

Chon Wa LAM 林俊華 MD, National Defense Medical Center

Zhengfeng LU 盧正烽 MD, Sun Yat-sen University

Kam Leong NGAI 倪金良 BSc, Macao Polytechnic Institute

Xi Bin QIU 丘熹彬 MD, MSc, Sun Yat-sen University

Hewick Hon Ho YU 余漢濠 MD, Jinan University; MSc, Macau University of Science and Technology

## ADJUNCT ASSISTANT PROFESSOR 客席助理教授

Tan-Hsia CHEN 陳丹霞 MD, China Medical University; MSc, Chung Shan Medical University; PhD, Chung Shan Medical University

### ADJUNCT LECTURER 客席講師

Enqin LI 李恩琴 BMed, DMed, Huazhong University of Science and Technology

# APPENDICES / STAFF LIST Fundamental Academic Units

# Faculty of Law

# DEAN 院長

Io Cheng TONG 唐曉晴 LLB, University of Macau; LLM, Sun Yat-sen University; PhD, Chinese Academy of Social Sciences; Private Notary (inactive)

## ASSOCIATE DEAN 副院長

Augusto TEIXEIRA GARCIA LLB, LLM, University of Coimbra

## ASSOCIATE DEAN 副院長

Dan WEI 魏丹 LLB, Peking University; LLM, PhD of Law, University of Coimbra

## ASSISTANT DEAN 助理院長

Teng Pio IAU 邱庭彪 LLB, LLM, University of Macau; PhD, China University of Political Science and Law; Member of the Legislative Assembly of the Macao SAR

### HEAD OF DEPARTMENT 系主任

### Department of Global Legal Studies 環球法律學系

Rostam J. NEUWIRTH High Diploma of Law, Universite d'Auvergne; LLM, Karl-Franzens Universitat Graz; LLM, McGill University; LLD, European University Institute

## INTERIM HEAD OF DEPARTMENT 代系主任

Department of Macao Legal Studies 澳門法學系

Augusto TEIXEIRA GARCIA LLB, LLM, University of Coimbra

# EMERITUS PROFESSOR 榮休教授

Gaolong LIU 劉高龍 LLB, LLM, University of Beijing; LLM, University of Dalhousie

Cândida da Silva Antunes PIRES 李淑華 LLB, LLM, Classic University of Lisbon; Lawyer (inactive)

#### DISTINGUISHED PROFESSOR 特聘教授

Jianhong LIU 劉建宏 MA, Nankai University; MA, PhD, University at Albany, State University of New York

#### PROFESSOR 教授

Jianhong FAN 范劍虹 BA, Hangzhou (Zhejiang) University; LLM, University of Kiel; PhD, University of Freiburg

Chaoyang JIANG 蔣朝陽 LLB, LLM, PhD, Peking University

Rostam J. NEUWIRTH High Diploma of Law, Universite d'Auvergne; LLM, Karl-Franzens Universitat Graz; LLM, McGill University; LLD, European University Institute

Bing SHUI 稅兵 LLB, Sichuan Normal University; LLM, PhD, Peking University

Io Cheng TONG 唐曉晴 LLB, University of Macau; LLM, Sun Yat-sen University; PhD, Chinese Academy of Social Sciences; Private Notary (inactive)

Guangjian TU 涂廣建 Diploma of Law, Zhejiang University; Bachelor of Medicine in Forensic Medicine, Tong Ji Medical University; LLM, PhD, University of Aberdeen

Yu WANG 王禹 LLB, Renmin University of China; LLM, PhD of Law, Peking University

Dan WEI 魏丹 LLB, Peking University; LLM, PhD of Law, University of Coimbra

### ASSOCIATE PROFESSOR 副教授

Manuel Marcelino ESCOVAR TRIGO 尹思哲 LLB, LLM, University of Coimbra; Director of Legal and Judicial Centre of the Macao SAR

Augusto TEIXEIRA GARCIA LLB, LLM, University of Coimbra

Teng Pio IAU 邱庭彪 LLB, LLM, University of Macau; PhD, China University of Political Science and Law; Member of the Legislative Assembly of the Macao SAR

Zhe LI 李哲 LLB, LLM, PhD, China University of Political Science and Law

Perumal RAMASWAMY 白祿孟 BA, LLB, Bhara thiar University; PG in International Trade Law, University Institute of European

962

Studies; LLM, Cochin University; MSc, Portuguese Catholic University of Lisbon and Inter-University Institute of Macau; MPhil, Jawaharlal Nehru University; PhD, University of Hong Kong

Alexandr SVETLICINII Licentiate in Law, Free International University of Moldova; LLM, Central European University; Master of Research (Law), PhD, European University Institute

Paulo Jorge TAVARES CANELAS DE CASTRO

LLB, LLM, University of Coimbra; LLM, University of Nice, PG in European Community Law and International Relations, Institut Européen des Hautes Etudes Internationales

Augusto TEIXEIRA GARCIA LLB, LLM, University of Coimbra

Chao WANG 汪超 LLB, Shanghai Institute of Foreign Trade; MA, LLM, PhD, University of British Columbia

Xiaobo ZHAI 翟小波 LLB, Zhengzhou University; LLM, Peking University; PhD, Chinese Academy of Social Sciences

#### ASSISTANT PROFESSOR 助理教授

Li DU 杜立 Double BA Degree of Medicine and Law, LLM, Wuhan University; PhD, University of Alberta

Célia Filipa FERREIRA MATIAS LLB, University of Lisbon; PG in Business Law, University of Coimbra; LLM, PhD, University of Hong Kong

Miguel Ângelo LOUREIRO MANERO DE LEMOS LLB, LLM, PhD, University of Coimbra

João LORETO ILHÃO MOREIRA LLB, LLM, University of Coimbra; MSt, Oxford University; PhD, University of Oxford

Teresa LANCRY G ALBUQUERQUE E SOUSA ROBALO LLB, University of Lisbon; LLM, PhD, University of Macau;

Sara MIGLIORINI

Double Degree Program in Italian and French Law, University Paris 1, Panthéon-Sorbonne and University of Florence; LLM, University Paris 1, Panthéon-Sorbonne (with distinction); PhD, the European University Institute

Isabel MOUSINHO DE FIGUEIREDO LLB, LLM, PhD, University of Lisbon

Kei Kei NG 吳奇琦 LLB, LLM, PhD University of Macau

### LECTURER 講師

Heng Man HO 何慶文 LLB, Jinan University; LLM, PhD, University of Macau

#### SENIOR INSTRUCTOR 高級導師

Chio Keong CHIN 錢釗強 LLB, LLM, PhD, University of Macau

Lam Lam CHU 朱琳琳 LLB, LLM, PhD, University of Macau

Hugo Emanuel DE MIRANDA RODRIGUES DUARTE FONSECA LLB, LLM, University of Coimbra;

Man Teng IONG 翁文挺 LLB, New University of Lisbon, Portugal; LLM, University of Macau

Yiwa JIANG 蔣依娃 LLB, LLM, University of Coimbra;

Yut Ching KAN 簡月清 BSc, MSc, Oklahoma State University; PhD, Preston University

Wa KONG 江華 LLB, Renmin University of China; LLM, PhD, University of Macau

Kin Kei LEE 李建基 LLB, University of Macau; LLM, China University of Political Science and Law; PhD Candidate, Macau University of Science and Technology

Cheng Hang LEONG 梁靜短 LLB, Hua Qiao University; LLM, PhD, University of Macau

Ke LI 李可 LLB, China University of Politics and Law; LLM, University of Southampton; PhD, University of Macau

Zhe MA 馬哲 LLB, Peking University; LLM, PhD, University of Macau

# ADJUNCT PROFESSOR 客席教授

Guoqiang ZHAO 趙國強 LLB, east China Normal Institute; LLM, Shanghai Academy of Social Science; PhD, Remin University of China

Mauro BUSSANI J.D, Juris Doctor, University of Trieste

Anthony CARTY LLB, Queen's University Belfast; LLM, University of London; PhD, Cambridge University

Duanhong CHEN 陳端洪 BA, Hunan Normal University; LLM, China University of Political Science and Law; PhD, Chinese Academy of Social Sciences

Zuoer CHEN 陳佐洱 Graduate of Foreign Language Department, Fujian Normal College

964

Guobin CUI 崔國斌 LLM, Peking University; LLM, Yale University; PhD, Peking University

Wei FENG 馮巍 LLM, Peking University

Dayuan HAN 韓大元 LLB, Jilin University; LLM, PhD Remin University of China

Dongxue HAN 韓冬雪 BA, Master, Jilin University; PhD, Jilin University

Jin HUANG 黄進 LLM, Hubei Institute of Finance and Economics; LLM, PhD, Wuhan University

Yong HUANG 黃勇 LLB, Peking University; LLM, PhD, University of International Business and Economics

Guy LEFEBVRE Licence in Law, LLM, University of Montreal; LLM, University College London

Yanping LIN 林燕萍 PhD, East China University of Political Science and Law

Anabela Maria PINTO DE MIRANDA RODRIGUES LLB, LLM, PhD, University of Coimbra

António PINTO MONTEIRO LLB, LLM, PhD, University of Coimbra

Manuel PORTO LLM, University of Coimbra; M.Phil in Economics, University of Oxford; PhD, University of Coimbra

Geping RAO 饒戈平 Bachelor, Heilongjiang University; LLM, Peking University

Francis SNYDER B.A.(Hons.), Yale University, J.D. Harvard Law School, PhD, Université de Paris Panthéon-Sorbonne

Youhai SUN 孫佑海 LLB, LLM, Jilin Univeristy; PhD, Nanjing Agricultural University

Bea VERSCHRAEGEN LLM, University of London; European Master in Mediation, Universitat de Barcelona (Les Heures); LLM, University of Vienna; PhD, University of Vienna

Dário Moura VICENTE PhD, University of Lisbon Guiguo WANG 王貴國 Diploma, University of Foreign Studies; LLM, Columbia University, Peking University; JSD, Yale University

Zhenmin WANG 王振民 LLB, Zhengzhou University; LLM, PhD, Remin University of China

Lixin YANG 楊立新

Associate degree, Majoring in Chinese Language and Literature, Tonghua Normal University; Associate degree, Majoring in Law, China University of Political Science and Law; Graduating from class for junior judges, Law School, Renmin University of China

Hanmin ZHOU 周漢民 LLM, Shanghai University of International Business and Economics; Honorary Doctor of Law, University of Liverpool

Pingxue ZOU 鄒平學 LLB, LLM, Wuhan University; PhD, Chinese Academy of Social Sciences

#### ADJUNCT ASSISTANT PROFESSOR 客席教授

Wei WANG 王薇 BA, Shanghai International Studies University; LLB, University of Macau; PhD, China University of Political Science and Law

#### PART-TIME ASSOCIATE PROFESSOR 兼職副教授

Man Chong FONG 馮文莊 LLB, LLM, University of Macau; PhD, Renmin University of China; Judge of Intermediate Court of the Macao SAR

Man leng MAI 米萬英 Diploma of Portuguese Language and Culture, University of Coimbra; Introduction to Macau Law, University of Macau; LLB, LLM, PhD, People's University of China; Assistant Prosecutor General of the Macao SAR

Wai Fong TOU 杜慧芳 LLB, LLM, University of Macau; LLM, PhD, Renmin University of China;

### PART-TIME ASSISTANT PROFESSOR 兼職助理教授

Kam Chon CHOU 曹錦俊 BA, LLB, LLM, University of Macau

Wai Neng HO 何偉寧 LLB, LLM, University of Macau; Judge of Intermediate Court of the Macao SAR

Nuno Fernando Correia Neves PEREIRA LLB, University of Macau; Principal Advisor, Office of the Secretary for Administration and Justice of Macao SAR

Chan Io SAM 沈振耀 LLB, University of Macau; LLM, City University of Macau Hio Fong TONG 唐曉峰 LLB, University of Macau; Judge of Intermediate Court of the Macao SAR

Vai Va VONG 王偉華 LLB, University of Macau; PhD, Macau University of Science and Technology; Assistant Prosecutor General of the Macao SAR

### PART-TIME LECTURER 兼職講師

Chi Weng CHAN 陳志榮 LLB, University of Macau; Judge of the Primary Court of Macao SAR Government

Io Chao CHAN 陳曉疇 Bachelor of Translation and Interpretation, LLB, LLM, University of Macau; Judge of the Primary Court of Macao SAR Government

Luis Gonçalo GOMES DE ARAÚJO VASCONCELOS PESSANHA LLB, University of Nova Lisboa; PG in Public Law, Portuguese Catholic University; LLM, University of Macau; Legal Advisor, Legislative Assembly of the Macao SAR

José Eduardo ISAAC SOARES DUARTE Bachelor of Economy, University of Coimbra; BSc, MSc, University of London

Ieng Ha LOU 盧映霞 LLB, University of Macau; Bachelor of Portuguese Language, Beijing Foreign University; Judge of the Primary Court of the Macao SAR

Sio Kei SOU 蘇兆基 LLB, LLM, University of Macau; Lawyer

Chi Keong TANG 鄧志強 LLB, LLM, University of Macau; Lawyer

lok lp VONG aliás Francisca VONG 黃玉葉 LLB, University of Macau; Master of Philosophy, University of Saint Joseph; Legal Advisor of the Legislative Assembly of the Macao SAR Government

Wai Kit WONG, Bernard 黃偉傑 Bachelor of Medicine, Medical College of Jinan University; Medical Doctor of Conde S. Januário Hospital of the Macao SAR

Hio WU 胡曉 LLB, LLM, Peking University; PhD, China University of Political Science and Law; Prosecutor of the Public Prosecutions Office of the Macao SAR

#### PART-TIME SENIOR INSTRUCTOR 兼職高級導師

Sok Hei VONG 黃淑禧 LLB, LLM, University of Macau; Lawyer

### PART-TIME INSTRUCTOR 兼職導師

Keng Hei VONG 黃景禧 LLB, University of Macau; LLM, Sun Yat-sen University; Lawyer

# APPENDICES / STAFF LIST Fundamental Academic Units

# Faculty of Science and Technology

DEAN 院長

Cheng-Zhong XU 須成忠 B.S., M.S., Nanjing University; Ph.D., The University of Hong Kong

# ASSOCIATE DEAN 副院長

Academic Affairs Fai WONG 黃輝 B.S., M.S., University of Macau; Ph.D., Tsinghua University

# **Research and Graduate Studies**

Xiao-Chuan CAI 蔡小川 B.S., Peking University; M.S., Ph.D., New York University

# ASSISTANT DEAN 助理院長

Administrative Affairs Ningyi DAI 戴寧怡 B.S., Southeast University, Nanjing; M.S., Ph.D., University of Macau

# **Student Affairs**

Chi Chiu LAM 林智超 B.S., M.S., University of Macau; Ph.D., University of Alberta

# HEAD OF DEPARTMENT 系主任

# Department of Civil and Environmental Engineering 土木及環境工程系

Wanhuan ZHOU 周萬歡 B.S., M.S., Zhejiang University; Ph.D., Hong Kong Polytechnic University

# Department of Computer and Information Science 電腦及資訊科學系

Zhiguo GONG 鞏志國 B.S., Hebei Normal University; M.S., Peking University; Ph.D., Institute of Mathematics, Chinese Academy of Science

# Department of Electrical and Computer Engineering 電機及電腦工程系

Man Chung WONG 黃民聰 B.S., M.S., University of Macau; Ph.D., Tsinghua University

# Department of Electromechanical Engineering 機電工程系

Chi Tat KWOK 郭志達 B.S., MPhil, Ph.D., The Hong Kong Polytechnic University

#### **Department of Mathematics**

Xiao-Chuan CAI 蔡小川 B.S., Peking University; M.S., Ph.D., New York University

#### Department of Physics and Chemistry 物理及化學系

Songnan QU 曲松楠 B.S., Eng.D., Jilin University

#### ASSOCIATE HEAD OF DEPARTMENT 副系主任

Department of Civil and Environmental Engineering 土木及環境工程系 Yong Jie LI 黎永杰 B.S., Peking University; Ph.D., Hong Kong University of Science and Technology

#### Department of Computer and Information Science 電腦及資訊科學系

Chi Man VONG 黃志文 B.S., M.S., Ph.D., University of Macau

#### Department of Electrical and Computer Engineering 電機及電腦工程系

Sai Weng SIN 冼世榮 B.S., M.S., Ph.D., University of Macau

#### Department of Electromechanical Engineering 機電工程系

Vai Kuong SIN 冼偉光 B.S., National Taiwan University; M.S., Arizona State University; Ph.D., University of Macau

# Department of Mathematics

Che Man CHENG 鄭智文 B.S., Ph.D., The University of Hong Kong

## Department of Physics and Chemistry 物理及化學系

Bingpu ZHOU 周冰樸 B.S., M.S., Sun Yat-Sen University; Ph.D., The Hong Kong University of Science and Technology

#### CHAIR PROFESSOR 講座教授

Yonghua SONG 宋永華 B.Eng., Chengdu University of Science and Technology (now Sichuan University); Ph.D., China Electric Power Research Institute; DSc., Brunel University

Rui Paulo da Silva MARTINS 馬許願 B.E., M.S., Ph.D., Instituto Superior Técnico da Universidade Técnica de Lisboa

Zikang TANG 湯子康 B.S., Zhejiang University; MPhil, PhD., Tohoku University

#### DISTINGUISHED PROFESSOR 特聘教授

Xiao Qing JIN 金小慶 B.S., Nanjing Normal University; MPhil, The Chinese University of Hong Kong; Ph.D., The University of Hong Kong Jerome YEN 顏至宏 Ph.D., University of Arizona

Ka-Veng YUEN, Kelvin 阮家榮 B.S., National Taiwan University; MPhil, Hong Kong University of Science and Technology; Ph.D., California Institute of Technology

Lei ZHU 祝雷 B.E., Nanjing Institute of Technology; M.S., Southeast University; Ph.D., University of Electrocommunications

#### PROFESSOR 教授

Yang CHEN

B.S., National University of Singapore; M.S., Illinois Institute of Technology; Ph.D., University of Massachusetts at Amherst

Vai Pan IU 姚偉彬 Dip, Hong Kong Baptist College; M.S., University of Southampton; Ph.D., The University of Hong Kong

Yun-Tung LAU 劉潤東

B.S., Sun Yat-sen Universit. M.S., University of Maryland University College, Ph.D., Massachusetts Institute of Technology

Shaodan MA 馬少丹 B.Econ, B.E., MEng, Nankai University; Ph.D., The University of Hong Kong

Pui In MAK 麥沛然 B.S., Ph.D., University of Macau

Kai Meng MOK 莫啟明 B.S., M.S., Ph.D., University of Washington

Hui PAN 潘暉 B.S., Xidian University; Ph.D., National University of Singapore

Chi Man PUN 潘治文 B.S., University of Macau; M.S., University of Macau; Ph.D., The Chinese University of Hong Kong

Carlos Jorge Ferreira SILVESTRE B.S., M.S., Ph.D., Instituto Superior Técnico da Universidade Técnica de Lisboa

Haiwei SUN 孫海衛 B.S., M.S., Sun Yat-sen University; Ph.D., The Chinese University of Hong Kong

Kam Weng TAM 譚錦榮 B.S., Ph.D., University of Macau; Ph.D., Technical University of Lisbon

Lap Mou TAM 譚立武 B.S., National Chiao Tong University; M.S., Ph.D., Oklahoma State University Seak Weng VONG 黃錫榮 B.Ed., M.S., University of Macau; Ph.D., City University of Hong Kong

Guichuan XING 邢貴川 B.S., Fudan University; Ph.D., National University of Singapore

Qingsong XU 徐青松 B.S., Beijing Institute of Technology; M.S., Ph.D., University of Macau

Pak Kin WONG 王百鍵 M.S., University of Warwick; Ph.D., The Hong Kong Polytechnic University

Yicong ZHOU 周怡聰 B.S., Hunan University; M.S., Ph.D., Tufts University

#### ASSOCIATE PROFESSOR 副教授

Long CHEN 陳龍 B.S., Peking University; MSE, Institute of Automation, Chinese Academy of Sciences; M.S., University of Alberta; Ph.D., University of Texas at San Antonio

Wai Wa CHOI 蔡偉華 B.S., M.S., Ph.D., University of Macau

Deng DING 丁燈 B.S., Guangzhou Normal Colleage; M.S., Ph.D., Sun Yat-sen University

Guokang ER 鄂國康 B.S., Zhengzhou Institute of Technology; M.S., Ph.D., Southwest Jiaotong University

Simon James FONG 方正天 B.E., Ph.D., La Trobe University

Jingzhi GUO 過競志 BEcon, University of International Business and Economics; M.S., University of Manchester; Ph.D., Griffith University

Fen HOU 侯芬 B.S., M.S., Yunnan University; Ph.D., Beijing University of Posts and Telecommunications; Ph.D., University of Waterloo

Guanghui HU 胡光輝 B.S., M.S., Sichuan University; Ph.D., Hong Kong Baptist University

Kwun Nam HUI 許冠南 B.S., Hong Kong University of Science and Technology; MPhil., Ph.D., The University of Hong Kong

Hou IAN 殷灝 B.S., M.Eng., Cornell University; D.S., Chinese Academy of Sciences

Kit Ian KOU 高潔欣 B.Ed., M.S., Ph.D., University of Macau Kun Pang KOU 高冠鵬 B.S., University of Macau; M.S., Ph.D., University of Manchester Chi Seng LAM 林智聲 B.S., M.S., Ph.D., University of Macau Man Kav LAW 羅文基 B.S., Ph.D., Hong Kong University of Science and Technology Siu Long LEI 李兆降 B.Ed., M.S., University of Macau; Ph.D., Hong Kong University of Science and Technology leng Tak LEONG 梁應德 B.A., The University of Hong Kong, Ph.D., Purdue University Haifeng LI 李海峰 B.Eng., M. Eng., University of Science and Technology Beijing; Ph.D., RWTH Aachen University Zhi LIU 劉志 B.S., M.S., Lanzhou University; Ph.D., Hong Kong University of Science and Technology Kin Ho LO 羅健豪 B.S., M.S., University of Macau., University of Manchester, Ph.D., City University of Hong Kong Man Hoi LOK 陸萬海 B.S., National Taiwan University; M.S., Carnegie-Mellon University; Ph.D., University of California at Berkeley Yan LU 路延 BEng, M.S., South China University of Technology; Ph.D., Hong Kong University of Science and Technology Seng Peng MOK 莫昇萍 B.S., National Yang-Ming University: Ph.D., Johns Hopkins University Kar Wei NG 吳嘉偉 B.S., MPhil., Hong Kong University of Science and Technology; Ph.D., University of California, Berkelev Sio Hang PUN 潘少恆 B.S., Ph.D., University of Macau; M.S., The University of Porto Wai Meng QUACH 郭偉明 B.S., University of Macau; M.S., University of Manchester; Ph.D., Hong Kong Polytechnic University Huaiyu SHAO 邵懷字 B.S., Ph.D., Peking University Hojae SHIM 沈虎宰 B.S., Seoul National University; M.S., Ph.D., Ohio State University

Yain Whar SI 池英華 B.S., M.S., University of Macau; Ph.D., Queensland University of Technology Yan SU 粟燕 B.S., Tsinghua University; M.S., Hong Kong University of Science & Technology; Ph.D., University of Minnesota Guoxing SUN 孫國星 B.S., M.S., Beijing Normal University; Ph.D., Hong Kong University of Science and Technology Sik Chung TAM 讀錫忠 B.A., National Chung-Hsing University; Ph.D., University of Missouri-Columbia Leong Hou U, Ryan 余亮豪 B.S., National Chi Nan University; M.S., University of Macau; Ph.D., The University of Hong Kong Mang I VAI 韋孟宇 B.S., Huaquao University; M.S., Jinan University; Ph.D., University of Macau Feng WAN 萬峰 B.S., Tianiin University: M.S., Zheijang University: Ph.D., Hong Kong University of Science and Technology Shuang Peng WANG 王雙鵬 B.E., Jilin University: Ph.D., Chinese Academy of Sciences Seng Fat WONG 黃承發 B.S., National Cheng Kung University; MPhil, Hong Kong University of Science and Technology; Ph.D., Hong Kong Polytechnic University Yuan WU 吳遠 B.S., M.S., Zheijang University; Ph.D., Hong Kong University of Science and Technology Jie XU 徐杰 B.Eng., M.Eng., Zhejiang University; Ph.D., Hong Kong University of Science & Technology Lihu XU 徐禮虎 B.S., Shandong University; M.S., Peking University; Ph.D., Imperial College of Science, University of London Dinggi YANG 楊丁奇 B.E., Xidian University; M.E., Telecom SudParis; Ph.D., Telecom SudParis/Pierre and Marie Curie University (Paris 6) Wangji YAN 顏王吉 B.S., M.S., Central South University; Ph.D., Hong Kong University of Science and Technology Zhixin YANG 楊志新 B.E., Huazhong University of Science and Technology; Ph.D., Hong Kong University of Science and Technology Jun YIN 殷俊

B.S., M.S., Peking University; Ph.D., Hong Kong University of Science and Technology

Yibo ZHANG, Bob 張一博 B.A., York University; M.A.Sc, Concordia University; Ph.D., University of Waterloo

Jiantao ZHOU 周建濤 B.S., Dalian University of Technology; M.S., Southeast University; Ph.D., Hong Kong University of Science and Technology

Yan ZHU 諸嫣 B.S., Shanghai University; M.S., Ph.D., University of Macau

#### ASSISTANT PROFESSOR 助理教授

Tai Man AO IEONG 歐陽棣文 B.S., M.S., University of Ottawa; Ph.D., Hong Kong Polytechnic University

Yongqing CAI 蔡永青 B.S., M.S., Northwestern Polytechnic University; Ph.D., National University of Singapore

Zhongya CAI 蔡忠亞 B.S., M.S., Ocean University of China; Ph.D., National University of Singapore

Chi Hang CHAN 陳知行 B.S., University of Washington; M.S., Ph.D., University of Macau

Iat Neng CHAN 陳溢寧 B.S., National Taiwan Normal University; M.S., Ph.D., University of California, San Diego

Binmeng CHEN 陳斌猛 B.S., Southeast University; M.S., Ph.D., Hong Kong University of Science and Technology

Shi CHEN 陳石 B.S., MPhil, Zhejiang University; Ph.D., National University of Singapore

Yong CHEN 陳勇 B.S., Communication University of China; Ph.D., Institute of Microelectronics of Chinese Acadey of Sciences

Pedro CHEONG 張子康 B.S., M.S., Ph.D., University of Macau

Valentino Anok Melo CRISTINO 紀天龍 B.S., M.S., Ph.D., Instituto Superior Tecnico, Portugal

Liang GAO 高亮 B.S., M.S., Tsinghua University; Ph.D., Hong Kong University of Science and Technology

Mingqiang GUO 郭銘強 B.S., Xidian University; M.S., Fudan University; Ph.D., University of Macau

Tianwei HAO 郝天偉 B.S., Chengdu University of Information Technology; M.S., Ph.D., Hong Kong University of Science and Technology Guo HONG 洪果 B.S., Sichuan University; Ph.D., Peking University

Mo HUANG 黃沫 B.S., M.S., Ph.D., Sun Yat-sen University

Ruey-Song HUANG 黃瑞松 B.S. National Chung Cheng University; M.S. National Chung Cheng University, University of California; Ph.D., University of California

Weng Fai IP 葉穎暉 B.S., University of Cambridge; M.S., Hong Kong University of Science and Technology; Ph.D., University of Manchester

Yanwei JIA 賈艷偉 B.S., M.S., Hunan University; Ph.D., National University of Singapore

Yang JIANG 江洋 B.S., M.S., Ph.D., University of Macau

Sin Chi KUOK 敦善知 B.S., M.S., Ph.D., University of Macau

Keng Weng LAO 劉景榮 B.S., M.S., Ph.D., University of Macau

Ka Meng LEI 李家明 B.S., Ph.D., University of Macau

Li LI 栗力 B.S., Tianjin University; M.S., The Ohio State University; Ph.D., The Ohio State University

Li LUO 羅力 B.S., Jilin University; M.S., Chang'an University; Ph.D., The Hong Kong University of Science and Technology

Hongchao LIU 劉宏超 B.S., Beijing University; Ph.D., Hong Kong University of Science and Technology

Peng Un MAK 麥炳源 B.S., National Taiwan University; M.S., Ph.D., Michigan State University

Ping SHEN 申平 B.S., Zhejiang University; Ph.D., Hong Kong University of Science and Technology

Huabin SHI 施華斌 B.S., Ph.D., Tsinghua University

Ka Fai UN 阮家輝 B.S., National Taiwan University; M.S., Ph.D., University of Macau

Chi Kong WONG 黃志剛 B.S., M.S., University of Macau; Ph.D., Tsinghua University B.S., Shanghai Jiao Tong Univeristy; Ph.D., The Chinese University of Hong Kong Qiwen XU 徐啟文 B.S., East China Normal University; Ph.D., University of Oxford Pengyang WANG 汪澎洋 B.E., Xidian University, M.E. Beijing University of Posts and Telecommunications: Ph.D., Univerity of Central Florida Qinaging WU 武慶慶 B.S. South China University of Technology; Ph.D. Shanghai Jiao Tong University Xiaowei WU 吳曉偉 B.S., University of Science and Technology of China; Ph.D., University of Hong Kong Weihan YU 于維翰 B.S., M.S., Ph.D., University of Macau Qiang ZENG 曾強 B.S., Beijing Normal University; M.S., Ph.D., University of Illinois at Urbana-Champaign Hongcai ZHANG 張洪財 B.S., Ph.D., Tsinghua University Liming ZHANG 張立明 B.S., Nankai University; M.S., East China Institute of Technology; Ph.D., University of New England Minglei ZHANG 張明磊 B.S., Tianjin University; Ph.D. Institute of Microelectronics, Chinese Academy of Sciences Ping ZHANG, Peter 張平 B.S., Nankai University; ; M.S., Ph.D., Rice University Houston Junwen ZHONG 鍾俊文 B.S., Ph.D., Huazhong University of Science and Technology Yinning ZHOU 周胤寧 B.S., Ocean University of China; M.S., Nanyang Technological University; Ph.D., Singapore University of Technology and Design RESEARCG ASSISTANT PROFESSOR 研究助理教授 Guangsheng QIAN 錢光升 B.Eng., Northeastern University; Ph.D., Northeastern University LECTURER 講師 Weng Chon CHEONG 張永臻 B.S., M.S., Ph.D., Tsinghua University B.S., Chongging University; M.S., Beijing Management Institute of Mechanical Industry; M.S.,

976

Huanle XU 除歡樂

University of Macau

#### SENIOR INSTRUCTOR 高級導師

Lam TENG 林定 B.S., Memorial University of Newfoundland; M.S., University of Macau

Seng Kin LAO 劉承堅 B.S., M.S., University of Macau

Miguel GOMES DA COSTA Junior B.S., Universidade Mackenze; MBA, University of Macau

Shu Ming TAM 譚樹明 Ph.D. University of Hong Kong

Yu Ming TANG 鄧宇明 B.S., MPhil, Ph.D., The Hong Kong Polytechnic University

Kam Hou VAT 屈鑑濠 B.S., M.S., University of Southwestern Louisiana; Ph.D., University of Macau

Iat Meng WAN 溫日明 B.S., University of Macau; MPhil, The University of Hong Kong

Lung Yam WAN 溫龍欽 B.S., The University of Hong Kong; M.S., City University of Hong Kong

# APPENDICES / STAFF LIST Fundamental Academic Units

# **Faculty of Social Sciences**

## DEAN 院長

Richard Weixing HU 胡偉星 B.Law, Peking University; MA, Johns Hopkins University SAIS; PhD, University of Maryland, College Park

#### ASSOCIATE DEAN 副院長

Tianji CAI 蔡天驥 PhD, University of North Carolina

Anise Man Sze WU 胡文詩 BSSc, MPhil, PhD, The Chinese University of Hong Kong

#### ASSISTANT DEAN 助理院長

Kwok Kit TONG 唐國傑 BEcon, University of Hong Kong; MPhil, PhD, The Chinese University of Hong Kong

## HEAD OF DEPARTMENT 系主任

#### Department of Communication 傳播系

Head 系主任 Tien Tsung LEE 李天宗 BS, University of Oregon; MA, University of Minnesota -Twin Cities; PhD, University of Oregon

## Department of Economics 經濟學系

Head 系主任 Angus Chi Ho CHU 朱智豪 BBA, Simon Fraser University BBA, Simon Fraser University; MA, University of British Columbia ; PhD, University of Michigan

## Department of Government and Public Administration 政府與行政學系

Head 系主任 Weiqing SONG 宋衛清 BA, Shanghai International Studies University; MA, Shanghai University of International Business and Economics; MA, University of Leuven; PhD, University of Siena

## Department of Psychology 心理學系

Head 系主任 Lei CHANG 張雷 BA, Hebei University; MS, PhD, University of Southern California

#### Department of Sociology 社會學系 Head 系主任

Jianhua XU 徐建華 PhD, University of Hong Kong

#### CHAIR PROFESSOR 講座教授

Lei CHANG 張雷 BA, Hebei University; MS, PhD, University of Southern California

Xinshu ZHAO 趙心樹 BA, Fudan University; MA, Stanford University; PhD, University of Wisconsin - Madison

## DISTINGUISHED PROFESSOR 特聘教授

Richard Weixing HU 胡偉星 B.Law, Peking University; MA, Johns Hopkins University SAIS; PhD, University of Maryland, College Park

Angus Chi Ho CHU 朱智豪 BBA, Simon Fraser University; MA, University of British Columbia ; PhD, University of Michigan

Lampo LEONG 梁藍波 M.F.A., Guangzhou Academy of Fine Arts; M.F.A., California College of the Arts; PhD, Central Academy of Fine Arts

#### PROFESSOR 教授

Tianji CAI 蔡天驥 PhD, University of North Carolina

Richard Dennis FITZGERALD BA, University College of North Wales, Bangor; PhD, University of Wales, Bangor

Todd JACKSON MA, PhD, University of Windsor

Tien Tsung LEE 李天宗 BS, University of Oregon; MA, University of Minnesota-Twin Cities; PhD, University of Oregon

Spencer De LI 李德 PhD, University of Illinois at Urbana-Champaign

Shih-Diing LIU 劉世鼎 BSc, MA, Fu Jen Catholic University; PhD, University of Westminster

Tak Wing NGO 吳德榮 BSocSc, MA, University of Hong Kong; PhD, University of London

Anise Man Sze WU 胡文詩 BSSc, MPhil, PhD, The Chinese University of Hong Kong

#### ASSOCIATE PROFESSOR 副教授

Kay Sio Nga CHANG 曾子雅 BA, University of Hawaii; MA, PsyD, California School of Professional Psychology Alameda

Wen-Yu CHANG 張文瑜 BA, Chinese Culture University; MA, New York Institute of Technology; PhD, Union Institute

Peilian CHI 池培蓮 PhD, The University of Hong Kong, Hong Kong

Daina CHIBA 千葉大奈 BA, Tokyo University of Foreign Studies; Master of Laws, Hitotsubashi University; MA, PhD, Rice University

Ni CHEN 陳霓 BA, Nanjing Normal University; MA, PhD, Ohio University

Shu Fai CHEUNG 張樹輝 BSocSc, MPhil, PhD, The Chinese University of Hong Kong

Guangchao FENG BA, Communication University of China; MPhil, University of Hong Kong; PhD, Hong Kong Baptist University

Tieyuan GUO 郭鐵元 PhD, Queen's University

Patrick Wai Hong HO 何偉雄 BSSC, University of Macau; MA, PhD, Virginia Tech

Shih-Ya KUO 郭世雅 PhD, Sam Houston State University

Agnes lok Fong LAM 林玉鳳 BA, University of Macau; LLM, PhD, Renmin University of China

Tao LI 李桃 BA, Peking University; MA, PhD Harvard University

Melody Chia-Wen LU 呂家玟 PhD, Leiden University

Chengxin PAN 潘成鑫 Bachelor of Law, Master of Law, Peking University; PhD, The Australian National University

Todd Lyle SANDEL BA, Williams College; MA, PhD, University of Illinois at Urbana-Champaign

Wei SHI 史唯 BA, MA, Sichuan University; PhD, University of London

Timothy Alan SIMPSON BA, Auburn University; MA, University of Arkansas; PhD, University of South Florida Guangzhen SUN 孫廣振 PhD, Monash University

Kwok Kit TONG 唐國傑 BEcon, University of Hong Kong; MPhil, PhD, The Chinese University of Hong Kong

Haiyan WANG 王海燕 BA, Fudan University; MA, The University of Westminster; PhD, The Chinese University of Hong Kong

Hongyu WANG 王紅宇 BA, Peking University; MA, University of Nebraska-Lincoln; PhD, University of Pennsylvania

Gary Ka Kei WONG 黄嘉基 BA, York University; MSocSc, National University of Singapore; PhD, Monash University

Weiqing SONG 宋衛清 BA, Shanghai International Studies University; MA, Shanghai University of International Business and Economics; MA, University of Leuven; PhD, University of Siena

Jianhua XU 徐建華 PhD, University of Hong Kong

Ming YAN 閻鳴 PhD, Beijing Normal University, China

Eilo Wing Yat YU 余永逸 BSc, MPhil, Hong Kong University of Science and Technology; PhD, University of Hong Kong

Ruohui ZHAO 趙若輝 PhD, University of Nebraska

Mingli ZHENG 鄭明禮 MSc, Wuhan University; MA, PhD, University of Toronto; Doctor of Science, Huazhong University of Science and Technology

Yang, ZU 祖楊 BA, MA, Wuhan University; PhD, University of Amsterdam and Tinbergen Institute

#### ASSISTANT PROFESSOR 助理教授

Kin Sun CHAN 陳建新 MPhil, PhD, University of Hong Kong

Wei DENG 鄧瑋 BSc, Zhejiang University, China; MA, PhD, The Ohio State University, USA

Bryan Chiew Siang HO 何秋祥 BA, National University of Singapore; MA, University of Warwick; PhD, University of Hong Kong

Benjamin Kidder HODGES BA, New College of Florida; MA, PhD, University of Texas Ruiyang HU 胡瑞洋 BA, Xiamen University; MA, Miami University at Oxford; PhD, Southern Methodist University Meng U IEONG 楊鳴宇 BA, Peking University; MA, Social Science, Hong Kong University of Science & Technology; PhD, Peking University Bo JIANG 姜波 BA, National University of Singapore; MA, National University of Singapore; PhD, University of Maryland Fung KWAN 關鋒 BSocSc, University of East Asia; MA, University of Leicester; PhD, University of London Letty Yan Yee KWAN 關欣儀 BA, University of Michigan, Ann Arbor; MA, PhD, University of Illinois, Urbana Champaign Bruce Kam Kwan KWONG 鄺錦鉤 BSocSc, University of East Asia; MPhil, The Chinese University of Hong Kong; PhD, University of Hong Kong Mei Mei LAM 林微微 PhD, University of Cambridge Yi LI 李毅 PhD. University of North Carolina Yiran LI 李亦然 LLB, Shanghai International Studies University; MA, Mphil, The Hong Kong University of Science and Technology; PhD, The University of Hong Kong Chin Pang LEI 李展鵬 BA, ChengChi University; MA, Sun Yat-Sen University; PhD, University of Sussex Xiaogin LI 李小勒 BA. Renmin University of China: MA. Jinan University: PhD. Hong Kong Baptist University Ying LI 李穎 BA. Shaanxi Normal University: MA. Beijing Foreign Studies University: PhD. University of Southern California Lulu LIU 劉露露 LL.B., China Youth University of Political Studies; M.Sc., University of Chinese Academy of Sciences; PhD, University of Sydney, Australia Licheng QIAN 錢力成 LL.B., Nanjing University; LL.M., Nanjing University; MA., University of Virginia, Ph.D., University of Virginia Vivienne Yick Ku TAO 涂憶劬 BSc, MA, PhD, Hong Kong University of Science and Technology Yubo TAO 陶字博 BSc. Southwestern University of Finance and Economics: MPhil. Renmin University of China: PhD, Singapore Management University 982

Yi-feng TING 丁懿芬 BS, MS, National Chaio Tung University; PhD, Michigan State University

Chengli WANG 王成立 Bachelor of Management, Beijing Normal University; Master of Law, Southwest University of Political Science and Law; PhD, University of Nevada, Reno

Xiangning WU 吳湘寧 BA, Hunan University; MA, Peking University; PhD, University of Birmingham

Ting XIAO 肖婷 PhD, Rice University, USA

Yibai YANG 楊毅柏 BCom, University of Canterbury; PhD, University of Sydney

Weiwen YIN 尹偉文 Bachelor of Law, Peking University; Master of Public Policy, University of Tokyo; MA, Central European University; PhD, Texas A&M University

Huiquan ZHANG 張滙泉 PhD, University of Toronto

Jiasheng ZHANG 張家盛 Bachelor of Management, Sichuan University; Master of Management, Renmin University of China, China; PhD, Florida State University

#### SENIOR INSTRUCTOR 高級導師

Hio leong CHE 謝曉陽 BA, Chengchi Universiry; MA, Ecole des Hautes Etudes en Sciences Sociales

Ka Ian CHEANG 鄭家欣 BA, University of Macau; MA, University of Leicester, MPhil, Lingnan University

Raymond Fei Loi LAI 黎飛雷 BA, University of Macau; MPhil, The Chinese University of Hong Kong

Ka leng LEI 李嘉瑩 BA, Tamkang University; MA, Tainan University of Arts

Chu Kwan LOK 駱柱君 BA, MPhil, Hong Kong Baptist University

Suzana Va Ian SOU 蘇樟茵 BA, Macao Polytechnic Institute; MSc, University of Manchester, UK

#### RESEARCH ASSISTANT PROFESSOR 助理研究教授

Song AO 敖頌 BA, Sun Yat-sen University; MSS, The Chinese University of Hong Kong; PhD, The Chinese University of Hong Kong Nan ZHU 朱楠 BS, Fudan University; MEd, East China Normal University; PhD, The Chinese University of Hong Kong

#### MACAO FELLOW IN SOCIAL SCIENCES 澳大濠江學者

Allen Io Kuan VONG 黃耀錕 BCom, University of Melbourne; MA, MPhil, Yale University ; PhD, Yale University

#### EMERITUS PROFESSOR 榮休教授

Yufan HAO 郝雨凡 BA, Heilongqiang University; MA, PhD, Johns Hopkins University

Zhidong HAO 郝志東 BA, Nankai University; MA, East China Normal University; PhD, City University of New York

Bolong LIU 劉伯龍 BA, Anhui University; MSocSc, University Academy of Social-Science; Doctor of Social Sciences, Catholic University of Leuven

Robert Joseph TAORMINA PhD, University of California – Santa Barbara

Jianwei WANG 王建偉 BA, MA, Fudan University; PhD, University of Michigan

#### ADJUNCT PROFESSOR 兼任教授

Wai Kuong CHAU PhD, Renmin University of China

Ji YOU 由冀 BA, Beijing University; BA (Hons) Victoria University of Wellington; MA, PhD, Australian National University

#### ADJUNCT PROFESSOR (IN PRACTICE) 兼任教授 (實務)

Yanjinzi GAO 高艷津子 BA, Beijing Dance Academy

#### ADJUNCT ASSOICATE PROFESSOR 兼任副教授

Zhimin LIN 林至敏 BA, Fudan University; MPA, Princeton University; PhD, University of Washington

Philip Yeung Fai SIU 蕭楊輝 BA, University of Wisconsin-Madison; MA, PhD, Claremont Graudate School

#### ADJUNCT ASSISTANT PROFESSOR 兼任助理教授

André van Dokkum 杜安哲 PhD, Free University Amsterdam

#### ADJUNCT ASSISTANT PROFESSOR (IN PRACTICE) 兼任助理教授 (實務)

Qin SHU 舒琴 BA, Beijing Dance Academy

## ASSISTANT PROFESSOR (BY COURTESY)

Yi JIANG 蔣怡 PhD, The Chinese University of Hong Kong

Natalie Siu Lam WONG 黃兆琳 BA, Lingnan University; MA, PhD, University of Westminster

Kuai Long SOU 蘇桂龍 PhD, the University of Hong Kong

Mek WONG 王覓 PhD, Peking University

#### VISITING SENIOR INSTRUCTOR 客座高級導節

Weng Fong AO IEONG 歐陽永鋒 Master of Design, National Yunlin University of Science and Technology

Ching Man LAU 劉靖民 BA, Deakin University; Master of Design, The Hong Kong Polytechnic University

# Asia-Pacific Academy of Economics and Management

## INTERIM DIRECTOR 代所長

Michael King Man HUI 許敬文 Vice Rector (Academic Affairs) Chair Professor of Marketing, Faculty of Business Administration, University of Macau BBA (First class Hons), The Chinese University of Hong Kong; CAAE, IAE Aix-en-Provence, France; PhD, London Business School

## DEPUTY DIRECTOR 副所長

Rob LAW 羅振雄 UMDF Chair Professor of Smart Tourism, Asia-Pacific Academy of Economics and Management, University of Macau BASc., The University of Lethbridge; MSc PhD, University of Regina

#### CHAIR PROFESSOR 講座教授

Rob LAW 羅振雄 BASc., The University of Lethbridge; MSc PhD, University of Regina

## EXECUTIVE COMMITTEE MEMBERS 執行委員會成員

Michael King Man HUI 許敬文 (Chair 主席) Vice Rector (Academic Affairs) Interim Director, Asia-Pacific Academy of Economics and Management Chair Professor of Marketing, Faculty of Business Administration, University of Macau BBA (First class Hons), The Chinese University of Hong Kong; CAAE, IAE Aix-en-Provence, France; PhD, London Business School, United Kingdom

Angus Chi Ho CHU 朱智豪

Head of Department of Economics, Faculty of Social Sciences Distinguished Professor, Faculty of Social Sciences, University of Macau BBA, Simon Fraser University; MA, University of British Columbia; PhD, University of Michigan

Wei GE 葛偉 Vice Rector (Research) Interim Dean, Faculty of Business Administration Chair Professor, Faculty of Health Sciences, University of Macau BSc, Nanjing University; M.Sc. Institute of Hydrobiology, Academia Sinica; PhD, University of Alberta Professor of Political Economy and Publicy Policy, Faculty of Social Sciences, University of Macau BA, Peking University; MA, PhD, University of Freiburg Richard Weixing HU 胡偉星 Dean, Faculty of Social Sciences UMDF Distinguished Professor of Politics and Public Policy, Faculty of Social Sciences, University of Macau B.Law, Peking University; MA, Johns Hopkins University SAIS; PhD, University of Maryland, College Park

Rob LAW 羅振雄 Deputy Director, Asia-Pacific Academy of Economics and Management UMDF Chair Professor of Smart Tourism, Asia-Pacific Academy of Economics and Management, University of Macau BASc, The University of Lethbridge; MSc PhD, University of Regina

Io Cheng TONG 唐曉晴 Dean, Faculty of Law Council Member, University Council, University of Macau Professor, Faculty of Law, University of Macau PhD in Civil and Commercial Law, Chinese Academy of Social Sciences, Beijing, China

Cheng-Zhong XU 須成忠 Dean, Faculty of Science and Technology Interim Director, Institute of Collaborative Innovation Chair Professor of Computer and Information Science, Faculty of Science and Technology, University of Macau BS, MS, Nanjing University; PhD, The University of Hong Kong

Jerome YEN 顏至宏

Head of Centre for Innovation and Entrepreneurship, Institute of Collaborative Innovation Distinguished Professor of Computer and Information Science, Faculty of Science and Technology, University of Macau PhD, University of Arizona

# **Centre for Continuing Education**

DIRECTOR 主任 Matthew Ting Chi LIU 劉丁己 BA, National Taiwan University; MBA, National Sun Yat-sen University; PhD, Peking University

# **Centre for Macau Studies**

**DIRECTOR 主任** Agnes lok Fong LAM 林玉鳳 BA, University of Macau; M.L.; Ph.D., Renmin University of China

**Graduate School** 

# INTERIM DEAN 代院長

Pak Kin WONG 王百鍵 M.S., University of Warwick; Ph.D., The Hong Kong Polytechnic University

# **Honours College**

## DEAN 院長

Rose Neng LAI 黎寧 Professor, Faculty of Business Administration (FBA) BBA, University of East Asia; MBA, Simon Fraser University; PhD, The Chinese University of Hong Kong

#### HONOURS PROGRAMME COORDINATOR 榮譽課程主任

Ping Cheng WANG, Dennis 王秉正 Honours Programme Coordinator, Honours College (HC) Associate Professor, Faculty of Education (FED) BMus, MMus, Oklahoma City University, USA; DMA, University of Miami, USA

## FACULTY COORDINATORS 駐學術單位協調主任

Lai Cheng LEI, Victoria 李麗青 FAH Coordinator for Honours College (HC) Associate Professor, Faculty of Arts and Humanities (FAH) LLB, Jinan University; MPhil, PhD, University of Glasgow

Pou lu VONG, Anna 黃寶儀 FBA Coordinator for Honours College (HC) Associate Professor, Faculty of Business Administration (FBA) BBA, MBA, University of Macau; PhD, Instituto Superior de Ciências do Trabalho e da Empresa

Ping Cheng WANG, Dennis 王秉正 FED Coordinator for Honours College (HC) Associate Professor, Faculty of Education (FED) BMus, MMus, Oklahoma City University, USA; DMA, University of Miami, USA

Hongjie ZHANG 張紅杰 FHS Coordinator for Honours College (HC) Associate Professor, Faculty of Health Sciences (FHS) BSc, MSc, Zhengzhou University; PhD, University of Tokushima

Kei Kei NG 吳奇琦 FLL Coordinator for Honours College (HC) Assistant Professor, Faculty of Law (FLL) LLB, LLM, PhD, University of Macau

Benjamin Kidder HODGES FSS Coordinator for Honours College (HC) Assistant Professor, Faculty of Social Sciences (FSS) BA, New College of Florida; MA, PhD, University of Texas Peng Un MAK 麥炳源 FST Coordinator for Honours College (HC) Assistant Professor, Faculty of Science and Technology (FST) BS, National Taiwan University; MS, PhD, Michigan State University

#### RC LIAISION OFFICER 駐住宿式書院協調主任

Caishi HUANG, Kevin 黃才試 CKLC Liaison Officer for Honours College (HC) Associate Master of Cheong Kun Lun College (CKLC) BEng, Beijing University of Posts and Telecommunications; MPhil, Hong Kong University of Science and Technology; PhD, University of Maryland, Hong Kong University of Science and Technology

I Teng SENG, Elaine 盛綺婷 CKPC Liaison Officer for Honours College (HC) Resident Fellow of Chao Kuang Piu College (CKPC) BA, Beijing Normal University; MPhil, Tsinghua University

Yaning QI 齊亞寧 CKYC Liaison Officer for Honours College (HC) Associate Master of Choi Kai Yau College (CKYC) BSc, Tongji University; PhD, Nanyang Technology University

Yu Ming TANG 鄧宇明 CYTC Liaison Officer for Honours College (HC) Resident Fellow of Cheng Yu Tung College (CYTC) BSc, MPhil, PhD, The Hong Kong Polytechnic University

Yi JIANG, Vivian 蔣怡 FPJC Liaison Officer for Honours College (HC) Associate Master of Henry Fok Pearl Jubilee College (FPJC) BA, MPhil, Sun Yat-Sen University; PhD, The Chinese University of Hong Kong

Sisi SUN 孫斯斯 LCWC Liaison Officer for Honours College (HC) Resident Fellow of Lui Che Woo College (LCWC) BA, China University of Political Science and Law; MA, PhD, University of Montreal

Manuel Antonio NORONHA MCMC Liaison Officer for Honours College (HC) Associate Master of Moon Chun Memorial College (MCMC) BA, University of East Asia; MA, The University of Lancaster; PhD, University of St. Joseph

Ka Wai FUNG 馮家維 MLC Liaison Officer for Honours College (HC) Associate Master of Ma Man Kei and Lo Pak Sam College (MLC) BSc, University of Manchester; PhD, University College London

Wai San WAN, Sancia 溫慧珊 SEAC Liaison Officer for Honours College (HC) Associate Master of Stanley Ho East Asia College (SEAC) BA, MPhil, The University of Hong Kong; PhD, London School of Economics & Political Science Kam Leng CHAN, Ginger 陳錦翎 SPC Liaison Officer for Honours College (HC) Resident Fellow of Shiu Pong College (SPC) BSc, Sun Yat-Sen University; MPA, Chinese Academy of Governance

#### **TEACHING FELLOW**

Jeremy DE CHAVEZ 盧杰 Assistant Professor, Faculty of Arts and Humanities (FAH) BA, University of the Philippines; MA, The National University of Singapore; PhD, Queen's University

Chi Ho LOI, Raymond 雷智豪 Professor, Faculty of Business Adminstration (FBA) BSSc, MBA, MPhil, PhD, The Chinese University of Hong Kong

Lingling ZHANG, Lida 張玲玲 Associate Professor, Faculty of Business Adminstration (FBA) BA, MS, Peking University; PhD, University of Macau, Hong Kong University of Science & Technology

Timothy Alan SIMPSON Associate Professor, Faculty of Social Sciences (FSS) BA, Auburn University; MA, University of Arkansas; PhD, University of South Florida

Ting XIAO, Amy 肖婷 Assistant Professor, Faculty of Social Sciences (FSS) BS, Beijing Normal University; MA, PhD, Rice University

# Institute of Advanced Studies in Humanities and Social Sciences

#### INTERIM DIRECTOR 代院長

Billy Kee Long SO 蘇基朗 B.A., M.Phil., Chinese University of Hong Kong; Ph.D., Australian National University

# ASSOCIATE DIRECTOR 副院長

Bing SHUI 稅兵 B.A., Sichuan Normal University; M.A., Ph.D., Peking University

#### ASSOCIATE DIRECTOR 副院長

Di WANG 王笛 BA, Sichuan University; MA, Sichuan University, Johns Hopkins University; PhD, Johns Hopkins University

# Institute of Applied Physics and Materials Engineering

# DIRECTOR 院長

Zikang TANG 湯子康 B.S., Zhejiang University; M.S., Ph.D., Tohoku University

# ASSOCIATE DIRECTOR 副院長

Hui PAN 潘暉 B.E., Xidian University; Ph.D., National University of Singapore

## PROFESSOR 教授

Songnan QU 曲松楠 B.S., D. Eng., Jilin University

Guichuan XING 邢貴川 B.S., Fudan University; Ph.D., National University of Singapore

## ASSOCIATE PROFESSOR 副教授

Kwun Nam HUI 許冠南 B.S., The Hong Kong University of Science and Technology; M.S., Ph.D., The Hong Kong University

Hou IAN 殷灝 B.S., MEng, Cornell University; Ph.D., Institute of Theorectical Physics, Chinese Academy of Sciences

Haifeng LI 李海峰 B.E., M.E., University of Science and Technology Beijing; Ph.D., RWTH Aachen University

Kar Wei NG 吳嘉偉 B.E., MPhil., The Hong Kong University of Science and Technology; Ph.D., University of California at Berkeley

Huaiyu SHAO 邵懷宇 B.S., Ph.D., Peking University

Guoxing SUN 孫國星 B.S., M.S., Beijing Normal University; Ph.D., The Hong Kong University of Science and Technology

Shuang Peng WANG 王雙鵬 B.E., Jilin University; D.S., Chinese Academy of Sciences Bingpu ZHOU 周冰樸 B.E., M.S., Sun Yat-Sen University; Ph.D., The Hong Kong University of Science and Technology

#### ASSISTANT PROFESSOR 助理教授

Yongqing CAI 蔡永青 B.S., M.S., Northwestern Polytechnic University Ph.D., National University of Singapore

Binmeng CHEN 陳斌猛 B.S, Southeast University; M.S., Ph.D., The Hong Kong University of Science and Technology

Shi CHEN 陳石 B.S., MPhil., Zhejiang University; M.S., The Hong Kong University of Science and Technology; Ph.D., National University of Singapore

Guo HONG 洪果 B.S., Sichuan University; Ph.D., Peking University

Hongchao LIU 劉宏超 B.S., Beijing Normal University; Ph.D., The Hong Kong University of Science and Technology

Yinning ZHOU 周胤寧

B.S., Ocean University of China; M.S., Nanyang Technological University; Ph.D., Singapore University of Technology and Design

# **Institute of Chinese Medical Sciences**

## DIRECTOR 院長

Xin CHEN 陳新 BMed, MMed, Hubei University of Chinese Medicine; PhD, Guangzhou University of Chinese Medicine; PhD, Radboud University Nijmegen Medical Centre

## DEPUTY DIRECTOR 副院長

Ming Yuen LEE, Simon 李銘源 BSc(Hon), City University of Hong Kong; PhD, The Chinese University of Hong Kong

Peng LI 李鵬 BSc, MSc, Chengdu University of TCM; MSc, PhD, University of Macau

# CHAIR PROFESSOR 講座教授

Yitao WANG  $\pm-\bar{\texttt{a}}$  BChinMed, University of Traditional Chinese Medicine; MPharm, Chongqing University of Medicine

# DISTINGUISHED PROFESSOR 特聘教授

Xin CHEN 陳新 BMed, MMed, Hubei University of Chinese Medicine; PhD, Guangzhou University of Chinese Medicine; PhD, Radboud University Nijmegen Medical Centre

Ming Yuen LEE, Simon 李銘源 BSc(Hon), City University of Hong Kong; PhD, The Chinese University of Hong Kong

Shaoping LI 李紹平 MSc, PhD, China Pharmaceutical University

# PROFESSOR 教授

Meiwan CHEN 陳美婉 BSc, Guangdong Pharmaceutical University; MSc, Jinan University; PhD, Sun Yat-sen University

Xiuping CHEN 陳修平 MB, Jining Medical College; MSc, Zunyi Medical College; PhD, Peking Union Medical College, Tsinghua University

Hao HU 胡豪 MSc, PhD, Sichuan University Yuanjia HU 胡元佳 BSc, MSc, China Pharmaceutical University; MSc, PhD, University of Macau

Chung Hang LEUNG, Duncan 梁重恒 BSc, PhD, City University of Hong Kong

Huanxing SU 蘇煥興 BSc, Zhejiang University; MSc, The Chinese University of Hong Kong; PhD, The University of Hong Kong

Chunming WANG 王春明 BSc, MSc, Nanjing University; PhD, Nanyang Technological University

Ru YAN 燕茹 BSc, MPhil, China Pharmaceutical University; PhD, The Chinese University of Hong Kong

Ying ZHENG 鄭穎 BSc, Beijing Medical University; MPhil, PhD, The Chinese University of Hong Kong

#### ASSOCIATE PROFESSOR 副教授

Ying BIAN 卞鷹 MSc, PhD, Shangdong University

Ging CHAN 陳勁 Ph.D, University of Illinois

Chengwei HE 何承偉 MSc, Guangdong Medical College; PhD, Sun Yat-sen University of Medical Sciences

Pui Man HOI, Maggie 許貝文 BSc(Hon), University College London; PhD, University of Cambridge

Peng LI 李鵬 BSc, MSc, Chengdu University of TCM; MSc, PhD, University of Macau

Ligen LIN 林理根 BE, Zhejiang University; PhD, Shanghai Institute of Materia Medica, CAS

Jiahong LU 路嘉宏 BSc, MSc, Central South University; PhD, Hong Kong Baptist University

Jinjian LU 陸金健 BSc, Zhejiang Normal University; PhD, Shanghai Institute of Materia Medica, CAS

Defang OUYANG 歐陽德方 BSc, MSc, Shenyang Pharmaceutical University; PhD, University of Queensland

Jianbo WAN 萬建波 BSc, Wuhan University; MSc, China Pharmaceutical University; MSc, PhD, University of Macau

Ruibing WANG 王瑞兵 BSc, University of Jilin; PhD, Queen's University Ying WANG 王穎 BSc, Shenyang Pharmaceutical University; BSc, MSc, Jilin University; PhD, The University of Hong Kong

Hua YU 余華 BSc, China Pharmaceutical University; MSc, China Pharmaceutical University; MSc, University of Macau; PhD, University of Macau

Qingwen ZHANG 張慶文 BE, PhD, China Pharmaceutical University

Jing ZHAO 超靜 BSc, Chengdu University; MSc, University of Macau; PhD, China Pharmaceutical University

#### ASSISTANT PROFESSOR 助理教授

Wai San CHEANG, Anna 鄭慧珊 B.Sc. (Hon), Ph.D., The Chinese University of Hong Kong

Xiaojia CHEN 陳肖家 BSc, MSc, Peking University; MSc, PhD, University of Macau

Cheng Meng CHONG 鍾昌明 BSc, Chung Shan Medical University; MSc, National Chi Nan University; PhD, University of Macau

Carolina Oi Lam UNG 吳靄琳 Master of Health Science (Health Informatics), The University of Sydney; Doctor of Biomedical Sciences, University of Macau

Shengpeng WANG 王勝鵬 BSc, Chengdu University of TCM; PhD, University of Macau

Jinchao WEI 魏金超 BSc, Henan University; MMed, Tianjin University of Traditional Chinese Medicine; PhD, University of Macau

Yonghua ZHAO 趙永華

Master of Integrative Clinical Medicine, Liaoning University of Traditional Chinese Medicine; Doctor of Chinese Internal Medicine, Guangzhou University of Chinese Medicine

Zhangfeng ZHONG 鍾章鋒 BSc, Guangdong Medical University; MSc, PhD, University of Macau

# Institute of Collaborative Innovation

#### INTERIM DIRECTOR 代院長

Cheng-Zhong XU 須成忠 B.S., M.S., Nanjing University; Ph.D., The University of Hong Kong; IEEE Fellow Dean, Faculty of Science and Technology Chair Professor of Computer and Information Science, Faculty of Science and Technology, University of Macau

#### HEAD OF CENTRE 中心主任 INTERIM HEAD OF CENTRE FOR COGNITIVE AND BRAIN SCIENCES 認知與腦科學研究中心代主任

Zhen YUAN 袁振 PhD, Mechanical Engineering, University of Science and Technology of China Associate Professor, Faculty of Health Sciences, University of Macau

## INTERIM HEAD OF CENTRE FOR DATA SCIENCE 數據科學研究中心代主任

Leong Hou U, Ryan 余亮豪 Ph.D. in Computer Science, The University of Hong Kong Associate Professor of Computer and Information Science, Faculty of Science and Technology, University of Macau

# INTERIM HEAD OF CENTRE FOR ARTIFICIAL INTELLIGENCE AND ROBOTICS 人工智能與機器人研究中心代主任

Jiantao ZHOU 周建濤 PhD in Electronic and Computer Engineering, Hong Kong University of Science and Technology Associate Professor of Computer and Information Science, Faculty of Science and Technology, University of Macau

## HEAD OF CENTRE FOR INNOVATION AND ENTREPRENEURSHIP 創新創業中心主任

Jerome YEN 顏至宏

PhD, Systems Engineering and Management Information Systems, University of Arizona Distinguished Professor of Computer and Information Science, Faculty of Science and Technology, University of Macau

# ASSISTANT PROFESSOR 助理教授

Ruey-Song HUANG 黃瑞松

B.S., M.S., National Chung Cheng University, Chia-Yi; M.S., Ph.D., University of California, San Diego

1000

Qi-Yang NIE 聶其陽

B.S., Wuhan University; M.S., Graduate University of Chinese Academy of Sciences; Ph.D., LMU München

Haiyan WU 伍海燕

B.E., Guangxi Normal University; M.S., Zhejiang Normal University; Ph.D., Beijing Normal University

Haoyun ZHANG 張浩雲

B.S., Shaanxi Normal University; M.S., Beijing Normal University; Ph.D., The Pennsylvania State University

# Institute of Microelectronics

#### DIRECTOR 院長

Rui Paulo da Silva MARTINS 馬許願 B.E., M.S., Ph.D., Instituto Superior Técnico da Universidade Técnica de Lisboa; IEEE Fellow; Academy of Sciences of Lisbon Vice Rector (Global Affairs), University of Macau

#### DEUPTY DIRECTOR (RESEARCH) 副院長(研究)

Pui In MAK 麥沛然 B.S., Ph.D., University of Macau; IEEE Fellow; IET Fellow; Fellow of the Royal Society of Chemistry (RSC)

#### DEPUTY DIRECTOR (ACADEMIC) 副院長(學術)

Sai Weng SIN 冼世榮 B.S., M.S., Ph.D., University of Macau

## RESEARCH GROUP COORDINATORS 研究組主任

Wireless and Multidisciplinary Research Group 無線和多學科研究組

Pui In MAK 麥沛然 B.S., Ph.D., University of Macau; IEEE Fellow

#### Data and Power Conversion Research Group 數據和電源轉換研究組

Sai Weng SIN 冼世榮 B.S., M.S., Ph.D., University of Macau

#### ASSOCIATE PROFESSOR 副教授

Man Kay LAW 羅文基 B.S., Ph.D., Hong Kong University of Science and Technology Laboratory Infrastructure Coordinator

Yan ZHU 諸嫣 B.S., Shanghai University; M.S., Ph.D., University of Macau Industrial Collaboration Coordinator

Yan LU 路延 B.Eng., M.S., South China University of Technology; Ph.D., Hong Kong University of Science and Technology Microelectronics Center/ZUMRI Coordinator

Sio Hang PUN 潘少恆 M.S., University of Porto; B.S., Ph.D., University of Macau

1002

Chi Seng LAM 林智聲 B.S., M.S., Ph.D., University of Macau

Jun YIN 殷俊 B.S., M.S., Peking University; Ph.D., Hong Kong University of Science and Technology

Chi Hang CHAN 陳知行 B.S., University of Washington; M.S., Ph.D., University of Macau

Yong CHEN 陳勇 B.S., Communication University of China, Ph.D., Institute of Microelectronics of Chinese Academy of Sciences

Yanwei JIA 賈艷偉 B.S., M.S., Hunan University, Ph.D., National University of Singapore

## ASSISTANT PROFESSOR 助理教授

Ka Fai UN 阮家煇 B.S., National Taiwan University; M.S., Ph.D., University of Macau

Ka Meng LEI 李家明 B.S., Ph.D., University of Macau

Mo HUANG 黃沫 B.S., M.Eng., P.Eng., Sun Yat-sen University

Minglei ZHANG 張明磊 B.Eng., Tianjin University; Ph.D., University of Chinese Academy of Sciences

Yang JIANG 江洋 B.S., M.S., Ph.D., University of Macau

Wei Han YU 于維翰 B.S., M.S., Ph.D., University of Macau

Mingqiang GUO 郭銘強 B.S., Xidian University; M.S., Fudan University; Ph.D., University of Macau

Yatao PENG 彭亞濤 B.Eng., Tianjin Normal University; P.Eng., University of Chinese Academy of Sciences

# **Residential Colleges**

#### CHAO KUANG PIU COLLEGE 曹光彪書院 COLLEGE MASTER 院長

Yun-Tung LAU 劉潤東 BS, Sun Yat-Sen University; MS, University of Maryland University College; PhD, Massachusetts Institute of Technology

#### CHENG YU TUNG COLLEGE 鄭裕彤書院 INTERIM COLLEGE MASTER 代院長

Alfred Seng Fat WONG 黃承發 BSc, Taiwan Cheng Kung University; MPhil, Hong Kong University of Science and Technology; PhD, The Hong Kong Polytechnic University InstMC Fellow, CABE Chartered Fellow, AEM Fellow

#### CHEONG KUN LUN COLLEGE 張崑崙書院 COLLEGE MASTER 院長

Meifang ZHANG 張美芳 BA & MA (equivalent), Sun Yat-sen University; PhD, Hong Kong Baptist University

#### CHOI KAI YAU COLLEGE 蔡繼有書院 COLLEGE MASTER 院長

Janny May Yee LEUNG 梁美兒 S.B. Harvard University; M.A. Oxford University; Ph.D. Massachusetts Institute of Technology

## HENRY FOK PEARL JUBILEE COLLEGE 霍英東珍禧書院 INTERIM COLLEGE MASTER 代院長

Kai Meng MOK 莫啟明 Professor, Faculty of Science and Technology BSc, MSc, PhD, University of Washington

# LUI CHE WOO COLLEGE 呂志和書院 COLLEGE MASTER 院長

Desmond Chee Shiong LAM 藍志雄 BEng, National University of Singapore; MBA, University of Melbourne; PhD, University of Western Australia

1004

#### MA MAN KEI AND LO PAK SAM COLLEGE 馬萬祺羅柏心書院 COLLEGE MASTER 院長

Liu YANG 楊柳 Full Professor in English Linguistics and Literature PhD, Nanjing University; MA, Hunan University; BA, Central South University; Postdoc, Beijing Foreign Studies University Academic Visiting Scholar, University of Cambridge, UK; Auburn University, USA;

# MOON CHUN MEMORIAL COLLEGE 滿珍紀念書院

#### INTERIM COLLEGE MASTER 代院長

Kwok Cheung CHEUNG 張國祥 BSc, University of Hong Kong; CertEd, University of Hong Kong; Advanced DipEd, University of Hong Kong; MEd, University of Hong Kong; PhD, University of London, UK

#### SHIU PONG COLLEGE 紹邦書院 INTERIM COLLEGE MASTER 代院長

Sik Chung TAM 譚錫忠

B.A. National Chung-Hsing University Taiwan; PhD, University of Missouri-Columbia, United States

#### STANLEY HO EAST ASIA COLLEGE 何鴻桑東亞書院 COLLEGE MASTER 院長

Vai Pan IU 姚偉彬

Dip, Hong Kong Baptist College; MSc, University of Southampton; PhD, University of Hong Kong

### APPENDICES / STAFF LIST Independent Academic Units

### State Key Laboratory of Analog and Mixed-Signal VLSI

#### INTERIM DIRECTOR 代主任

Pui In MAK 麥沛然 B.S., Ph.D., University of Macau; IEEE Fellow; IET Fellow; Fellow of the Royal Society of Chemistry (RSC)

#### DEPUTY DIRECTOR 副主任

Sai Weng SIN 冼世榮 B.S., M.S., Ph.D., University of Macau

#### CHAIR PROFESSOR 講座教授

Rui Paulo da Silva MARTINS 馬許願 B.E., M.S., Ph.D., Instituto Superior Técnico da Universidade Técnica de Lisboa; IEEE Fellow; Academy of Sciences of Lisbon Vice Rector (Global Affairs), University of Macau

#### RESEARCH GROUP COORDINATORS 研究組主任

Wireless and Multidisciplinary Research Group 無線和多學科研究組

Pui In MAK 麥沛然 B.S., Ph.D., University of Macau; IEEE Fellow

#### Data and Power Conversion Research Group 數據和電源轉換研究組

Sai Weng SIN 冼世榮 B.S., M.S., Ph.D., University of Macau

#### ASSOCIATE PROFESSOR 副教授

Man Kay LAW 羅文基 B.S., Ph.D., Hong Kong University of Science and Technology Laboratory Infrastructure Coordinator

Yan ZHU 諸嫣 B.S., Shanghai University; M.S., Ph.D., University of Macau Industrial Collaboration Coordinator

Yan LU 路延 B.Eng., M.S., South China University of Technology; Ph.D., Hong Kong University of Science and Technology Microelectronics Center/ZUMRI Coordinator

Sio Hang PUN 潘少恆 M.S., University of Porto; B.S., Ph.D., University of Macau

1006

Chi Seng LAM 林智聲 B.S., M.S., Ph.D., University of Macau

Jun YIN 殷俊 B.S., M.S., Peking University; Ph.D., Hong Kong University of Science and Technology

Chi Hang CHAN 陳知行 B.S., University of Washington; M.S., Ph.D., University of Macau

Yong CHEN 陳勇 B.S., Communication University of China, Ph.D., Institute of Microelectronics of Chinese Academy of Sciences

Yanwei JIA 賈艷偉 B.S., M.S., Hunan University, Ph.D., National University of Singapore

Mang I VAI 韋孟宇 B.S., Huaquao University; M.S., Jinan University; Ph.D., University of Macau

#### ASSISTANT PROFESSOR 助理教授

Ka Fai UN 阮家輝 B.S., National Taiwan University; M.S., Ph.D., University of Macau

Ka Meng LEI 李家明 B.S., Ph.D., University of Macau

Mo HUANG 黃沫 B.S., M.Eng., P.Eng., Sun Yat-sen University

Minglei ZHANG 張明磊 B.Eng., Tianjin University; Ph.D., University of Chinese Academy of Sciences

Yang JIANG 江洋 B.S., M.S., Ph.D., University of Macau

Wei Han YU 于維翰 B.S., M.S., Ph.D., University of Macau

Mingqiang GUO 郭銘強 B.S., Xidian University; M.S., Fudan University; Ph.D., University of Macau

Yatao PENG 彭亞濤 B.Eng., Tianjin Normal University; P.Eng., University of Chinese Academy of Sciences

### APPENDICES / STAFF LIST Independent Academic Units

### State Key Laboratory of Internet of Things for Smart City

#### DIRECTOR 主任

Yonghua SONG 宋永華 B.Eng., Chengdu University of Science and Technology (now Sichuan University); Ph.D., Electric Power Research Institute of China; D.Sc., Brunel University; D.Eng., Bath University

#### ASSISTANT DIRECTOR 助理主任

Shaodan MA 馬少丹 B.Econ., B.E., M.Eng., Nankai University; Ph.D., The University of Hong Kong

#### RESEARCH GROUP COORDINATORS 研究室統籌人

# Research Group of Intelligent Sensing and Network Communication 智能傳感與網路通信研究室

Fen HOU 侯芬 B.S., M.S., Yunnan University; Ph.D., Beijing University of Posts and Telecommunications; Ph.D., University of Waterloo

# Research Group of Urban Big Data and Intelligent Technology 城市大數據與智能技術研究室

Jiantao ZHOU 周建濤 B.S., Dalian University of Technology; M.S., Southeast University; Ph.D., Hong Kong University of Science and Technology

#### Research Group of Smart Energy 智慧能源研究室

Ningyi DAI 戴寧怡 B.S., Southeast University, Nanjing; M.S., Ph.D., University of Macau

#### Research Group of Intelligent Transportation 智能交通研究室

Leong Hou U, Ryan 余亮豪 B.S., National Chi Nan University; M.S., University of Macau; Ph.D., The University of Hong Kong

# Research Group of Urban Public Safety and Disaster Prevention 城市公共安全與災害防治研究室

Wanhuan ZHOU 周萬歡 B.S., M.S., Zhejiang University; Ph.D., Hong Kong Polytechnic University

#### CHAIR PROFESSOR 講座教授

Cheng-Zhong XU 須成忠 B.S., M.S., Nanjing University; Ph.D., The University of Hong Kong

1008

#### DISTINGUISHED PROFESSOR 特聘教授

Ka-Veng YUEN, Kelvin 阮家榮 B.S., National Taiwan University; M.Phil., Hong Kong University of Science and Technology; Ph.D., California Institute of Technology

#### PROFESSOR 教授

Zhiguo GONG 肇志國 B.S., Hebei Normal University; M.S., Peking University; Ph.D., Chinese Academy of Science

Man Chung WONG 黃民聰 B.S., M.S., University of Macau; Ph.D., Tsinghua University

#### ASSOCIATE PROFESSOR 副教授

Hui KONG 孔慧 B.E., M.E., Jiangsu University; Ph.D., Nanyang Technological University

Yuan WU 吳遠 B.E., M.E., Zhejiang University; Ph.D., Hong Kong University of Science and Technology

Jie XU 徐杰 B.Eng., M.Eng., Zhejiang University; Ph.D., Hong Kong University of Science & Technology

Wangji YAN 顏王吉 B.E., M.E., Central South University; Ph.D., Hong Kong University of Science and Technology

Dingqi YANG 楊丁奇 B.E., Xidian University; M.E., Telecom SudParis; Ph.D., Pierre and Marie Curie University

Zhixin YANG 楊志新 B.E., Huazhong University of Science and Technology; Ph.D., Hong Kong University of Science and Technology

#### ASSISTANT PROFESSOR 助理教授

Zhongya CAI 蔡忠亞 B.S., M.S., Ocean University of China; Ph.D., Hong Kong University of Science and Technology

Liang GAO 高亮 B.Eng., M.Eng., Tsinghua University; Ph.D., Hong Kong University of Science and Technology

Sin Chi KUOK 郭善知 B.S., M.S., Ph.D., University of Macau

Keng Weng LAO 劉景榮 B.S., M.S., Ph.D., University of Macau

Li LI 栗力 B.Eng., Tianjin University; M.S., Ph.D., The Ohio State University

Ping SHEN 申平 B.E., Zhejiang University; Ph.D., Hong Kong University of Science and Technology Huabin SHI 施華斌 B.E., Ph.D., Tsinghua University

Pengyang WANG 汪澎洋 B.E., Xidian University; M.E., Beijing University of Posts and Telecommunications; Ph.D., University of Central Florida

Qingqing WU 武慶慶 B.E., South China University of Technology; Ph.D., Shanghai Jiao Tong University

Xiaowei WU 吳曉偉 B.E., University of Science and Technology of China; Ph.D., The University of Hong Kong

Hongcai ZHANG 張洪財 B.S., Ph.D., Tsinghua University

#### APPENDICES / STAFF LIST Independent Academic Units

### State Key Laboratory of Quality Research in Chinese Medicine

#### INTERIM DIRECTOR 代主任

Xin CHEN 陳新 BMed, MMed, Hubei University of Chinese Medicine; PhD, Guangzhou University of Chinese Medicine; PhD, Radboud University Nijmegen Medical Centre

#### DEPUTY DIRECTOR 副主任

Shaoping LI 李紹平 MSc, PhD, China Pharmaceutical University

#### CHAIR PROFESSOR 講座教授

Yitao WANG  $\pm-\bar{}\Bar{}$  BChinMed, University of Traditional Chinese Medicine; MPharm, Chongqing University of Medicine

#### DISTINGUISHED PROFESSOR 特聘教授

Xin CHEN 陳新 BMed, MMed, Hubei University of Chinese Medicine; PhD, Guangzhou University of Chinese Medicine; PhD, Radboud University Nijmegen Medical Centre

Ming Yuen LEE, Simon 李銘源 BSc(Hon), City University of Hong Kong; PhD, The Chinese University of Hong Kong

Shaoping LI 李紹平 MSc, PhD, China Pharmaceutical University

#### PROFESSOR 教授

Meiwan CHEN 陳美婉 BSc, Guangdong Pharmaceutical University; MSc, Jinan University; PhD, Sun Yat-sen University

Xiuping CHEN 陳修平 MB, Jining Medical College; MSc, Zunyi Medical College; PhD, Peking Union Medical College, Tsinghua University

Hao HU 胡豪 MSc, PhD, Sichuan University

Yuanjia HU 胡元佳 BSc, MSc, China Pharmaceutical University; MSc, PhD, University of Macau Chung Hang LEUNG, Duncan 梁重恒 BSc, PhD, City University of Hong Kong

Huanxing SU 蘇煥興 BSc, Zhejiang University; MSc, The Chinese University of Hong Kong; PhD, The University of Hong Kong

Chunming WANG 王春明 BSc, MSc, Nanjing University; PhD, Nanyang Technological University

Ru YAN 燕茹 BSc, MPhil, China Pharmaceutical University; PhD, The Chinese University of Hong Kong

Ying ZHENG 鄭穎 BSc, Beijing Medical University; MPhil, PhD, The Chinese University of Hong Kong

#### ASSOCIATE PROFESSOR 副教授

Ying BIAN 卞鷹 MSc, PhD, Shangdong University

Ging CHAN 陳勁 Ph.D, University of Illinois

Chengwei HE 何承偉 MSc, Guangdong Medical College; PhD, Sun Yat-sen University of Medical Sciences

Pui Man HOI, Maggie 許貝文 BSc(Hon), University College London; PhD, University of Cambridge

Peng LI 李鵬 BSc, MSc, Chengdu University of TCM; MSc, PhD, University of Macau

Ligen LIN 林理根 BEng, Zhejiang University; PhD, Shanghai Institute of Materia Medica, CAS

Jiahong LU 路嘉宏 BSc, MSc, Central South University; PhD, Hong Kong Baptist University

Jinjian LU 陸金健 BSc, Zhejiang Normal University; PhD, Shanghai Institute of Materia Medica, CAS

Defang OUYANG 歐陽德方 BSc, MSc, Shenyang Pharmaceutical University; PhD, University of Queensland

Jianbo WAN 萬建波 BSc, Wuhan University; MSc, China Pharmaceutical University; MSc, PhD, University of Macau

Ruibing WANG 王瑞兵 BSc, University of Jilin; PhD, Queen's University

Ying WANG 王頴 BSc, Shenyang Pharmaceutical University; BSc, MSc, Jilin University; PhD, The University of Hong Kong

Hua YU 余華 BSc, China Pharmaceutical University; MSc, China Pharmaceutical University; MSc, PhD, University of Macau

Qingwen ZHANG 張慶文 BEng, PhD, China Pharmaceutical University

Jing ZHAO 趙靜 BSc, Chengdu University; MSc, University of Macau; PhD, China Pharmaceutical University

#### ASSISTANT PROFESSOR 助理教授

Wai San CHEANG, Anna 鄭慧珊 B.Sc. (Hon), PhD, The Chinese University of Hong Kong

Xiaojia CHEN 陳肖家 BSc, MSc, Peking University; MSc, PhD, University of Macau

Cheng Meng CHONG 鍾昌明 BSc, Chung Shan Medical University; MSc, National Chi Nan University; PhD, University of Macau

Carolina Oi Lam UNG 吳靄琳 Master of Health Science (Health Informatics), The University of Sydney; Doctor of Biomedical Sciences, University of Macau

Shengpeng WANG 王勝鵬 BSc, Chengdu University of TCM; PhD, University of Macau

Jinchao WEI 魏金超 BSc, Henan University; MMed, Tianjin University of Traditional Chinese Medicine; PhD, University of Macau

Yonghua ZHAO 趙永華 Master of Integrative Clinical Medicine, Liaoning University of Traditional Chinese Medicine; Doctor of Chinese Internal Medicine, Guangzhou University of Chinese Medicine

Zhangfeng ZHONG 鍾章鋒 BSc, Guangdong Medical University; MSc, PhD, University of Macau

# ACADEMIC SUPPORT UNITS 學術輔助部門

### ACADEMIC AFFAIRS OFFICE 學務部

REGISTRAR 教務長 Rico Long Wai LAM 林朗為

MBA, Michigan State University; Ph.D., University of Oregon

REGISTRY 註冊處
 HEAD 處長
 Ka Vai VU, Eduarda 鄔嘉慧

BA; MEd, University of Macau

HEAD OF GENERAL EDUCATION IMPLEMENTATION
 Gary WONG 黃值富
 BS, University of California, Davis
 MSc, Ph.D., North Carolina State University

# ALUMNI AND DEVELOPMENT OFFICE 校友及發展辦公室

DIRECTOR 主任 Yuk Yee LAM, Cindy 林鈺儀

BBA, Asia International Open University (Macau); MEd, University of Macau

# CENTRE FOR TEACHING AND LEARNING ENHANCEMENT 教與學優化中心

**DIRECTOR 主任** Katrine Ka Ki WONG 王嘉祺

BA; M.Phil, The Chinese University of Hong Kong; Ph.D., University of Leeds; AHEA, Higher Education Academy, U.K.

# GLOBAL AFFAIRS OFFICE 全球事務部

DIRECTOR 總監 Ruibing WANG 王瑞兵

BSc, Jilin University Ph.D., Queen's University

## OFFICE OF HEALTH, SAFETY AND ENVIRONMENTAL AFFAIRS 安健及環境事務辦公室

INTERIM DIRECTOR 代主任 Sau Kun CHEANG, Phoebe 鄭秀娟

LL.B., Macau University of Science and Technology B.N., Macau Polytechnic University M.N., Macau University of Science and Technology

# OFFICE OF SPORTS AFFAIRS 體育事務部

DIRECTOR 總監 Grace Kwai Chee CHAU 周桂慈

BBA, University of Macau; MA, Middlesex University

# RECTOR'S OFFICE 校長辦公室

**DIRECTOR 主任** Carol Kei WONG 汪淇

BSc; MSc, University of Macau

### RESEARCH SERVICES AND KNOWLEDGE TRANSFER OFFICE 研究服務及知識轉移辦公室

INTERIM DIRECTOR 代主任 Wei GE 嘉偉

 RESEARCH SERVICES SECTION 研究服務處
 HEAD 處長
 Lai Fan CHAN, Linda 陳麗芬 BSc, Nanjing University; MSc, Institute of Hydrobiology, Chinese Academy of Sciences; PhD, University of Alberta

Bcom, The University of New South Wales MBA, University of Durham

# STUDENT AFFAIRS OFFICE 學生事務部

**DEAN OF STUDENTS 學生事務長** Paul Chap Chong PANG 彭執中

MBA, University of East Asia

- STUDENT DEVELOPMENT SECTION 學生發展處 HEAD 處長 Sao Lai IO, Stephanie 姚秀麗
   Bachelor, Institute for Tourism Studies
- STUDENT COUNSELLING SECTION 學生輔導處 HEAD 處長 Elvo Kuai Long SOU 蘇桂龍
   BSc, Washingt

BSc, Washington State University; MA, University of Saint Joseph

 STUDENT RESOURCES SECTION 學生資源處 HEAD 處長 Hok Sam CHEONG, Samson 張學森 BBA,

BBA, University of Macau; MPA, Chongqing University

### STRATEGY AND PLANNING OFFICE 策略及規劃辦公室

DIRECTOR 主任 Joey Chi Ngai LAO 柳智毅

BBA, Flinders University of South Australia; MBA, Macau University of Science and Technology; Doctor, Peking University

### UNIVERSITY LIBRARY 大學圖書館

UNIVERSITY LIBRARIAN 圖書館館長

Jianzhong WU 吳建中

MA, East China Normal University; Ph.D., University of Wales, Aberystwyth

#### ASSOCIATE UNIVERSITY LIBRARIAN 圖書館副館長

Kwok Keung WONG, Raymond 王國強

BA, Fu Jen Catholic Unicersity Taiwan; MEd, University of Macau; MAppSc, Charles Sturt University; Ph.D., Beijing University

# UNIVERSITY LIBRARY 大學圖書館

### ■ LIBRARY RESOURCES AND DEVELOPMENT SECTION 圖書館資源及發展處 ASSISTANT UNIVERSITY LIBRARIAN 助理圖書館館長

Kwok Keung WONG, Raymond 王國強 BA, Fu Jen Catholic Unicersity Taiwan; MEd, University of Macau; MAppSc, Charles Sturt University; Ph.D., Beijing University

■ LIBRARY SERVICES AND OUTREACH SECTION 圖書館服務及推廣處 ASSISTANT UNIVERSITY LIBRARIAN 助理圖書館館長

Tak Hoi LEUNG, Billy 梁德海

BA, South China Normal University; MSc, ZhongShan University

# ADMINISTRATIVE UNITS 行政部門

### CAMPUS MANAGEMENT AND DEVELOPMENT OFFICE 校園管理及發展部 DIRECTOR 總監

Meng Kai LAI, Dick 黎明佳

MBA, Asia International Open University (Macau)

- FACILITY MANAGEMENT AND MAINTENANCE SECTION 設施管理及維護處 HEAD 處長 Ka Ip LEONG 梁嘉業
   BSc; MSc, University of Macau
- FACILITY DEVELOPMENT SECTION 設施拓展處 HEAD 處長 Sio Weng TING, Tony 丁紹榮
   BSc; MSc; Ph.D, University of Macau
- SECURITY AND TRANSPORT SECTION 保安及交通事務處 HEAD 處長 Mao Keong LAO, Peter 劉茂強
   BA, University of East Asia
- ENERGY SECTION 能源處 INTERIM HEAD 代處長 Un Leng TAM, Catarina 譚婉鈴

BEng, University of Macau

 CONSTRUCTION AND ENGINEERING SECTION 工程處 HEAD 處長 Sio Un TAI 戴兆源
 BA, National Taiwan

BA, National Taiwan University; MSC, University of Macau; MM, Sun Yat-Sen University

### COMMUNICATIONS OFFICE 傳訊部

DIRECTOR 總監 Wai Kam CHEONG, Katrina 張惠琴

BA, National Chengchi University; MA, University of Macau

# 

**DIRECTOR 總監** Miu Mei LEI, Candy 李妙媚

#### ASSOCIATE DIRECTOR 副總監

Sin Wa PANG, Angela 彭倩華

BBA, Asia International Open University; MPA, University of Macau

BBA, Asia International Open University (Macau); MSc, Drexel University

 ACCOUNTS SECTION 會計處 HEAD 處長 Ka Lai CHENG, Indy 鄭嘉禮

BA; MA, The University of Western Ontario HKICPA, ACAMS

- TREASURY SECTION 出納處 INTERIM HEAD 代處長 Un Keng TAM, Yuki 譚婉琼
- BUDGET SECTION 預算處 HEAD 處長 Sin Wa PANG, Angela 彭倩華

BBA, University of Macau

BBA, Asia International Open University (Macau); MSc, Drexel University

### INFORMATION AND COMMUNICATION TECHNOLOGY OFFICE 資訊及通訊科技部 DIRECTOR 總監

Antony, Kuok Fan SI TOU 司徒瓓璠

BSc, University of Macau

- ACADEMIC COMPUTING AND TECHNOLOGY SERVICES SECTION 電腦教學暨技術服務處
   HEAD 處長
   Kuok leng SEAK, Stanley 石國英
   BSc, University of Macau
- INFRASTRUCTURE AND USER SERVICES SECTION 資訊基建暨用戶服務處 INTERIM HEAD 代處長 Seng Fo CHEANG, Winson 鄭成火
   B.Eng., Huaqiao University
- INFORMATION MANAGEMENT SECTION 資訊管理處 HEAD 處長 Man leng LAO, Ivy 劉曼盈
   BSc, Msc, University of Illinois at Urbana-Champaign

# INTERNAL AUDIT OFFICE 內部審計辦公室

INTERIM DIRECTOR 代主任 Hou Wan TENG, Annie 丁皓雲

BBA; MAcc, Golden Gate University

# OFFICE OF ADMINISTRATION 行政部

DIRECTOR 總監

Lai Meng CHAN, Annie 陳麗明

BSc, University of Macau

 HUMAN RESOURCES SECTION 人力資源處 HEAD 處長 Yuing Guing Ahchi SILVA AGUIAR, Jennifer

BBA, Asia International Open University (Macau); MBA, University of Macau

 PROCUREMENT SECTION 採購處 INTERIM HEAD 代處長 Chon Mio WONG, Mond 王俊苗

BA, BBA, Beijing Normal University MA, University of Macau

# Staff List index

# APPENDICES Staff List index

# A

<i>/ \</i>	
Aaron CIECHANOVER	958
Adrian Cheuk Hung LEI 李卓雄	939
Agnes lok Fong LAM 林玉鳳	980,989
Albert Yuk-keung IP 葉毓強	944
Alexandr SVETLICINII	963
Alfred Seng Fat WONG 黃承發	1004
Alice Chong Kok FONG 馮鍾珏	28
Alice S. LEE	932
Allen Io Kuan VONG 黃耀錕	984
Amy Siu lan SO 蘇小恩	834,936,940
Ana Cristina da Silva Santos Pereira Fernandes DIAS	932
Ana Lulsa Varani LEAL	930
Ana Margarida Belem Nunes	835
Ana Margarida Belem NUNES	929
	965
André van Dokkum 杜安哲	984
Andrew Jackson MOODY	834,925,928
Andy Chun Wai FAN 范進偉	26,833
Angus Chi Ho CHU 朱智豪	978,979,986
Anise Man Sze WU 胡文詩	24,27,978,979
Anna Pou lu VONG 黃寶儀	940
Anna Wai San CHEANG 鄭慧珊	957
Anthony CARTY	964
Anthony Heng TANG 唐恒	943
António PINTO MONTEIRO	965
Antonio Vasconcelos de SALDANHA 薩安東	927
Antony Kuok Fan SI TOU 司徒蟈璠	26,1019
Augusto Teixeira GARCIA	24,27,961,961,962,963

# В

-	
Baby Wina Umacob ALEGRE	949
Baoquan PAN 潘寶全	959
Barry Lee REYNOLDS 雷貝利	22,24,948
Bea VERSCHRAEGEN	965
Bei LI 李蓓	958
Benjamin Kidder HODGES	28,981,991
Betty Wai Hong CHANG 曾偉紅	28
Billy Kar Wei NG 吳嘉偉	28
Billy Kee Long SO 蘇基朗	21,23,994,926
Bin YANG 楊斌	21,925,928
Bing SHUI 稅兵	962,994
Bing WEI 魏冰	946
Bingpu ZHOU 周冰樸	969,996

Binmeng CHEN 陳斌猛	974,996
Biying HU 胡碧穎	946
Bo JIANG 姜波	982
Boby Ho-Hong CHING 程浩航	28,947
Bolong LIU 劉伯龍	984
Brenda Wing Han CHAN 陳詠嫻	941
Brenda Yang ZHANG 張洋	941
Bruce Kam Kwan KWONG	982
Bryan Chiew Siang HO 何秋祥	981

# С

0	
Caishi HUANG, Kevin 黃才試	992
Cândida da Silva Antunes PIRES 李淑華	961
Carla Alexandra SANTOS LOPES	933
Carlos Filipe Guimarães FIGUEIREDO	932
Carlos Jorge Ferreira SILVESTRE	22,970
	940
	24
Carol Kei WONG 汪淇	21,23,27,1015
Carolina Oi Lam UNG 吳靄琳	957,999,1013
Carry Ka Yee MAK 麥嘉怡	943
Catherine See CHAN 陳家怡	930
	963 966
Chan lo SAM 沈振耀 Chanthika PORNPITAKPAN	900 940
Chao Fong KOU SI TOU 高司徒秋芳	940 950
Chao WANG 汪超	963
Chaoyang JIANG 蔣朝陽	962
Chap Fun CHEONG 張集歡	930
Charlie Byung Cherl SOHN	938
Che Man CHENG 鄭智文	28,969
Cheng Hang LEONG 梁靜姮	29,964
Cheng Meng CHONG 鍾昌明	999,1013
Cheng Tak CHAN 陳政德	950
Chengcheng YOU 尤呈呈	931
Chengli WANG 王成立	983
Chengqing XI 席成清	951
Chengwei HE 何承偉	955,998,1012
Chengxin PAN 潘成鑫	980
Cheng-Yu TSAI 蔡承佑	931
Chengzhong XU 須成忠	21,21,23,24,25,968,987,1000,1008
Cheong Hin HONG 孔祥騫	950
Cheong Meng CHONG 鐘昌明	957
Cheris Wing Chi CHOW 周詠芝	938
Chi Chiu LAM 林智超	968
Chi Chong WU, Lantz 胡梓聰	949
Chi Hang CHAN 陳知行	28,974,1003,1007
Chi Ho LOI, Raymond 雷智豪	993

Chi Hong LEONG, Gasper 梁梓康 Chi Keong TANG 翻志強 Chi Kong WONG 黃志剛 Chi Kuan LOU 老志鈞 Chi Man KUOK 郭梓零 Chi Man PUN 潘治文 Chi Man TONG 董志文 Chi Man VONG 黃志文 Chi Meng CHEANG 鄭智明 Chi Seak CHONG 鍾子石 Chi Seng LAM 林智聲 Chi Tat KWOK 郭志逵 Chi Weng CHAN 陳志榮 Chi-Chung CHAN 陳誌中 Chin Pang LEI 李展鵬 Ching Man LAU 劉靖民 Ching-hui LU, Diane 呂靜慧 Ching-Yin KWAN, Nathan 關正衍 Chio leong SIO 邵朝陽 Chio Keong CHIN 錢釗強 Cho Kee CHENG 鄭祖基 Chon Chit TANG 鄧駿捷 Chon Fai CHONG 鍾春暉 Chon Kit CHOU 曹俊傑 Chon Lok LEI 李俊樂 Chon Mio WONG, Mond 王俊苗 Chon Wa LAM 林俊華 Chou Nei LON 倫藻妮 Chris Koon Ho WONG 黃冠豪 Christine Mei Lai LIM Christopher Allen FULTON Christopher KELEN Chu Kwan LOK 駱柱君 Chuang WANG 王闖 Chun Lian JIANG 江春蓮 Chun Seng KAM 甘俊生 Chun Wai CHENG, George 鄭振偉 Chun Wai FAN, Andy 范進偉 Chun Wing CHEUNG 張振榮 Chung Hang LEUNG, Duncan 梁重恒 Chunhui LU 盧春暉 Chunming WANG 王春明 Chuxia DENG 鄧初夏 Claudia Jian XU 徐建 Clement Siu Fung CHOW 鄒少峰

949

967

932

929

965

965

959

927

971

29

943

940

965

964

954

942

937,1004

926,994

973,1009

27,961,962

22,835,937

26,955,998,1012

21,24,27,834,925,927

Dalila Carmen de Sousa ARAUJO Damian John SHAW Dan WEI 魏丹 Dário Moura VICENTE Davis Ka Chio FONG 馮家超 Dayuan HAN 韓大元 De Li XU 徐德利 Defang OUYANG 歐陽德方 Defeng LI 李德鳳 Dehua ZHENG 鄭德華 Deng DING 丁燈 Dennis Ping Cheng WANG 王秉正 Derek Weng Hang CHAN 陳永亨 Desmond Chee Shiong LAM 藍志雄 Desmond Chun Yip YUEN 袁振業 Di WANG 王笛 Dingqi YANG 楊丁奇 Dongxue HAN 韓冬雪 Duanhong CHEN 陳端洪 Duncan Chung Hang LEUNG 梁重恒 Duncan Jiancheng LIU 劉鍵程

# Е

Eduarda Ka Vai VU 鄔嘉慧	29,1014
Edwin Chong Wing CHEUNG 張仲榮	26,954
Eilo Wing Yat YU 余永逸	981
Ellen Ying ZHANG 張穎	928
Elvo Kuai Long SOU 蘇桂龍	28,985,1016
Endong YANG 楊恩東	943
Enqin LI 李恩琴	960

# F

Fai WONG 黃輝	968
Fanny Shuk Fan WONG 黃淑芬	22
Faye Feier CHEN 陳菲兒	941
Fen HOU 侯芬	971,1008
Feng HU 胡峰	959
Feng TANG 唐豐	943
Feng WAN 萬峰	973
Fiona Xi YANG 楊曦	943
Francis SNYDER	965
Fu CHEN 陳孚	947
Fu GAO 高福	958
Fun Hei TANG 鄧歡喜	933
Fung KWAN 關鋒	982

# G

9	
Gabriel ANTUNES DE ARAUJO	928
Gang GONG 龔剛	836,927
Gang LI 李剛	955
Gangli XIAO 肖光莉	959
Gaolong LIU 劉高龍	961
Gary Ka Kei WONG 黃嘉基	981
Gary WONG 黃值富	27,954,1014
Ge GAO 高鴿	935
George Chun Wai CHENG 鄭振偉	22,25
George Chuxiong WEI 魏楚雄	927
Geping RAO 饒戈平	965
Ging CHAN 陳勁	955,998,1012
Glen TIMMERMANS	21,25,929
Glenn James MCCARTNEY 默希濂	22,25,936,939
Grace Kwai Chee CHAU 周桂慈	29,1015
Grace Qi FU 付琦	939
Grace Ying HO 何瑛	941
Gregory CHENG 鄭彥銘	958
Guanfang ZHAO 趙冠芳	929
Guang Hui LUO 羅光輝	958
Guangchao FENG	980
Guanghui HU 胡光輝	971
Guangjian TU 涂廣建	22,25,835,962
Guangsheng QIAN 錢光升	976
Guangzhen SUN 孫廣振	981
Guichuan XING 邢貴川	28,971,995
Guiguo WANG 王貴國	966
Guo HONG 洪果	975,996
Guo Jie CAI 蔡國傑	935,949
Guobin CUI 崔國斌	965
Guokai CHEN 陳國凱	27,31,952,953
Guokang ER 鄂國康	971
Guoqiang LI 李國強	936,939
Guoqiang ZHAO 趙國強	964
Guoxing SUN 孫國星	973,995
Guy LEFEBVRE	965

# Н

Haifeng LI 李海峰	972,995
Haijian MAO 茅海建	926
Haiwei SUN 孫海衛	970
Haiyan WANG 王海燕	981
Haiyan WU 伍海燕	1001
Hanmin ZHOU 周漢民	966
Hanming SHEN 沈漢明	22,24,27,952,953
Hans-Georg MOELLER 梅勒	27,928
Hao HU 胡豪	30,954,997,1011

# 1026

	0.40
Hao ZHANG 張皓	940
Haoyun ZHANG 張浩雲	1001
Hari VENKATESAN 何立慧	26,929
Heng Man HO 何慶文	22,963
Heng SUN 孫恆	958
Henry Chun Kwok LEI 李振國	22,942
Henry Hang Fai KWOK 郭珩輝	22,28,955
Heung Chin HUI, Walter 許向前	29,948
Hewick Hon Ho YU 余漢濠	960
Hio Fong TONG 唐曉峰	967
Hio leong CHE 謝曉陽	983
Hio WU 胡曉	967
Hoi Keng IEONG 楊開荊	935
Hoi Ling PANG 彭海鈴	930
Hoi Yan CHEUNG 張凱欣	949
Hoi Ying CHEN 陳海瑛	926,928
Hojae SHIM 沈虎宰	972
Hok Cheung MA 馬學章	959
Hok Sam CHEONG, Samson 張學森	1016
Hok-Shing CHAN, Brian 陳學成	928
Hon Kei IP 葉漢基	950
Hong Cheng CHAU 周康政	950
Hongcai ZHANG 張洪財	976,1010
Hongchao LIU 劉宏超	975,996
Hongjie ZHANG 張紅杰	956,991
Hongyong LIU 劉鴻勇	929
Hongyu WANG 王紅宇	981
Hou IAN 殷灝	26,971,995
Hou Keong WU 胡浩強	951
Hou Wan TENG, Annie 丁皓雲	1020
Hsu-Min CHIANG 江旭敏	949
Hua YU 余華	956,999,1013
Huabin SHI 施華斌	975,1010
Huaiyu SHAO 邵懷宇	30,972,995
Huanle XU 除歡樂	976
Huanxing SU 蘇煥興	954,998,1012
Hugo Alexandre MARQUES TEIXEIRA	934
Hugo Emanuel DE MIRANDA RODRIGUES DUARTE FONSECA	964
Hui KONG 孔慧	1009
Hui PAN 潘暉	26,29,970,995
Huiling HUANG 黃慧靈	942
Huiquan ZHANG 張滙泉	983
Hung Po LEONG 梁洪波	950
Hung Wan KOT 葛鴻雲	942
Hwai Ping WONG, Mark	933

I Teng SENG, Elaine 盛綺婷 Ian CHE 謝昕 Ian Chun NG 吳恩銓 lat Meng WAN 溫日明 lat Neng CHAN 陳溢寧 Ieng Ha LOU 盧映霞 leng Tak LEONG 梁應德 leng Wai HONG, Alice 洪盈惠 Im Lan CHEONG 張艷蘭 In Fat LO 羅言發 Io Chao CHAN 陳曉疇 Io Cheng TONG 唐曉晴 21,23,25,961,962,987 Io Kei KUONG 圖耀基 lok lp VONG aliás Francisca VONG 黃玉葉 Iris Lin YUAN 袁琳 Isabel MOUSINHO DE FIGUEIREDO Isabel Siu Fong FU 傅小鳳

J

Jacey Ja Young CHOE 崔慈瑛 Jacky Fok Loi HONG 洪福來 Jacky Yuk-Chow SO 蘇育洲 Janet Elizabeth RANDALL Janny May Yee LEUNG 梁美兒 Jason Zezhong XIAO 蕭澤忠 Javier Calero CUERVO Jean Jinghan CHEN 陳靖涵 Jean-Paul Lafavette DUQUETTE Jennifer Yuen Man LAI 黎婉雯 Jeremy DE CHAVEZ 盧杰 Jerome YEN 顏至宏 Jet Lianjie SHU 舒連杰 Ji YOU 由輩 Jia YUAN 袁嘉 Jiahong LU 路嘉宏 Jianbo WAN 萬建波 Jianbo ZHANG 張劍波 Jianguo SHI 侍建國 Jianhong FAN 范劍虹 Jianhong LIU 劉建宏 Jianhua XU 徐建華 Jianrong SUN 孫建榮 Jiantao ZHOU 周建濤 Jianwei WANG 王建偉 Jianzhong WU 吳建中 Jiasheng ZHANG 張家盛 Jie XU 徐杰

29.941 22,27,937 937 934 1004 22,24,936,938 938 937 932 939 22.930.993 833,970,987,1000 22,27,938 984 940 955,998,1012 27,956,998,1012 931 927 962 962 22,979,981 935 832,974,1000,1008 984 21.25.935.1016 983 21,23,24,833,834,835,925,926,973,1009

992

960

950 977

974

967

972

948

932 930

967

29 925.930

967

963

941

936.940

Jimmy Chi Ming LEE 李志明	26,942
Jin HUANG 黃進	965
Jinchao WEI 魏金超	957,999,1013
Jing Ming YAO 姚京明	835,928
Jing ZHANG 張靜	931
Jing ZHAO 趙靜	956,999,1013
Jingbo WU	959
Jingwei ZHANG 張璟瑋	931
Jingzhen XIE 謝靜珍	931
Jingzhi GUO 過競志	971
Jinjian LU 陸金健	955,998,1012
Jin-Jy SHIEH 謝金枝	948
Joanne Sow Hup CHAN	938
João LORETO ILHÃO MOREIRA	963
João Manuel PIRES DA SILVA E ALMEIDA VELOSO	925,928
Joey Chi Ngai LAO 柳智毅	25,1016
Jonty Man Kin LAM 林文堅	943
Joong Sup SHIM 沈仲燮	955
José Eduardo ISAAC SOARES DUARTE	967
José Fernando Lino PASCOAL	933
Joseph Adea SY-CHANGCO	943
	933
Joshua Parr EHRLICH 夜華	930
Juan ZHANG 張娟	833,947
Júlio Reis JATOBÁ	932
Jun YIN 殷俊	26,973,1003,1007
Jung Woo PARK 朴政友	957
Junwen ZHONG 鍾俊文	976

# Κ

Ka Chon LAM 林嘉俊	950
Ka Fai UN 阮家輝	975,1003,1007
Ka lan CHEANG 鄭家欣	983
Ka leng LEI 李嘉瑩	983
Ka lp LEONG 梁嘉業	29,1018
Ka Lai CHENG, Indy 鄭嘉禮	1019
Ka Lai LAM, 林嘉麗	950
Ka Lon CHAN 陳嘉麟	934
Ka Meng LEI 李家明	975,1003,1007
Ka Wai FUNG 馮家維	992
Kaeling TAN 陳凱靈	957
Kai Chong SAM 沈繼忠	950
Kai Chun LEUNG 梁佳俊	935
Kai Meng MOK 莫啟明	16,21,22,23,27,32,970,1004
Kai MIAO 苗凱	957
Kaijian TANG 湯開建	927
Kam Chon CHOU 曹錦俊	966
Kam Hou VAT 屈鑑濠	977
Kam Leng CHAN, Ginger 陳錦翎	948,993

Kam Leong NGAI 倪金良 Kam Weng TAM 譚錦榮 Kan Kan CHAN, Regina 陳勤勤 Kao SI 司考 Kar Wei NG 吳嘉偉 Kathy Qian LUO 羅茜 Katrina Wai Kam CHEONG 張惠琴 Katrine Ka Ki WONG 王嘉祺 Ka-Veng YUEN, Kelvin 阮家榮 Kay Sio Nga CHANG 曾子雅 Ke LI 李可 Keang leng VONG, Peggy 黃鏡英 Kee Hung CHEUNG 張紀紘 Kei Kei NG 吳奇琦 Ken Kam Weng TAM 譚錦榮 Keng Chong LAO 劉景松 Keng Hei VONG 黃景禧 Keng Pan TANG 鄧景濱 Keng Weng LAO 劉景榮 Kevin Michael MAHER Kim Cho NG 伍劍佐 Kim Oi Mei KUOK 郭愛媚 Kin Ho LO 羅健豪 Kin long CHAN 陳建勇 Kin Kei LEE 李建基 Kin Sun CHAN 陳建新 Kin Wa LEONG 梁健華 Kin Wing LAM 林建榮 Kin Yip TAM 譚建業 King Yan HO, Walter 何敬恩 Kit lan KOU 高潔欣 **Kit THOMPSON** Kraivin Paripont CHINTAKANANDA Kuai Wa IP 葉貴華 Kumiko KIMURA 木村久美子 Kun Pang KOU 高冠鵬 Kuok leng SEAK, Stanley 石國英 Kwok Cheung CHEUNG 張國祥 Kwok Keung WONG, Raymond 王國強 Kwok Kit TONG 唐國傑 Kwok Kwong TANG 鄧國光 Kwun Nam HUI 許冠南

### L

Lai Cheng LEI, Victoria 李麗青	28,30,925,928,991
Lai Fan CHAN, Linda 陳麗芬	1015
Lai Han LEUNG 梁麗嫻	954
Lai Meng CHAN, Annie 陳麗明	1020

22.25.832.926.979

15,17,19

964

977

942

970

938

970

942

982

940

963

975

957

934

982 940

958

958

973

955

932

932

976

938

993

1005

943

966

971

939

967 982

977

975,1009

937.938

22,24,979

974.1009

953.955.998.1012

18.20

22,978,979

22,25,30,955

26,833,973,1000,1008

LAM Kam Seng Peter 林金城 Lam Lam CHU 朱琳琳 Lam TENG 林定 Lampo LEONG 梁藍波 Lancy Vai Iun MAC 麥慧妍 Lap Mou TAM 譚立武 Lawrence Hoc Nang FONG 馮學能 Lei CHANG 張雷 Lei ZHU 祝雷 Leo Tsz On LEE 李子安 Leona Shao Zhi LI 李少知 Leong Hou U, Ryan 余亮豪 Letty Yan Yee KWAN 關欣儀 LEUNG Kai Chun Chris 梁佳俊 Lewis Hon Keung TAM 譚漢強 Li DU 杜立 Li LI 栗力 Li LUO 羅力 Li MIAO 苗莉 Li SHENG, Edmund 盛力 Li WANG 王麗 Lian XUE 薛蓮 Liang GAO 高亮 Licheng QIAN 錢力成 Lida Ling Ling ZHANG 張玲玲 Ligang CHEN 陳禮剛 Ligen LIN 林理根 Ligong LU 陸驪工 Lihu XU 徐禮虎 Lijun DI 狄利俊 Lili GAO 高力力 Liliana GONCALVES Liming ZHANG 張立明 Linda Xiaoyun CHEN 陳曉雲 Lingling ZHANG, Lida 張玲玲 Liu YANG 楊柳 Liwen ZHANG 張麗文 Lixin YANG 楊立新 Long CHEN 陳龍 Lucy Xiaowan LIN 林曉婉 Luis Gonçalo GOMES DE ARAÚJO VASCONCELOS PESSANHA Lulu LIU 劉露露 Lung Yam WAN 溫龍欽

### Μ

Maggie Xiaoqing FU 傅曉青	939
Man Chong FONG 馮文莊	966
Man Chung WONG 黃民聰	968,1009

Man Hoi LOK 陸萬海 Man leng LAO, lvy 劉曼盈 Man leng MAI 米萬英 Man Kay LAW 羅文基 Man Leng SIO 蕭敏玲 Man Teng IONG 翁文挺 Mang I VAI 韋孟字 Manuel António NORONHA Manuel Marcelino ESCOVAR TRIGO 尹思哲 Manuel PORTO Manuela Maria Ferreira CARVALHO Mao Keong LAO, Peter 劉茂強 Maria Antónia ESPADINHA Maria Isabel da Silva MATOS Maria José Dos Reis GROSSO Mario CAMS 康言 Mário Rui Lima de Oliveira Pinharanda NUNES Mark Feng TENG 滕鋒 Martin Mathew MONTGOMERY Mary Lai Ping CHAI 柴麗萍 Matthew Ian GIBSON Matthew Patrick WALLACE Matthew Ting Chi LIU 劉丁己 Mauro BUSSANI Mei Leng TAM 譚美玲 Mei Mei LAM 林微微 Mei SHENG 盛梅 Meifang ZHANG 張美芳 Mei-Jiun WU, Michael 吳梅君 Meiwan CHEN 陳美婉 Mek WONG 王覓 Melody Chia-wen LU 呂家玟 Meng Kai LAI, Dick 黎明佳 Meng U IEONG 楊鳴字 Michael C LICHTENSTEIN Michael King Man HUI 許敬文 Michelle Mei Teng LOI 雷美婷 Miguel Ângelo LOUREIRO MANERO DE LEMOS Miguel GOMES DA COSTA Junior Miguel Junior GOMES DA COSTA Miho ANDO 安藤美保 Min-Chuan SUNG, Audrey 宋明娟 Ming Wai WONG, Matilda 黃明蕙 Ming YAN 閻鳴 Ming Yuen LEE, Simon 李銘源 Minghua LIU 劉明華 Minglei ZHANG 張明磊 Mingli ZHENG 鄭明禮 Mingming ZHOU 周明明 Minggiang GUO 郭銘強

Mingyu WANG 王銘宇	929
Miu Mei LEI, Candy 李妙媚	32,1019
Mo HUANG 黃沫	975,1003,1007
Monica Can CHEN 陳燦	941
Moody Yuko MASTUMOTO 松本雄子	943
Morris Ming LIU 劉明	939
Muruga Perumal RAMASWAMY 白祿孟	22,26,962

# Ν

Nai-Hua LIU, Natalia 劉乃華	947
Nan ZHU 朱楠	984
Nan-Shan ZHONG 鐘南山	958
Natalie Siu Lam WONG 黃兆琳	985
Neng lan CHEANG 鄭寧人	832,932
Nevia DOLCINI 杜雪雅	928
Nga Ut LEONG, Joan 深雅月	933
Ni CHEN 陳霓	980
Nicholas Michael PARKER-GROOM	928
Nim Ian CHAN 陳念恩	935
Ningyi DAI 戴寧怡	968,1008
Ningyi SHAO 邵寧—	957
Nuno Fernando Correia Neves PEREIRA	966

# Ρ

•	
Pak Kin WONG 王百鍵	21,23,24,25,27,971,990
Patrick Chang Boon LEE 李壯文	939
Patrick Kuok Kun CHU 朱國權	941
Patrick Wai Hong HO 何偉雄	980
Paul Chap Chong PANG 彭執中	21,28,29,30,31,1016
Paula Cristina Figueiredo de CAMPOS	932
Paulo Jorge TAVARES CANELAS DE CASTRO	963
Pedro CHEONG 張子康	974
Peilian CHI 池培蓮	22,980
Peng Chun VONG 黄炳銓	943
Peng LI 李鵬	955,997,998,1012
Peng Un MAK 麥炳源	975,992
Peng WANG 王鵬	956
Pengyang WANG 汪澎洋	976,1010
Peter Man Wai CHUI 徐文威	943
Pey-Tee OON 溫佩娣	946
Philip Kin Fun LAW 羅建勛	28,942
Philip Sau Tak PUN 潘守德	944
Philip Yeung Fai SIU 蕭楊輝	984
Phoebe Sau Kun CHEANG 鄭秀娟	29
Ping CHEN 陳平	958
Ping Cheng WANG, Dennis 王秉正	945,991

Ping LI 李慿 Ping Man WONG 黃炳文 Ping SHEN 申平 Ping ZHANG, Peter 張平 Ping ZHAO 趙萍 Pingxue ZOU 鄒平學 Pou lu VONG, Anna 黃寶儀 Pou Seong SIT 薛寶嫦 Priscilla Pui Sun TAM 譚珮璇 Pui Kei LAU, Peggy 劉沛棋 Pui Man HOI, Maggie 許貝文 Pui-In MAK 麥沛然

#### 927 949 975,1009 976 976 976 966 991 946 940 948 28,955,998,1012 23,24,970,1002,1006

# Q

Qi ZHAO 趙琦	29,956
Qiang CHEN 陳強	957
Qiang YU 于強	959
Qiang ZENG 曾強	976
Qin SHU 舒琴	985
Qin ZOU 鄒晴	944
Qingjie WANG 王慶節	21,925,926
Qingqing WU 武慶慶	976,1010
Qingsong XU 徐青松	971
Qingwen ZHANG 張慶文	956,999,1013
Qingzhen DENG 鄧慶真	934
Qiongyan ZHUO 卓琼妍	933
Qiwen XU 徐啟文	976
Qi-Yang NIE 聶其陽	1001

# R

Rachel Xiaorong MA 馬笑蓉	942
Raimundo Enedino dos SANTOS	930
Raquel ABI-SAMARA MAGALHÃES	931
Raymond Chi Ho LOI 雷智豪	938
Raymond Fei Loi LAI 黎飛雷	22,26,983
Rebecca Wun Lei LAO 劉煥莉	943
Renhe XU 徐仁和	24,952,953
Ricardo Chi Sen SIU 蕭志成	24,27,936,940
Ricardo MOUTINHO	28
Ricardo Moutinho Rodrigues da SILVA	929
Richard Dennis FITZGERALD	979
Richard Weixing HU 胡偉星	834,835,978,979,987
Rico Long Wai LAM 林朗為	21,22,23,25,27,28,29,31,937,1014
Rob LAW 羅振雄	937,986,987
Robert David SMITH	957
Robert Joseph TAORMINA	984

Roberval Teixeira e SILVA Robin Chi Hang CHARK 翟智恆 Ronald Ion Wa FONG 馮潤華 Ronnel B. KING 龔仁崇 Rose Neng LAI 黎寧 Rose Xiaoming LIU 劉曉明 Rostam J. NEUWIRTH Ru YAN 燕茹 Ruey-Song HUANG 黃瑞松 Rui Manuel Esteves da SILVA Rui Paulo da Silva MARTINS 馬許願 Rui YUAN, Eric 袁睿 Ruibing WANG 王瑞兵 Ruiyang HU 胡瑞洋 Ruiyu XIE 謝瑞瑜 Ruohui ZHAO 趙若輝

930 938 930 946,949 21,23,25,937,991 939 28,961,962 954,998,1012 975,1000 934 16,21,23,27,32,969,1002,1006 947 29,956,998,1012,1014 982 956 981

# S

5	
Sai Weng SIN 冼世榮	25,27,969,1002,1006
Sanming WANG 王山鳴	954
Sao Lai IO, Stephanie 姚秀麗	1016
Sao Leng IEONG 楊秀玲	949
Sara Goncalves dos SANTOS	930
Sara MIGLIORINI	963
Sau Kun CHEANG, Phoebe 鄭秀娟	1015
Seak Weng VONG 黃錫榮	25,971
Sean William GRANT	932
See Kam TAN 陳時鑫	929
Seng Fat WONG 黃承發	973
Seng Fo CHEANG, Winson 鄭成火	1019
Seng Kin LAO 劉承堅	977
Seng Peng MOK 莫昇萍	29,972
Shan WANG 王珊 Shaadaa MA 馬小冈	931
Shaodan MA 馬少丹	970,1008
Shaoping LI 李紹平	953,997,1011
Shengpeng WANG 王勝鵬	957,999,1013
Sheyla Schuvartz ZANDONAI Shi CHEN 陳石	935 974,996
Shih-Diing LIU 劉世鼎	29,979
Shih-Ya KUO 郭世雅	29,979 980
Shing On LEUNG 梁成安	29.946
Shoutong ZHU 朱壽桐	29,940 21,24,832,836,926
Shu Fai CHEUNG 張樹輝	21,24,032,030,920
Shu Ming TAM 譚樹明	977
Shuang Peng WANG 王雙鵬	977,995
Shuguang MAO 毛曙光	944
Shuh Ren JIN 金樹人	944 949
Shui Meng LIU 劉水明	949 959
Shur Weng LIU 剑小内	959

Shulin YU 干書林 Si Man LEI, Alice 李思敏 Siew Huat KONG 江紹發 Sihao WANG 王思豪 Sijia XUE 薛思佳 Sik Chung TAM 譚錫忠 Simon lok Kuan WU 胡玉均 Simon James FONG 方正天 Simon Man Shing SO 蘇文成 Simon Ming Yuen LEE 李銘源 Sin Chi KUOK 郭善知 Sin I MA, Miranda 馬倩兒 Sin Wa PANG, Angela 彭倩華 Sio Hang PUN 潘少恆 Sio Kei SOU 蘇兆基 Sio Un TAI 戴兆源 Sio Weng TING, Tony 丁紹榮 Sisi SUN 孫斯斯 Siu Kwai YEUNG 楊兆貴 Siu Long LEI 李兆隆 Soi Cheong WONG 王瑞璋 Sok Hei VONG 黃淑禧 Song AO 敖頌 Songnan QU 曲松楠 Sónia Sio Heng AO 區少卿 Sou Kuan VONG, Teresa 黃素君 Spencer De LI 李德 Stella leng SAM 沈鷹 Stephanie IO 姚秀麗 Steve Fu YANG 楊福 Steven Xu ZHANG 張旭 Sumiko ITO Susan Jiniuan REN 任錦娟 Suzana Va Ian SOU 蘇樺芮 Sze Lui LAM, Teresa 林思磊

# Т

Tai Ip CHAN 陳泰業	959
Tai Man AO IEONG 歐陽棣文	974
Tak Hoi LEUNG, Billy 梁德海	1017
Tak Wing NGO 吳德榮	979
Tan-Hsia CHEN 陳丹霞	960
Tao LI 李桃	980
Tao LI 李韜	934
Tat Ming SZE 施達明	946
Teng Pio IAU 邱庭彪	961,962
Terence Chuen Wai POON 潘全威	955

Teresa CHU 朱善欣	941
	963
Theresa Van Kam TCHIANG 鄭蘊琴	944
Tianhong FU 傅天虹	935
Tianji CAI 蔡天驥	836,978,979
Tianshu ZHU 朱天舒	929,949
Tianwei HAO 郝天偉	974
Tianyou HU 胡天佑	941
Tien Tsung LEE 李天宗	978,979
Tien-Ping HSIANG 向天屏	947
Tieyuan GUO 郭鐵元	980
Timothy Alan SIMPSON Ting XIAO, Amy 肖婷	980,993 983,993
Ting XIE 解亭	959
Ting-mien LEE 李庭綿	930
Tingting QUE 關婷婷	930 940
Todd JACKSON	940 979
Todd Lyle SANDEL	980
Tony Kin Meng SAM 岑健明	942
Tony Sio Weng TING 丁紹榮	29
Tony Zhenjiang QIN 秦振江	942
Toro Tao CHEN 陳濤	30,941
Tsang Wing MA 馬增榮	930
Tzu-ming LIU 劉子銘	955
נואג שי <b>- ט</b> יייי אייי	
U	
U Kei WONG, Frankie 黃宇棋	949
Un Keng TAM, Yuki 譚婉琼	1019
Un Leng TAM, Catarina 譚婉鈴	1018
V	
- Vai Kuong SIN 冼偉光	969
Vai Pan IU 姚偉彬	970,1005
Vai Va VONG 王偉華	967
Valentino Anok Melo CRISTINO 紀天龍	22,974
Valter SERGO	959
Vanessa Sio Tan SI TOU 司徒小丹	944
Victoria S. HARRISON 何瑞芬	925,927
Vivian Felicio CHAPLIN	932
Vivien Ya Fan WANG 王雅凡	25,956
	000

### W

Wa Kam CHANG 曾華鑫

Vivienne Yick Ku TAO 涂憶劬

956

982

964 Wa KONG 江華 Wai Chung LI 李慧中 948 Wai Fong TOU 杜慧芳 966 Wai Kin LOK 駱偉建 833.962 Wai Kit WONG, Bernard 黃偉傑 967 Wai Kuok CHU 朱偉國 960 Wai Kuong CHAU 984 Wai Kwok LO 盧偉國 833 Wai Man LEONG 梁偉民 950 Wai Meng QUACH 郭偉明 22.972 Wai Neng HO 何偉寧 966 Wai Po CHEUNG 張偉保 946 999,1013 Wai San CHEANG. Anna 鄭慧珊 Wai San WAN. Sancia 溫慧珊 992 Wai Wa CHOI 蔡偉華 971 Wan Cham MA 馬雲駸 934 Wang Lap WONG 黃霐雲 935 Wangji YAN 顏王吉 973,1009 Wanhuan ZHOU 周萬歡 968,1008 Water, Soi Po WONG, Water 黃水波 29,948 Wei DENG 密瑋 981 Wei FENG 馮巍 965 16.21.23.24,27,32,834,936,953,986,1015 Wei GE 葛偉 Wei Han YU 干維翰 1003.1007 Wei SHI 史唯 980 Wei WANG 王薇 966 Wei Wen CHEN 陳薇文 945 Weian LI 李維安 944 Weide ZHONG 鐘帷德 959 Weihan YU 干維翰 976 934 Weijie REN 任衛杰 Weiging SONG 宋衛清 978.981 22.957 Weiwei LIU 劉蔚蔚 Weiwen YIN 尹偉文 983 Weixing HU 胡偉星 21,23,25 Weng Chon CHEONG 張永臻 976 Weng Chon VONG 黃穎駿 951 Weng Fai IP 葉穎暉 975 Weng Fong AO IEONG 歐陽永鋒 985 Weng Hong LEI 李永康 933 Weng Kuan CHOI 蔡泳君 935 Wenhua ZHENG 鄭文華 954 Wenjiang YANG 楊文江 926,929 Wenjing KANG 康文津 937 Wenli ZHU 朱文立 959 Wen-yu CHANG 張文瑜 22.28.980 William Chong Hang CHAO 周昶行 955 William HUGHES 927 Winnie Un Fong KUAN 關婉芳 22,943

1038

# Х

Xi Bin QIU 丘熹彬 Xian WANG, Vincent 王憲 Xiangning WU 吳湘寧 Xianzhong SUN 孫憲忠 Xiao Qing JIN 金小慶 Xiaobo ZHAI 翟小波 Xiao-Chuan CAI 蔡小川 Xiaofei ZHANG 張曉非 Xiaojia CHEN 陳肖家 Xiaoling XU 徐曉玲 Xiaoqin LI 李小勤 Xiaowei TANG 唐小為 Xiaowei WU 吳曉偉 Xin CHEN 陳新 Xinhua GU 顧新華 Xinshu ZHAO 趙心樹 Xinyi JIN 金心藝 Xiuping CHEN 陳修平 Xuanjun ZHANG 張宣軍 Xue Bin XIE 謝學斌 XuHua SUN 孫旭花

#### 960 929 983 965 969 25,963 24,27,832,968,969 933 957,999,1013 956 982 948 976,1010 21,23,24,25,953,997,1011 939 979 934 953,997,1011 952,956 959 948

# Υ

•	
Yabing CAO 曹亞兵	959
Yain Whar SI 池英華	973
Yan LIN 林龑	942
Yan LU 路延	972,1002,1006
Yan SU 粟燕	973
Yan WANG 王燕	948
Yan ZHU 諸嫣	974,1002,1006
Yang CHEN	970
Yang GONG 龔陽	25,30,947
Yang JIANG 江洋	975,1003,1007
Yang, ZU 祖楊	981
Yaning QI 齊亞寧	992
Yanjinzi GAO 高艷津子	984
Yanping LIN 林燕萍	965
Yanwei JIA 賈艷偉	29,975,1003,1007
Yanzheng HE 何廷政	958
Yatao PENG 彭亞濤	1003,1007
Yee Tui SZE 施議對	927
Yi JIANG 蔣怡	985
Yi JIANG, Vivian 蔣怡	992
Yi LI 李毅	982
Yi YANG 楊義	927
Yibai YANG 楊毅柏	983

Yibo ZHANG, Bob 張一博 Yicong ZHOU 周怡聰 Yifeng SUN 孫藝風 Yi-feng TING 丁懿芬 Ying BIAN 卞鷹 Ying LI 李穎 Ying WANG 王穎 Ying ZHENG 鄭穎 Yinning ZHOU 周胤寧 Yiran LI 李亦然 Yisu ZHOU 周憶粟 Yitao WANG 王一濤 Yiwa JIANG 蔣依娃 Yong CHEN 陳勇 Yong HUANG 黃勇 Yong Jie LI 黎永杰 Yonghua SONG 宋永華 Yonghua ZHAO 趙永華 Yongqing CAI 蔡永青 Youhai SUN 孫佑海 Younhee KIM Yu Ming TANG 鄧宇明 Yu WANG 王禹 Yuan WU 吳遠 Yuanjia HU 胡元佳 Yuansi HOU 侯遠思 Yubo TAO 陶宇博 Yue ZHANG 張月 Yuen-yi LO 羅婉儀 Yufan HAO 郝雨凡 Yuhang XU 徐宇航 Yuing Guing Ahchi SILVA AGUIAR, Jennifer Yuk Yee LAM, Cindy 林鈺儀 Yulin YUAN 袁毓林 Yunlu DAI 代雲路 Yun-Tung LAU 劉潤東 Yuqi SUN 孫語崎 Yut Ching KAN 簡月清 Yutao XIANG 項玉濤 Yuzhe LI 李羽喆

974 971 926 983 954.998.1012 25.982 956,999,1012 952,954,998,1012 976,996 982 27.947 24,836,953,997,1011 964 28,974,1003,1007 965 969 16,21,23,24,26,32,969,1008 957,999,1013 974.996 965 930 977.992 962 973.1009 953,954,998,1011 939 982 22,25,929 946 984 931 1020 1014 925.926 955 970.1004 931 964 952,954 935

# Ζ

Zexun ZHANG 張澤珣	935,947
Zhangfeng ZHONG 鍾章鋒	957,999,1013
Zhaotong LIAN 練肇通	22,938
Zhaowei KONG 孔兆偉	27,945
Zhe LI 李哲	31,962
Zhe MA 馬哲	964

1040

Zhen YUAN 袁振 Zhengdong GAN 甘正東 Zhengfeng LU 盧正烽 Zhenmin WANG 王振民 Zhi LIU 劉志 Zhi Sheng WANG 王志勝 Zhidong HAO 郝志東 Zhiguo GONG 鞏志國 Zhiliang WU 吳志良 Zhimin LIN 林至敏 Zhixin YANG 楊志新 Zhong CHEN 陳忠 Zhongya CAI 蔡忠亞 Zhuo QIAO 香卓 Zihao LI 李自豪 Zikang TANG 湯子康 Zuoer CHEN 陳佐洱

# **Campus Map**

# APPENDICES Enquiries

Further enquiries related to admissions may be directed to: <u>Undergraduate Programmes</u>

#### Registry

Tel	:	(853) 8822 4007
E-mail	:	admission@um.edu.mo
Website	:	https://reg.um.edu.mo
Address	:	Registry, Room G002, Administration Building,
		University of Macau, N6
		Avenida da Universidade, Taipa, Macao, China

Postgraduate Programmes

#### Graduate School

- Tel : (853) 8822 4898
- E-mail gradschool@um.edu.mo
- Website : https://grs.um.edu.mo
- Address : Graduate School, Room G001, Administration Building, University of Macau, N6 Avenida da Universidade, Taipa, Macao, China

#### Further enquiries relating to programmes of studies may be directed to:

	General Office	Tel: (853) 8822 8357 E-mail: fah.enquiry@um.edu.mo Website: https://fah.um.edu.mo/
Faculty of Arts & Humanities	Centre for Chinese History and Culture	Tel: (853) 8822 2708 E-mail: cchc.info@um.edu.mo Website: https://cchc.fah.um.edu.mo/
	Centre for Japanese Studies	Tel: (853) 8822 8260, 8822 8230 E-mail: fah.japanese@um.edu.mo Website: https://fah.um.edu.mo/centre-for- japanese-studies/
	Department of Chinese Language and Literature	Tel: (853) 8822 9259, 8822 8150 E-mail: fah.chinese@um.edu.mo Website: https://fah.um.edu.mo/department- of-chinese-language-and-literature/
	Department of English	Tel: (853) 8822 8201, 8822 4063 E-mail: fah.english@um.edu.mo Website: https://fah.um.edu.mo/department- of-english/
	Department of History	Tel: (853) 8822 8801, 8822 8821 E-mail: fah.history@um.edu.mo Website: https://fah.um.edu.mo/department- of-history/
	Department of Portuguese	Tel: (853) 8822 8903, 8822 8181 E-mail: fah.portuguese@um.edu.mo Website: https://fah.um.edu.mo/department- of-portuguese/
	English Language Centre	Tel: (853) 8822 8120, 8822 4520 E-mail: fah.elc@um.edu.mo Website: https://fah.um.edu.mo/english- language-centre/

Faculty of Arts & Humanities	Department of Philosophy and Religious Studies	Tel: (853) 8822 4768 E-mail: fah.philosophy@um.edu.mo Website: https://fah.um.edu.mo/department- of-philosophy-and-religious-studies/
	Department of Arts and Design	Tel: (853) 8822 4597 Email: fah.dad@um.edu.mo Website: https://fah.um.edu.mo/department- of-arts-and-design/

Faculty of Business Administration	General Office	Tel: (853) 8822 4735/4734 E-mail: fba.suggestion@um.edu.mo Website: http://fba.um.edu.mo/
	Department of Accounting and Information Management	Tel: (853) 8822 4747 E-mail: fba.suggestion@um.edu.mo Website: http://fba.um.edu.mo/aim/
	Department of Finance and Business Economics	Tel: (853) 8822 9949 E-mail: fba.suggestion@um.edu.mo Website: http://fba.um.edu.mo/fbe/
	Department of Management and Marketing	Tel: (853) 8822 4649 E-mail: fba.suggestion@um.edu.mo Website: http://fba.um.edu.mo/mmi/
	Department of Integrated Resort and Tourism Management	Tel: (853) 8822 4731 E-mail: fba.suggestion@um.edu.mo Website: http://iirm.fba.um.edu.mo/
	Postgraduate Office	Tel: (853) 8822 4607/4656/4799/9957 E-mail: fba.enquiry@um.edu.mo Website: http://www.um.edu.mo/fba/pgrad/

		<u>Undergraduate Programmes</u> Tel: (853) 8822 4109, 8822 8776
Faculty of Education	General Office	<u>Postgraduate Programmes</u> Tel: (853) 8822 8789, 8822 8613
		E-mail: FED_Prog@um.edu.mo Website: http://www.um.edu.mo/fed/

Faculty of Health Sciences General Office	Tel: (853) 8822 4909, 8822 4296 E-mail: fhs.enquiry@um.edu.mo Website: https://fhs.um.edu.mo
----------------------------------------------	----------------------------------------------------------------------------------------------------

Faculty of Law	General Office	Tel: (853) 8822 9358, 8822 4176, 8822 4795, 8822 4770, 8822 4772 E-mail: fll.enquiry@um.edu.mo Website: http://fll.um.edu.mo
----------------	----------------	---------------------------------------------------------------------------------------------------------------------------------------

Faculty of Science & Technology	General Office Department of Civil and Environmental	Tel: (853) 8822 4963, 8822 4964 Fax: (853) 8822 2426 E-mail: fst.enquiry@um.edu.mo Website: http://www.fst.um.edu.mo Tel: (853) 8822 4967 Fax: (853) 88222426 E-mail: fst.enquiry@um.edu.mo
	Engineering Department of Computer and information Science	Website: http://www.fst.um.edu.mo/cee/ Tel: (853) 8822 4978 Fax: (853) 8822 2426 E-mail: fst.enquiry@um.edu.mo Website: http://www.fst.um.edu.mo/cis/
	Department of Electrical & Computer Engineering	Tel: (853) 8822 4961 Fax: (853) 8822 2426 E-mail: fst.enquiry@um.edu.mo Website: http://www.fst.um.edu.mo/ece/
	Department of Electromechanical Engineering	Tel: (853) 8822 4977 Fax: (853) 8822 2426 E-mail: fst.enquiry@um.edu.mo Website: http://www.fst.um.edu.mo/eme/
	Department of Mathematics	Tel: (853) 8822 4926 Fax: (853) 88222426 E-mail: fst.enquiry@um.edu.mo Website: http://www.fst.um.edu.mo/math/
	Department of Physics and Chemistry	Tel: (853) 8822 9170 Fax: (853) 88222426 E-mail: fst.enquiry@um.edu.mo Website: http://www.fst.um.edu.mo/pc/

i i i i i i i i i i i i i i i i i i i		1
Faculty of Social Sciences	General Office	Tel: (853) 8822 8976 E-mail: fss.enquiry@um.edu.mo Website: https://fss.um.edu.mo/
	Department of Communication	Tel: (853) 8822 8961, 8822 8978 E-mail: fss.comm@um.edu.mo Website: https://comm.fss.um.edu.mo/
	Department of Economics	Tel: (853) 8822 8916 E-mail: fss.econ@um.edu.mo Website: http://www.um.edu.mo/fss/economics/
	Department of Government and Public Administration	Tel: (853) 8822 8301, 8822 8321 E-mail: fss.gpa@um.edu.mo Website: http://www.um.edu.mo/fss/pa/
	Department of Psychology	Tel: (853) 8822 8381, 8822 4261 E-mail: fss.psychology@um.edu.mo Website: http://www.um.edu.mo/fss/psychology/

Faculty of Social Sciences	Department of Sociology	Tel: (853) 8822 4595 E-mail: fss.sociology@um.edu.mo Website: https://soc.fss.um.edu.mo/
	Doctor of Public Administration Programme	Tel: (853) 8822 8342 E-mail: fss.dpa@um.edu.mo Website: https://dpa.fss.um.edu.mo/
	Macau Studies Programme	Tel: (853) 8822 8130 E-mail: cms.info@um.edu.mo Website: https://cms.um.edu.mo/

Institute of Applied Physics and Materials Engineering	General Office	Tel: (853) 8822 4142, 8822 9953 E-mail: iapme.enquiry@um.edu.mo Website: http://iapme.um.edu.mo/
--------------------------------------------------------------	----------------	--------------------------------------------------------------------------------------------------------

Institute of Advanced Studies in Humanities and Social Sciences	General Office	Tel: (853) 8822 2082 E-mail: ias.enquiry@um.edu.mo Website: http://ias.um.edu.mo/
-----------------------------------------------------------------------	----------------	-----------------------------------------------------------------------------------------

Institute of Chinese Medical Sciences	eneral Office	Tel: (853) 8822 4685, 8822 4875 E-mail: icms.enquiry@um.edu.mo Website: http://www.um.edu.mo/icms/
------------------------------------------	---------------	----------------------------------------------------------------------------------------------------------

Institute of Collaborative Innovation	General Office	Tel: (853) 8822 4600 E-mail: ICI.Enquiry@um.edu.mo Website: https://ici.um.edu.mo
	Centre for Cognitive and Brain Sciences	Tel: (853) 8822 4600 E-mail: ICI.CogBrainSci@um.edu.mo Website: https://ccbs.ici.um.edu.mo/
	Centre for Artificial Intelligence and Robotics	Tel: (853) 8822 4600 E-mail: ICI.CAIR@um.edu.mo Website: https://cair.ici.um.edu.mo/
	Centre for Data Science	Tel: (853) 8822 4600 E-mail: ICI.Datasci@um.edu.mo Website: https://cds.ici.um.edu.mo/

Institute of Collaborative Innovation	Centre for Innovation and Entrepreneurship	Tel: (853) 8822 9219 E-mail: ICI.Innovation@um.edu.mo Website: https://cie.ici.um.edu.mo/
	Macau Institute for Translational Medicine and Innovation	Tel: (853) 8822 9204 E-mail: mitmi.info@um.edu.mo Website: https://mitmi.ici.um.edu.mo/

Institute of Microelectronics	General Office	Tel: (853) 8822 4700 E-mail: amsv.enquiry@um.edu.mo Website: https://ime.um.edu.mo/
----------------------------------	----------------	-------------------------------------------------------------------------------------------

Honours College General Office	Tel: (853) 8822 4974 E-mail: HC.enquiry@um.edu.mo Website: http://hc.um.edu.mo/
--------------------------------	---------------------------------------------------------------------------------------

Asia-Pacific Academy of Economics and Management	General Office	Tel: (853) 8822 8137 E-mail: apaem_info@um.edu.mo Website: http://apaem.um.edu.mo/
--------------------------------------------------------	----------------	------------------------------------------------------------------------------------------

Centre for Teaching and Learning Enhancement	General Office	Tel: (853) 8822 4583 E-mail: ctle@um.edu.mo Website: https://ctle.um.edu.mo
-------------------------------------------------	----------------	-----------------------------------------------------------------------------------

# **Office Hours:**

 Monday – Thursday
 : 9:00 a.m. – 1:00 p.m. and 2:00 p.m. – 5:45 p.m.

 Friday
 : 9:00 a.m. – 1:00 p.m. and 2:00 p.m. – 5:30 p.m.

Office is closed on Saturdays, Sundays and public holidays.

\*\*\*\*\*\*\*

All details given in the Calendar are based on information in July 2022. For updated information, please refer to the University Homepage http://www.um.edu.mo.