
Introduction

Founded in 1981, the University of Macao (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 13,500 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 120 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 No 193 in the Times Higher Education (THE) World University Rankings, No 14 in the THE Young University Rankings, No 36 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 245. It is among the top 1% in Essential Science Indicators (ESI) rankings in 14 subjects, namely Engineering, Materials Science, Computer Science, Chemistry, Pharmacology & Toxicology, Clinical Medicine, Psychiatry/Psychology, Biology & Biochemistry, Social Sciences, General, Molecular Biology & Genetics, Agricultural Sciences, Economics & Business, Environment/Ecology, and Mathematics.

The Faculty of Business Administration at UM has received accreditations from three major international accreditation bodies: the EFMD Quality Improvement System (EQUIS) of the European Foundation for Management Development (EFMD), the Association to Advance Collegiate Schools of Business (AACSB), and the Association of MBAs (AMBA).

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 university's international characteristics have attracted outstanding students from around the world, which in turn has created a vibrant, multicultural campus. UM constantly expands its international network and actively builds new platforms for international collaboration in order to broaden the students' horizons. It has signed collaboration agreements with nearly 320 higher education institutions spanning over 30 countries and regions and UM students can enjoy exchange opportunities offered by more than 170 partner institutions in over 30 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 Civil Engineers, fellow of the American Society of Mechanical 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, it also offers attractive work conditions through the UM Talent Programme to enable faculty members to achieve their full potential so that they can produce outstanding results. As part of the programme, the UM Macao Fellow scheme aims to nurture young local scholars and 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 whole-person development. The RCs strive to enhance students' seven competencies: responsible citizenship, global competitiveness, knowledge integration, teamwork and collaboration, service and leadership, cultural engagement, and healthy lifestyle.

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 Quality Research in Chinese Medicine, State Key Laboratory of Analog and Mixed-Signal VLSI, and State Key Laboratory of Internet of Things for Smart City), three emerging research fields (precision medicine, advanced materials, and regional oceanology), three interdisciplinary research fields (artificial intelligence and robotics, data science, and cognitive and brain sciences), 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 modern technology in humanities and social sciences.

In terms of chip research, UM has launched various cutting-edge studies for the development of electronic systems, with analog-to-digital converter and ultra-low-power RF integrated circuit being the two major research directions. The university also actively promotes research in power management and microfluidic technology. UM researchers in microelectronics have received different awards, including a second prize of the State Scientific and Technological Progress Award, the Xplorer Prize, and a number of Macao Science and Technology Awards. 15 papers

from UM were accepted at the International Solid-State Circuits Conference 2023, which is testament to UM's leading position in microelectronics research. As for Chinese medicine research, UM is committed to enhancing the quality of Chinese medicine and establishing international standards. UM has established quality standards for more than 20 Chinese medicinal herbs for authoritative publications such as United States Pharmacopeia (USP), European Pharmacopoeia (Ph. Eur.), and Chinese Pharmacopoeia (ChP), and have received a second prize of the State Scientific and Technological Progress Award, gold awards at the International Exhibition of Inventions of Geneva, over 40 Macao Science and Technology Awards, and the Macao Science and Technology Special Award. With the 'dual carbon' strategy and the creation of a livable and resilient smart city as the guiding principle, UM researchers in the field of Internet of Things for smart city are committed to strategic fundamental and applied research, and have produced a number of internationally influential and iconic results. UM has received a second prize of the State Scientific and Technological Progress Award, the Guanghua Engineering Science and Technology Prize, and a number of Macao Science and Technology Awards.

UM also actively strengthens 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 obtained approval to serve as a national co-working space in 2019 and has incubated over 50 start-ups to assist faculty members and students in transferring their research results.

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, Temple University, the University of Lisbon, Tsinghua University, Fudan University, Zhejiang University, and 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 language, 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, an Olympic-standard swimming pool, a sports complex, an archery range, basketball courts, a sports climbing wall, and gym rooms.

Support to 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. The current president Xi Jinping has visited UM and has 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.