

RESEARCH CENTRES AND LABORATORIES

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

Center for Cognitive Brain and Science (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

China Southern Power Grid – University of Macau Joint Laboratory of Smart Power and Energy for Carbon Neutrality**Guangdong-Hong Kong-Macao Joint Laboratories**

- Guangdong-Hong Kong-Macao Joint Laboratory for Smart Cities
- Guangdong-Hong Kong-Macao Joint Laboratory of Human-Machine Intelligence-Synergy Systems
- 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
- Biomedical Engineering Laboratory
- Biomedical Imaging Laboratory
- Chemistry Laboratory
- Clean Room
- Cloud Computing and Distributed Systems Laboratory
- Computational Engineering Laboratory
- Computer Graphics and Multimedia Laboratory
- Control Laboratory
- Construction Materials Laboratory
- Corrosion & Metallography Laboratory
- Crystal Growth and Atomic Force Microscope Laboratory
- Crystal Structure Laboratory
- Cyber and Crypto Laboratory
- Data Analytics and Collaborative Computing (DACC) Laboratory
- Data-Driven Intelligent Systems Laboratory
- Distributed Systems Laboratory
- Dynamics and Monitoring (DYAMON)Laboratory (IoTSC)
- E-Commerce Technology Laboratory
- E-Home Healthcare Engineering Laboratory
- Electric Power Engineering Laboratory
- Electrical Machines and Drives 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
- Immersive Interactive Technology Laboratory
- Industrial Engineering Laboratory
- Innovative Design and Integrated Manufacturing Laboratory
- Inorganic/Organic Engineering Material Laboratory
- Intelligent Unmanned Systems Laboratory

- Internet of Things 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
- Metallography Laboratory
- Microscopy Laboratory
- Motion Capture Laboratory
- Natural Language Processing & Portuguese-Chinese Machine Translation Laboratory (NLP2CT)
- Physical Chemistry Laboratory
- Physical Properties Measurement Laboratory
- Quantum Devices Fabrication/Testing Laboratory
- Raman Spectroscopy Laboratory
- Robotics Laboratory
- Scanning Electron Microscope (SEM) Laboratory
- Sensor-based Cooperative Robotics Laboratory
- Smart and Micro/Nano Systems Laboratory
- Smart Environment & Cybernetics System Laboratory
- Soft Matter Engineering Laboratory
- Soft Sensors-Actuators-Robotics 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

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- ISCG Gaming Laboratory
 - Kinesiology Laboratory
 - Linguistics Laboratory
 - MICE Laboratory
 - Mock Hotel Room
 - Science Laboratory
 - Thomson Reuters Trading Room