



**UTM**  
UNIVERSITI TEKNOLOGI MALAYSIA

# UNIVERSITI TEKNOLOGI MALAYSIA

## A Guide to Postgraduate Study

innovative • entrepreneurial • global  
[www.utm.my](http://www.utm.my)

# UNIVERSITI TEKNOLOGI MALAYSIA

## TOWARDS AN INNOVATIVE, ENTREPRENEURIAL AND GLOBAL UNIVERSITY

Since it became a full-fledged university in 1975, Universiti Teknologi Malaysia (UTM) has played a pivotal role as Malaysia's largest contributor of technical and professional workforce for the local industry, government agencies as well as multinational companies.

Along with its vision to be recognised as a world-class Entrepreneurial Research University, UTM is set to be the centre of academic and technological excellence. Its mission is to be a leader in the development of human capital and innovative technologies that will contribute to the nation's wealth creation.

UTM is now regarded as Malaysia's premier institution in engineering, science and technology and ranked in the top 100 league in the World University Rankings in the field of engineering and technology.

UTM's vision is in line with the nation's aspiration of becoming a knowledge-based, innovation-led economy that is grounded in creativity and innovation with high value creation.

UTM main campus at Johor Bahru



- Top graduated-focused research university in Malaysia
- Highest number of PhD student enrolment in the region
- Highest number of international student postgraduate enrolment in Malaysia
- Self-accreditation and autonomous status University
- Top 100 in QS World University Rankings in engineering & technology in 2016

## FACTS AND FIGURES\*

### ESTABLISHMENT 1 April 1975

Research University Status	2010
Autonomous University	2012
Self-Accreditation Status	2013

### CAMPUS

Johor Bahru	1,222 hectares
Kuala Lumpur	47.56 hectares

### STUDENTS

Undergraduate	48%
Postgraduate	52%
Number of students	21,309

\* As at June 2016



# PROGRAMME STRUCTURE

UTM offers a wide range of mainstream and external or off-campus graduate programmes.

## MAINSTREAM PROGRAMME

Mainstream Programmes are programmes usually conducted at UTM campus which offers various types of registration and modes of study.

## EXTERNAL PROGRAMME

External programmes are programmes usually offered off-campus (outside UTM Campus) at selected study centres. The mode of registration is by part time and the lectures are usually conducted during weekends. The programme is open to all Malaysians and International candidates with Malaysian Employment Pass.

## SPECIAL PROGRAMME

Special Programmes are programmes usually offered for special groups of students or organisation/companies to meet certain agreed requirements.



### MODES OF STUDY

#### Coursework

The candidate must complete a minimum of 40 credits, and must obtain a final academic grade of at least 3.0 out of 4.0 CGPA. The minimum 40-credit taught course consists of several subject modules including faculty compulsory, faculty electives, a university elective module and a Master's project.

#### Research

The Master's or PhD candidate by research is supervised by a lecturer (or a panel of lecturers). The directed research work introduces candidates to the processes by which new knowledge is developed and applied accordingly.

#### Mixed-Mode (Coursework and Research)

The candidate must complete a minimum of 21 credits of courses and an equivalent of 21-credit research component, and must obtain a final academic grade of at least 3.0 CGPA.

### PROGRAMME DURATION

PROGRAMME DURATION	MINIMUM	MAXIMUM
Master	3 Semesters	8 Semesters
PhD	6 Semesters	12 Semesters

# MASTER and PhD PROGRAMMES

Faculty/School	Programmes	Fields of Research
<b>Advanced Informatics School</b>	<p><b>by coursework</b>                      Master of Software Engineering                      M.Sc. (Information Assurance)                      M.Sc. (Computer Systems Engineering)                      M.Sc. (Informatic)                      M.Sc. (Business Intelligence and Analytics)                      M.Sc. (Computer Systems Engineering)-                      International Dual Master Degree Deakin - UTM</p> <p><b>by mixed-mode</b>                      Doctor of Software Engineering</p> <p><b>by research</b>                      Master of Philosophy                      Doctor of Philosophy</p>	Software Design, Software Testing, Software Development, Information Assurance, Data Hiding (Watermarking and Cryptography), Image Processing, Big Data Analysis, Business Intelligence Analysis, Multimedia Security, Digital Forensics, Business Informatics, Business Intelligence and Information Security, Network Security and Education / Business Informatics
<b>Biosciences &amp; Medical Engineering</b>	<p><b>by coursework</b>                      M.Sc. (Biomedical Engineering)</p> <p><b>by mixed-mode</b>                      Master of Science                      - Biotechnology</p> <p><b>by research</b>                      Master of Philosophy                      - Rehabilitation Technology                      - Biomedical Engineering                      - Biomedical Engineering (Double Degree with Technical University Ilmenau)                      - Bioscience                      Doctor of Philosophy                      - Health Science                      - Health Science (Industrial PhD)                      - Biomedical Engineering                      - Biomedical Engineering (Double Degree with Technical University Ilmenau)                      - Biomedical Engineering (Industrial PhD)                      - Bioscience                      - Bioscience (Industrial PhD)</p>	<p><b>Bioscience:</b> Molecular Biology &amp; Genetic Engineering, Biochemistry &amp; Environmental Microbiology, Plant Biotechnology, Fermentation Technology &amp; Bioprocess, Bioinformatics, Animal Tissue Culture &amp; Gene Therapy, Prokaryotic Biochemistry, Biochemistry</p> <p><b>Biomedical:</b> Biosignal Processing, Biomedical Instrumentation, Biomedical Imaging, Biomechanronics, Biomaterials, Tissue Engineering, Prosthetics &amp; Orthotics, Medical Computing, Clinical Engineering, Health Care Management System, Rehabilitation Engineering, Sports Science Technology</p>
<b>Built Environment</b>	<p><b>by coursework</b>                      Master of Architecture                      M.Sc. (Urban and Regional Planning)                      M.Sc. (Transportation Planning)                      M.Sc. (Tourism Planning)</p> <p><b>by research</b>                      Master of Philosophy                      - Architecture                      - Urban and Regional Planning                      - Transportation Planning                      - Quantity Surveying                      Doctor of Philosophy                      - Architecture                      - Urban and Regional Planning                      - Transportation Planning                      - Quantity Surveying</p>	<p><b>Quantity Surveying:</b> Construction Economics, Construction Law and Contract, Building Information Modelling, Construction Health and Safety, Plant and Site Management, Building Services.</p> <p><b>Architecture:</b> Environmental Engineering &amp; Architectural Sciences, Urban Design &amp; Greening, Architectural Management, Landscape Architecture, Climatic Mapping, Vertical Green System, Vernacular Architecture, Passive Architecture, Landscape Resource, Landscape Ecology.</p> <p><b>Urban and Regional Planning:</b> Transportation and Logistics Planning, Rural Planning, Tourism Planning, Housing and Community Planning, Regional Planning, Restorative Environment, Urban Morphology, Spatial Analysis, Environmental Planning, Urban Design &amp; Development.</p>

Faculty/School	Programmes	Fields of Research
<b>Chemical Engineering and Energy Engineering</b>	<p><b>by coursework</b>  M. Sc. (Safety, Health and Environment)  M.Sc. (Process Plant Management)  M.Sc. (Herbal Technology)  M.Sc. (Energy Management)</p> <p><b>by mixed-mode</b>  Master of Engineering  - Chemical  - Bioprocess  - Environmental</p> <p>Master of Science  - Polymer Technology</p> <p>Doctor of Engineering  - Process Plant Management  - Bioprocess Engineering Design</p> <p><b>by research</b>  Master of Philosophy  - Chemical Engineering  - Bioprocess Engineering  - Environmental Engineering  - Polymer Engineering  - Petroleum Engineering  - Gas Engineering</p> <p>Doctor of Philosophy  - Chemical Engineering  - Bioprocess Engineering  - Environmental Engineering  - Polymer Engineering  - Petroleum Engineering  - Gas Engineering</p>	<p><b>Chemical Engineering:</b> Catalysis and reaction engineering, Sustainable energy management system, Sustainable product and Process design, Water minimization, Process modelling and simulation, Process control and safety, Separation technology, Membrane separation, Process plant management.</p> <p><b>Bioprocess Engineering:</b> Biotechnology, Biopharmaceuticals, Cell cultures, Tissue engineering, Genetic engineering, Biotransformation, Food and Biomaterial engineering, Membrane technology, Fermentation, Nanotechnology, Ferro fluids.</p> <p><b>Polymer Engineering:</b> Plastic-Rubber blend, Modification of polymer, Recycling of plastics waste, Fibre-reinforced composite, PVC technology, Polymer synthesis and characterisation, Biopolymers, Polymer nano composites, Microwave processing of polymers, Rheology of polymer melts, Polymer additive and adhesive.</p> <p><b>Environmental Engineering:</b> Water and air pollution, Wastewater, Groundwater contamination, Solid and hazardous waste management, Industrial waste treatment, Environmental system modelling.</p> <p><b>Petroleum Engineering:</b> Geostatistics and geoscience engineering, Petroleum Geology, Water flooding, Improved and enhanced oil recovery, Rock-fluid interactions, Separation of oil-water emulsion, Drilling engineering, Formation damage, Shale problems, Cuttings transport, Corrosion, Rock mechanics, Well bore stability, Sand control, Production engineering, Cementing.</p> <p><b>Gas Engineering:</b> Gas metering and calibration, Gas adsorbent development, Membrane technology, Advanced Material for energy application, NGV conversion system, Renewable energy, Catalytic combustion, Burner Conversion, Optical tomography, Membrane fuel cell.</p>
<b>Civil Engineering</b>	<p><b>by coursework</b>  M.Eng. (Civil)  M.Eng. (Structures)  M.Eng. (Geotechnics)  M.Eng. (Hydraulics &amp; Hydrology)  M.Eng. (Construction Management)  M.Eng. (Environmental Management)  M.Eng. (Transportation)  Master of Forensics Engineering</p> <p><b>by mixed-mode</b>  Engineering Doctorate  - Construction Technology &amp; Management</p> <p><b>by research</b>  Master of Philosophy  - Transportation  - Coastal &amp; Maritime  - Materials  - Construction  - Highway &amp; Traffic  - Structure &amp; Materials  - Hydraulics  - Environment  - Geotechnics  - Structures  Doctor of Philosophy  - Civil Engineering</p>	<p>Structures &amp; Materials, Construction Management, Highway &amp; Transportation, Geotechnics, Hydraulics &amp; Hydrology, Environmental Engineering and Management, Project Management, Forensic Engineering</p>





Faculty/School	Programmes	Fields of Research
<b>Computing</b>	<p><b>by coursework</b>            M.Sc. (Information Technology Entrepreneurship)            M.Sc. (Information Security)</p> <p><b>by mixed-mode</b>            Master of Computer Science            Master of Information Technology            -Information Technology Management</p> <p><b>by research</b>            Master of Philosophy            - Computer Science            - Software Engineering            Doctor of Philosophy            - Computer Science            - Information System</p>	<p>Artificial Intelligence, Bioinformatics, Database and Informational Retrieval, E-Learning, Graphics &amp; Multimedia, Information System, Management, Network &amp; Security, Software Engineering, Information Assurance, Pervasive Computing, Soft Computing, Virtual, Visualization and Vision, Pattern Recognition, Operational Research, Business Intelligence, Information Service System, Computer Network &amp; Security, Computer Forensic, Network Forensic, Disaster Recovery Metamodel, Disaster Recovery Management, Information System Adoption, E-Services Satisfaction &amp; Quality Management, Co-Creation and Strategic System, Social Networking Adoption, Framework for E-Government, IT Service Management, Social Media Framework, Business Process Engineering &amp; Knowledge Management, Cloud Computing Management &amp; Adoption, Cloud Computing Protocol &amp; Security, Information System Security, Forgery Detection &amp; Optimization, Optimization and Scheduling, Privacy Preserving, Corporate Forensic Readiness Framework, Software Testing, Information Security Metamodel, Augmented Reality Environment, Data Clustering, Modelling &amp; Classification, Object Tracking Algorithm, VANET, MANET Protocol, Body Sensor Network, Trust, Privacy Modelling, Internet of Things (IoT).</p>
<b>Electrical Engineering</b>	<p><b>by coursework</b>            M.Eng. (Computer &amp; Microelectronic System)            M.Eng. (Electronic &amp; Communication)            M.Eng. (Mechatronic &amp; Automatic Control)            M.Eng. (Electrical Power)</p> <p><b>by research</b>            Master of Philosophy            - Electrical Engineering            Doctor of Philosophy            - Electrical Engineering</p>	<p>Control and Instrumentation, Mechatronic, Robotic, Power System, Power Electronic, High Voltage, Radio and Wireless Communication, Optical Communication, Computer Networks, Electronic System Design, Analog Mix-Signal, Microelectronic, Medical Electronic, Computer Engineering</p>
<b>Education</b>	<p><b>by coursework/ by mixed- mode</b>            M.Ed. (Chemistry)            M.Ed. (Curriculum &amp; Instruction)            M.Ed. (Education &amp; Development)            M.Ed. (Educational Psychology)            M.Ed. (Educational Technology)            M.Ed. (Guidance &amp; Counselling)            M.Ed. (Management &amp; Administration)            M.Ed. (Mathematics)            M.Ed. (Measurement &amp; Evaluation)            M.Ed. (Physics)            M.Ed. (Teaching as a Second Language - TESL)            M.Ed. (Technical &amp; Vocational Education)</p> <p><b>by research</b>            Master of Philosophy /            Doctor of Philosophy</p>	<p>Engineering and Technical Practice, Technical and Vocational and Training (TVET), Work-based Learning, Comparative Studies, Human Development, Cognitive Science, Pedagogical Methods, Learning Technologies, Curricular Reform, Assessment, Evaluation, Policy, Management, Higher Education, Current Issues in Education, Personalize Learning, Human Computer Interaction, Meaningful Interactive Learning, ICT Based Instruction Design, E-Learning, Online Education Testing, Learning Through Social Networking, Reading Readiness, School Readiness, Special Education Assessment, School-Based Assessment, Laboratory Work Assessment, Educational Courseware Assessment, Life Style &amp; Wellness, Physical Activity, Exercise And Sports, Child Physical Development And Fundamental Movement Assessment, Health And Fitness Program For Special Population, Physical, Social Development, Discipline Problems, Truancy/Absenteeism, Training Program And Short Course For Executive, Curriculum of Professional Continuing Education Program, Teaching And Learning For Professional Executives, Experience Based And Prior Knowledge Assessment, Issue Related To Professional Continuing Education Program, Standard Of Professional Continuing Education Program,</p>

Faculty/School	Programmes	Fields of Research
	<ul style="list-style-type: none"> <li>- Curriculum &amp; Instruction</li> <li>- Education &amp; Development</li> <li>- Educational Psychology</li> <li>- Guidance &amp; Counselling in Education</li> <li>- Management &amp; Administration in Education</li> <li>- Chemistry Education</li> <li>- Educational Technology</li> <li>- Mathematics Education</li> <li>- Measurement &amp; Evaluation in Education</li> <li>- Physics Education</li> <li>- Teaching English as a Second Language (TESL)</li> <li>- Technical &amp; Vocational Education</li> <li>- Online Learning</li> <li>- Multimedia in Education</li> </ul>	<p>Mathematical Thinking, Geometrical Thinking, Algebraic Thinking, Scientific Thinking, Problem Based Learning, Metacognition, Science And Mathematics Standards, Implementation And Evaluation of Curriculum, Teacher Education, Diagnostic And Remedial, Human Development, Cognitive Science, Pedagogical Methods, Learning Technologies, Curricular Reform. Sport Science.</p>
<p><b>Geoinformation &amp; Real Estate</b></p>	<p><b>by coursework</b></p> <ul style="list-style-type: none"> <li>M.Sc. (Geoinformatics)</li> <li>M.Sc. (Remote Sensing)</li> <li>M.Sc. (Geomatics Engineering)</li> <li>M.Sc. (Real Estate)</li> <li>M.Sc. (Land Administration &amp; Development)</li> <li>Master of Asset &amp; Facilities Management</li> </ul> <p><b>by research</b></p> <ul style="list-style-type: none"> <li>Master of Philosophy</li> <li>- Geoinformatics</li> <li>- Remote Sensing</li> <li>- Geomatics Engineering</li> <li>- Real Estate</li> <li>- Facilities Management</li> <li>- Land Administration &amp; Development</li> <li>- Hydrography</li> </ul> <ul style="list-style-type: none"> <li>Doctor of Philosophy</li> <li>- Geoinformatics</li> <li>- Remote Sensing</li> <li>- Geomatic Engineering</li> <li>- Real Estate</li> <li>- Facilities Management</li> <li>- Land Administration &amp; Development</li> <li>- Hydrography</li> </ul>	<p><b>Geographical Information System:</b> 3D GIS, GIS Applications, GIS Spatial Statistics, GIS Spatial Analysis, Web-Based GIS</p> <p><b>Geomatics Engineering:</b> Geomatics Engineering Applications, Remote Sensing, Digital Image Processing, Precision Farming, RADAR, Airborne Laser Mapping , Aerial Photogrammetric Mapping, Close-Range Photogrammetric Mapping, Terrestrial Laser Mapping, Industrial Surveying ,Engineering Surveying, Cadastral Surveying, Astronomy, Cartography, Hydrography, Oceanography, Coastal Mapping, Global Positioning System (GPS), Global Navigation Satellite System (GNSS), Underground Utility Mapping, Geomatics-Based Medical Imaging</p> <p><b>Real Estate:</b> Real Estate Study, Real Estate Valuation&amp; Investment, Real Estate Development, Real Estate Economics &amp; Management, Property Management Housing Study, Real Estate Law and Regulation, Housing Policy and Economics, Housing Development.</p> <p><b>Land Administration and Development:</b> Land Development, Land Law, Planning and Development, Land Policy</p> <p><b>Assets and Facilities Management:</b> Construction and Project Management, Quality Management System, Environmental Management, Information and Communication Technology (ICT)in Assets and Facilities Management, Performance Measurement</p> <p><b>Remote Sensing:</b> Remote Sensing Technologies and Applications in Urban Environment, Remote Sensing for Agriculture, Ecosystems and Hydrology, Remote Sensing of the Ocean, Sea Ice, Coastal Waters, and Large Water Regions, Sensors, Systems, and Next-generation Satellites, Remote Sensing of Clouds and the Atmosphere, Optics in Atmospheric Propagation and Adaptive Systems, Active and Passive Microwave Remote Sensing for Environmental Monitoring, Image and Signal Processing for Remote Sensing, Earth Resources and Environmental Remote Sensing/GIS Applications, LiDAR Technologies and Techniques.</p> <p><b>Hydrography:</b> Oceanography &amp; Sedimentation, Acoustic &amp; Oceanographic Surveying, Geophysical &amp; Acoustic Sensing Hydrography, Acoustic and Oceanographic Surveying, Digital Hydrographic Mapping, Managing Marine Ecosystems, Coastal Erosion and Protection, Economics of the Marine Environment, Marine Planning</p>





Faculty/School	Programmes	Fields of Research
<b>International Business School</b>	<p><b>by coursework</b> Master of Business Administration</p> <p><b>by mixed- mode</b> Doctor of Business Administration</p> <p><b>by research</b> Doctor of Philosophy</p>	<p><b>Marketing/Entrepreneurship:</b> Entrepreneurship, Marketing, Branding</p> <p><b>Accounting/Finance:</b> Corporate Governance, Financial Reporting, Management Accounting, Performance Measurement, Enterprise Risk Management</p> <p><b>Technology/Economics:</b> Financial Economics, Macroeconomic, Technology Management, Managing Innovation, Knowledge Management</p> <p><b>Management/ Human Capital:</b> Talent Management, Organisational Development, Leadership, Business Strategy, Strategic Management, Business Planning</p>
<b>Islamic Civilisation</b>	<p><b>by research</b> Master of Philosophy - Halal Science</p> <p><b>Doctor of Philosophy</b> -Fiqh Science &amp; Technology</p>	<p>Ethics in Science and Technology, The Fiqh of Science and Technology, Issues in Islam, Science and Technology, The Concept, Theory, and Philosophy of Islamic Science, The Methodology of Islamic Science, The Education of Science and Technology, The Science of I'jaz al-Qur'an, Muslim Scientists and Their Thoughts, Halal Laws and Regulations in Malaysia, Scientific and Technical Usage, Policies of Halal Science, The Ethics of Halal Science</p>
<b>Language Academy</b>	<p><b>by research</b> Master of Philosophy Doctor of Philosophy</p>	<p>Applied Linguistics, Literature Cultural and Intercultural Communication, English / Language for Specific Purposes (ESP), Gender Communication, Health Communication, Language Training, Sociolinguistics, Media and Global Communication, Multimodality, Corpus Linguistics, Organisational and Institutional Discourse, Political Discourse, Discourse Analysis, Computer-Mediated Communication, Genre Analysis</p>
<b>Malaysia-Japan International Institute of Technology</b>	<p><b>by coursework</b> - Master of Technology and Innovation Management - Master of Sustainable System</p> <p><b>by research</b> - Master of Philosophy - Doctor of Philosophy</p>	<p>Ecological Engineering ,Air Resources ,Intelligent Dynamic System, Communication System &amp; Network, Embedded System, Vehicle Systems Engineering,Advanced Devices And Materials Eng, Tribology And Precision Machining Biologically Inspired System And Technology, Conversions And Applications Nano-characterization, Structural Control And Processing, Metabolic Engineering And Molecular Biology , Artificial Intelligence and Robotics, Lipids Engineering, Wind Engineering For Urban, Artificial, Man-made Environment, Photonic Thermal Engineering, Management of Technology</p>
<b>Mechanical Engineering</b>	<p><b>by coursework</b> M.Sc. (Advanced Manufacturing Technology) M.Sc. (Mechanical Engineering) M.Sc. (Industrial Engineering) M.Sc. (Materials Engineering) M.Sc. (Ship and Offshore Engineering) M.Sc. (Aeronautical Engineering) M.Sc. (Automotive Engineering)</p> <p><b>by research</b> Master of Philosophy - Mechanical Engineering - Marine Technology</p> <p><b>Doctor of Philosophy</b> - Mechanical Engineering</p>	<p>Mechanical Engineering, Advanced Manufacturing Technology, Ship and Offshore Engineering, Materials Engineering, Industrial Engineering, Aeronautical Engineering, Automotive Engineering</p>



Faculty/School	Programmes	Fields of Research
<b>Management</b>	<p><b>by coursework</b> Master of Technology &amp; Innovation Management</p> <p><b>by mixed-mode</b> Master of Human Resource Development Master of Management - Technology Management</p> <p><b>by research</b> Master of Philosophy - Human Resource Development - Management  Doctor of Philosophy - Management</p>	Advertising, Consumer Behaviour, Marketing, Supply Chain Management, Business Ethics, Human Resource Management, Leadership, Crisis Management, Cross Cultural Management, E-commerce, Organisational Behaviour, Quality Management, Safety Management, Strategic Management, Entrepreneurship, Commercialization, Technology Management, Production Management, Operation Management, Financial Accounting & Reporting, Financial Management, Auditing, Investment, Management Accounting, Corporate Finance, Corporate Governance, Taxation, Adult Learning, HRIS, Communication, Industrial Psychology, Knowledge Management, Employment Relation, Organisational & Industrial Psychology, Professional Ethic, Stress Management, Human Resource Development.
<b>Perdana School of Science, Technology and Innovation Policy</b>	<p><b>by coursework</b> Master of Technology &amp; Innovation Management</p> <p><b>by research</b> Master of Philosophy - Policy Studies  Doctor of Philosophy - Policy Studies</p>	Policy for Green Technology; Policy for Technology & Knowledge Society; Managing STI Policy Implementation; Entrepreneurship & Innovation Policy; National STI Policy; Space Policy; Policy & Standards
<b>Razak School of Engineering &amp; Advanced Technology</b>	<p><b>by coursework</b> Executive Master Occupational Safety and Health Management M.Sc. (Sustainable Urban Design) M.Sc. (Engineering Business Management) M.Sc. (System Engineering) Master of Professional Science</p> <p><b>by mixed-mode</b> Doctor of Engineering (Engineering Business Management)</p> <p><b>by research</b> Master of Philosophy (Industrial Design) Master of Philosophy Doctor of Philosophy</p>	Mechanical and Manufacturing Engineering, Civil Engineering and Built Environment, Sciences, Management, Quality Management, Lean, Materials Engineering, Human Resource Management, Industrial Engineering, Corrosion Engineering, Project Management, Construction Management, Ethics, Re-manufacturing, Sustainable Urban Design, Occupational Safety and Health Management, Disaster and mitigation, Engineering Education, Systems Engineering, Communication Engineering, Instrumentation Engineering, Environmental Engineering, Geotechnical Engineering, Power Systems, Electronic Systems
<b>Science</b>	<p><b>by mixed-mode</b> M.Sc. (Chemistry) M.Sc. (Forensic Science) M.Sc. (Mathematics) M.Sc. (Engineering Mathematics) M.Sc. (Physics)</p> <p><b>by research</b> Master of Philosophy - Chemistry - Mathematics - Physics  Doctor of Philosophy - Physics - Chemistry - Mathematics</p>	<p><b>Physics:</b> Material Physics, Electro-Optics Laser, Instrumentation Physics, Health Physics.</p> <p><b>Chemistry:</b> Instrumentation and Analytical Chemistry, Organic Chemistry, Inorganic Chemistry, Physical Chemistry, Forensic Science</p> <p><b>Mathematics:</b> Algebra and Analysis, Applied Mathematics, Numerical and Computational Mathematics, Operational Research and Statistics.</p>





Faculty/School	Programmes	Fields of Research
School of Graduate Studies	by research Master of Philosophy Doctor of Philosophy PhD (Engineering Education)	Engineering Epistemologies, Engineering Learning Approaches, Engineering Learning System, Engineering Diversity and Inclusiveness, Engineering Assessment

Note:

1. A comprehensive list of research areas can be referred at the respective faculty websites
2. Master by research and PhD programme other than the ones listed above will be offered as generic programmes by all faculties and schools.

## PART TIME EXTERNAL PROGRAMME



Part time external programme is offered on-campus (Johor Bahru or Kuala Lumpur Campus) or off-campus at selected study centres. The mode of registration is by part-time and the lectures are conducted on weekends. The programme is open to all Malaysians and International candidates with Malaysian Employment Pass.

LEARNING CENTRE	FIELD OF PROGRAMME
Kuala Lumpur	Civil Engineering, Electrical Engineering, Mechanical Engineering, Petroleum Engineering, Mathematics Engineering, Education, MBA, Management, Human Resource, Construction, Land Administration, Geomatics, Real Estate, Asset & Facilities Management, Safety, Health & Environment, IT Management, Information Security.
Bayan Lepas, Penang	Electrical Engineering, Engineering Electronics & Communication, Engineering Mechatronic & Automatic Control, Computer & Electronics System Engineering, Computer & Micro electric Systems Engineering, Civil Engineering, Land Administration & Development
Penang	Electrical Engineering, Civil Engineering
Ipoh, Behrang	Civil Engineering, Mechanical
Melaka, Muar, Segamat, Kota Tinggi & Kuantan	Education
UTM Johor Bahru	Electrical Engineering, Mechanical Engineering, Ship & Offshore, Automotive, Aeronautical, Safety Health & Environment, Education, MBA, Management, Human Resource, Construction, Land Administration, Geomatics, Real Estate, Safety, Health & Environment, IT Management, Computer Science.
Kuching & Kota Kinabalu	Education, TESL, Civil Engineering

\* List of programmes offered at the learning centres is subject to change. For an updated list of programme offered and learning centres, please refer to [www.utm.my/admission](http://www.utm.my/admission)

# GENERAL ENTRY REQUIREMENTS

In order to ensure the quality and integrity of the programmes, both the mainstream and off-campus or external programmes maintain the following entry requirements:

## Master's Degree:

- A bachelor's degree with good honours in a relevant field from Universiti Teknologi Malaysia or any other institutions of higher learning recognised by the UTM Senate; or
- Other qualifications equivalent to a Bachelor's degree and experience in a related field recognised by the UTM Senate.

## Doctor of Philosophy:

A master's degree in a relevant field from Universiti Teknologi Malaysia or any other institutions of higher learning recognised by the UTM Senate.

## Engineering Doctorate / Doctor of Software Engineering:

- A master's degree in a relevant field from Universiti Teknologi Malaysia or any other institutions of higher learning recognised by the UTM Senate; or
- A bachelor degree together with working/industrial experience in a relevant field recognised by the UTM Senate.

## Health Requirement

An international student must be certified by a UTM Medical doctor to be in good health for the issuance of a student pass and/or student registration (refer to [www.utm.my/admission](http://www.utm.my/admission) for details on medical requirements).

## STUDENT VISA

International students are required to have a student pass to study in Malaysia. UTM will assist international students in obtaining visas and student passes. Visa and student pass requirements are subject to change from time to time and vary between countries. For the most up-to-date information, students should refer to the Malaysia Embassy and Malaysia Immigration Department website at [www.imi.gov.my](http://www.imi.gov.my) or Education Malaysia website at <http://educationmalaysia.gov.my>



## SPECIFIC REQUIREMENTS FOR INTERNATIONAL STUDENTS

### English Language Requirements for International Students

An international applicant must provide evidence of English Language proficiency in addition to academic credential. Applicants must fulfil one of the options below:

IELTS / TOEFL SCORE:	ENGLISH LANGUAGE REQUIREMENTS
<b>IELTS ≥ Band 6.0</b> TOEFL ≥ 550 TOEFL (IBT) ≥ 79 <b>ELS CIEP LEVEL 108 &amp; 109</b>	Students can enrol at Faculty
<b>IELTS = Band 5.5</b> 525 ≤ TOEFL < 550 69 ≤ TOEFL IBT < 79 <b>+ English Course Certified</b>	
<b>IELTS = Band 5.5</b> 525 ≤ TOEFL < 550 69 ≤ TOEFL IBT < 79 <b>+ ELS CIEP Level 107</b>	Students are required to attend and pass an <b>English for Postgraduates Programme (EPG)</b> conducted by Language Academy in UTM.
<b>IELTS ≤ Band 5.0</b> 500 ≤ TOEFL (PB) < 525 59 ≤ TOEFL (IBT) < 69	Students are required to attend Certified Intensive English Programme (CIEP) <b>conducted by</b> ELS language Center and pass level 107 or higher.

### Note :

- Students must have a valid two-year TOEFL certificate with a PBT score of 600 or above (IBT/CBT equivalent) or IELTS Band 7 or CIEP equivalent as a per-requisite for Teaching English as a Second Language (TESL) programme.
- For more information about ELS (CIEP) & UTM admission requirement, refer [www.els.edu.my/admission](http://www.els.edu.my/admission)

# HOW TO JOIN US

1. Apply online at [www.utm.my/admission](http://www.utm.my/admission)
2. Upload the following supporting documents (not more than 10 MB per file in pdf/jpeg/words file);
  - a) Certificate(s) & Transcript(s)
  - b) Passport size photograph
  - c) IC/Passport copy
  - d) Processing fee slip (Internet Banking /Cash Deposit/Electronic Funds Transfer): MYR20 (Malaysians); USD30 (Non-Malaysians)
  - e) Research Proposal (Research Application only)
  - f) Approval letter from your proposed supervisor (Research Application only, if any)
  - g) Proof of working experience, if any.
  - h) IELTS/TOEFL certificate (Non-Malaysians)
3. Application results will be issued within two months.

## TUITION FEES FOR POSTGRADUATE PROGRAMMES

### MAINSTREAM PROGRAMMES (MALAYSIANS AND INTERNATIONAL STUDENTS)

Master	Malaysians		Internationals
	Full Time (3 semesters)	Part Time External Programme	Full Time (3 semesters)
Coursework	MYR 9,355.00	Please refer to note 3	MYR 22,330.00
Coursework and research (Mixed mode)	MYR 9,355.00		MYR 22,330.00
Research	MYR 8,255.00		MYR 18,980.00
MBA	MYR 21,000.00		MYR 30,000.00

Doctor of Philosophy	Malaysians		International
	Full Time (6 semesters)	Part Time (8 semesters)	Full Time (6 semesters)
Coursework and research (Mixed mode)	MYR 18,860.00	MYR 16,730.00	MYR 44,810.00
Research	MYR 15,860.00	MYR 14,330.00	MYR 37,310.00

**Note:**

1. Fees stated above are applicable to programmes at UTM Johor Bahru campus and are subject to change.
2. Fees for international students do not include Personal Bond, Medical Check-up, Visa & Student Pass
3. Fees for Master programmes conducted during weekends range from **MYR19,000 – MYR30,000** (external programme)
4. Fees for programmes offered by faculties/schools, AIS, IBS, IBD, Perdana School, MJIT or special programmes can be referred on-line at [www.utm.my/admission](http://www.utm.my/admission)

# STUDENT SERVICES AND ACADEMIC SUPPORT

## UTM offers one of the most comprehensive student support networks in Malaysia.

- State-of-art learning and research facilities
- UTM Library with over half a million collection books, journals and other resources
- International Student Centre (ISC)
- International Student Country Chapter Societies
- WiFi zone covering most academic area
- Well-equipped student clinic (including dental and imaging services)
- Counseling & Career Development Services
- Bank, Post Office and bookshop
- Free on-campus transportation
- On-campus accommodation / housing for students (single and limited family apartment) for 18,000 students
- International Arabic School & kindergarten
- International cafeteria & fast food
- Guest house (Scholar's Inn)
- Sport Facilities & Gymnasium
- Football Stadium and Olympic-sized swimming pool
- Equine centre & kayak facilities
- Lakes, recreational park and natural reserve

For more information on student services and accommodation, please refer to [www.utm.my/studentaffairs](http://www.utm.my/studentaffairs)

## UTM SCHOLARSHIP AND FINANCIAL ASSISTANCE

The following scholarships and financial assistance are available :

- Ainuddin Wahid Scholarship ( PhD/Malaysians only)
- UTM Zamalah for Master & Ph.D programme (Malaysians only)
- UTM International Doctoral Fellowship (International students only)
- Graduate Assistantships (Malaysians and International students)
- Industrial PhD/ MyBrain15 Scholarship (Malaysians only)
- Doctoral Research Grant (Malaysians and International students)
- Graduate Supervision Grant (Malaysians and International Students)
- Citation and Impact factor Incentive (Malaysians and International Students)

Scholarship application requirements vary. For more information, visit the postgraduate scholarship website at [www.utm.my/admission](http://www.utm.my/admission)

## ACCOMMODATION

UTM has 10 residential colleges at UTM Johor Bahru, which can accommodate more than 17,000 students and 1 residential college which can be accommodate 3,000 students in UTM Kuala Lumpur. Some of the residential colleges provide single accommodation for students with each room having its own attached bathroom. Facilities provided at each residential college include a cafeteria, a multipurpose hall, self-laundry services, computer center, convenience store and common hall besides other facilities in the student's rooms. There are 300 units of family housing with 2 and 3 bedrooms. Usually the apartment is reserved for married students. For more information on student accommodation, please visit website [www.utm.my/studentaffairs](http://www.utm.my/studentaffairs)



# FACULTIES & SCHOOL CONTACT DETAILS

## Advanced Informatics School

Tel : +603 26154429 / 4727  
 Fax : +603 2693 0933  
 Email : enquiry\_ais@ic.utm.my  
<http://www.ais.utm.my>

## Faculty of Biosciences and Medical Engineering

Tel : +607 555 8527 / 8528  
 Fax : +607 553 1112  
 Email : postgrad@biomedical.utm.my  
<http://www.fbme.utm.my>

## Faculty of Built Environment

Tel : +607 553 0611  
 Fax : +607 556 6155  
 Email : gradfab@utm.my  
<http://www.fab.utm.my>

## Faculty of Chemical Engineering and Energy Engineering

Tel : +607 553 5507  
 Fax : +607 558 8166  
 Email : gradcheme@utm.my  
<http://www.fcee.utm.my>

## Faculty of Civil Engineering

Tel : +607 553 1744  
 Fax : +607 556 6157  
 Email : gradfka@utm.my  
<http://www.civil.utm.my>

## Faculty of Computing

Tel : +607 553 2208 / 2209  
 Fax : +607 553 8822 / 8829  
 Email : kjps@utm.my  
<http://www.cs.utm.my>

## School of Graduate Studies

Tel : +607 553 8037 /  
 Fax : +607 5537546  
 Email : graduate@utm.my  
<http://www.sps.utm.my>

## Faculty of Electrical Engineering

Tel : +607 555 7011  
 Fax : +607 556 6272  
 Email : kjps@fke.utm.my  
<http://www.fke.utm.my>

## Faculty of Geoinformation and Real Estate

Tel : +607 553 0899  
 Fax : +607 556 6163  
 Email : zulkeplimajid@utm.my  
<http://www.fght.utm.my>

## Faculty of Islamic Civilisation

Tel : +607 553 5095/5091  
 Fax : +607 553 5101  
 Email : fti@utm.my  
<http://www.islamic.utm.my>

## Faculty of Management

Tel : +607 561 0088  
 Fax : +607 561 0099  
 Email : inquiry.management@utm.my  
<http://www.management.utm.my>

## Faculty of Mechanical Engineering

Tel : +607 555 7042  
 Fax : +607 556 6159  
 Email : kjil@mail.fkm.utm.my  
<http://www.fkm.utm.my>

## Faculty of Education

Tel : +607 553 4410 / 4405  
 Fax : +607 557 7351  
 Email : tpfp@utm.my  
<http://www.educ.utm.my>

## Faculty of Science

Tel : +607 553 4002  
 Fax : +607 556 6162  
 Email : tda.fs@utm.my  
<http://www.fs.utm.my>

## Malaysia-Japan International Institute Technology

Tel : +603 26154922  
 Fax : +603 2203 1266  
 Email : mjiiit@ic.utm.my  
<http://www.mjiiit.utm.my>

## International Business School

Tel : +603 2180 5023  
 Fax : +603 2692 6435  
 Email : ibskl@utm.my  
<http://www.ibs.utm.my>

## Language Academy

Tel : +607 553 1803 / 2488  
 Fax : +607 556 6911  
 Email : m-adlina@utm.my  
<http://www.languageacademy.utm.my>

## Perdana School of Science, Technology and Innovation Policy

Tel : +603 21805193/95/52/62  
 Fax : +603 21805340  
 Email : perdanaschool@utm.my  
<http://www.perdanaschool.utm.my>

## Razak School of Engineering & Advanced Technology

Tel : +603 2180 5138 / 5143  
 Fax : +603 21805380  
 Email : razakschool@utm.my  
<http://www.razakschool.utm.my>

## CONTACT DETAILS OF STUDENT RECRUITMENT AND ADMISSION DIVISION

Department	Email	Telephone No.
Admission	pggrad@utm.my	+607-553 7891 / 7904 / 7779
Scholarship	sps.scholarship@utm.my	+607-553 7782 / 7595 / 7769

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## FURTHER INFORMATION:

### UTM JOHOR BAHRU

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Student Recruitment & Admission Division**  
Block F54, Universiti Teknologi Malaysia  
81310 Johor Bahru , Johor  
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**Director,  
Student Recruitment & Admission Division**  
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Jalan Sultan Yahya Petra, 54100 Kuala Lumpur  
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Information is deemed correct at the time of printing. December 2016

[www.utm.my/admission](http://www.utm.my/admission)