



## 1.1 UTM in Brief

Universiti Teknologi Malaysia is an innovation-driven entrepreneurial Research University and a leading research-intensive university in engineering, science and technology ranked in the top 200 world ranking in engineering and technology. It is located both in Kuala Lumpur, the capital city of Malaysia and Johor Bahru, the southern city in Iskandar Malaysia, which is a vibrant economic corridor in the south of Peninsular Malaysia.

UTM is now a graduate-focused university with 53% of its student population consisting of postgraduate students, the highest in Malaysia. The number of postgraduates enrolled in PhD studies in diverse fields of specialization is 4,455 students, which is the highest in the region and among top ten in the world. It has 5,043 international students from more than 60 countries around the world, the highest among research universities in Malaysia. Through its Global Outreach Programme, UTM students gain international exposure and experiential learning through various student mobility and exchange programmes, service learning and community engagements and Summer School such as in Harvard.

UTM's mission is to lead in the development of creative and innovative human capital and advanced technologies that will contribute to the nation's wealth creation. This is in line with the aspirations of the country towards becoming a knowledge-based, innovation-led economy grounded in creativity and innovation with high value creation. Through a strategic transformation of its organizational structure, UTM is focused on creating a vibrant academic culture and fertile intellectual ecosystem through its New Academia approach based on Blue Ocean Strategy which focuses on innovative, entrepreneurial, value-driven and meaningful approaches beyond conventional paradigms

UTM has also established a reputation for cutting-edge research undertakings and innovative education, proven by becoming the three-time winner for the National Intellectual Property Award for organization category. A stimulating research culture exists in UTM through 10 Research Alliances (RA) in strategic disciplines and 31 Centres of Excellence (CoE) with more than 100 Research Groups, in addition to academic faculties to service science, technology, engineering, business and management education, among others

UTM is also actively engaged in research collaboration with renowned institutions such as Harvard University, Massachusetts Institute of Technology (MIT), University of Oxford, Imperial College of London, University of Cambridge, Tokyo University and Meiji University, to name a few, on strategic areas of interests. To facilitate further engagement and networking in academic and research undertakings, international satellite offices have been established in Tokyo, Boston, Doha and Madinah.

UTM is thus renowned for being at the forefront of engineering and technological knowledge and expertise, contributing to the technical and professional workforce of the nation since 1904. Having produced more than 200,000 technical graduates and qualified professionals over the years, UTM has earned its place as Malaysia's premier university in engineering and technology which inspires creative, innovative and entrepreneurial mindsets.



## 1.2 UTM-Faculty of Civil Engineering

The UTM-Faculty of Civil Engineering, affectionately known as UTM-FKA (Fakulti Kejuruteraan Awam), is one of the largest faculties in the region. It is also the largest producer of civil engineers in Malaysia. Currently there are about 1087 students in UTM-FKA, of which 495 are Masters and 280 are Doctoral students. Presently, UTM-FKA hosts foreign students mainly from Indonesia, Pakistan, Bangladesh and some Middle Eastern and African countries who are enrolled in undergraduate and postgraduate studies in various fields in civil engineering. Since its establishment in 1975, UTM-FKA has produced 9927 Bachelors degree, 1455 Masters and 97 Ph.Ds graduates. Many of these graduates now hold prominent positions in various organisations both in the public and the private sectors.

There are four academic departments at the Faculty representing the main branches of civil engineering. They are the Department of Structures and Materials, the Department of Hydraulics and Hydrology, the Department of Geotechnics and Transportation and the Department of Environmental Engineering. In addition to these departments, the Faculty also houses four centres of excellence to coordinate and optimise the vast expertise available in the Faculty. These centres of excellence are the Construction Research Centre (CRC), the Institute of Environmental and Water Resources Management (IPASA) and the Coastal and Offshore Engineering Institute (COEI).

A number of UTM-FKA staff has been recognised at national and international level for their scholarly work and research in their fields. The recognition includes awards from many competitions or exhibitions such as the Petronas Invention Medal Award, Mindex/Innatex, UTM's Researcher of the year award, ITEX, Geneva's International Exhibition of Invention, WEPO and INPEX. Several products invented by UTM-FKA researchers have been commercialised such as the sine-slab and the artificial sea grass for coastal protection, the F-R concrete, and the mobile interlocking block machine.

As a faculty, UTM-FKA has also been acknowledged as one of the leading faculties in UTM. In the year 2000, UTM-FKA was the first faculty of civil engineering in Malaysia to obtain ISO 9002 and ISO 9001:2008 certification in the year 2008 for its undergraduate academic management. UTM-FKA was the recipient of the Vice Chancellor Quality Award in 2000 and 2009, UTM's Information Technology Award in 2001 and 2008, Creativity and Innovation Award in 2003 and Academic Quality Award in 2011. With such achievements, there is no doubt that UTM-FKA is on the right track to becoming one of the leading teaching and research faculties in Malaysia if not the region.



### **1.3 Policy Statement of the Faculty**

UTM-FKA aspires to become a world class centre for education and research in civil engineering. As such, the Faculty has spelled out its vision, mission and objectives as outlined below.

#### **1.3.1 Vision**

To be a world class centre of education and research in Civil Engineering.

#### **1.3.2 Mission**

To spearhead excellence in academic and technology development through creativity.

#### **1.3.3 Objectives**

- (i) To produce quality graduates through implementation of integrated curriculum that meets market demands.
- (ii) To enhance and provide professional expertise in civil engineering.
- (iii) To extend the strategic relationship between the University and industries.
- (iv) To increase the number of quality research and publications.
- (v) To promote a systematic life long education system.
- (vi) To improve the skill and expertise of human resource.
- (vii) To enhance the culture of effective team working in a conducive working environment.