

馬來西亞理工大學（UTM）的前身為成立於 1904 年的科技學校，至 1972 年才正式轉型為大學，目前為馬來西亞相當頂尖的研究型公立大學，現有學生 16,000 人，研究生比例 26%，教師人數則為 2,300 人，其中有 256 人為國際籍教師。依據 QS 世界排名資料，UTM 在全世界排名第 228 名，亞洲為第 49 名，如僅考慮成立 50 年以內年輕學校排名，UTM 的世界排名為第 18 名。UTM 校方期許在 2020 年能達到全世界前 50 名，因此在 2018 年對全校 18 個學院(School)重新進行架構調整成 7 個學程(Faculty)，同時也加重研究中心的角色，以期能強化 UTM 的研究能量。

UTM 的永續環境研究中心(Research Institute for Sustainable Environment, RISE)成立於 2015 年，其由 UTM 校內 5 個傑出的卓越研究中心所組成，其中最主要的研究中心為環境永續與水質安全卓越研究中心(IPASA)，另也包括地質科學與數據地球研究中心(INSTeG)、程序系統工程中心、創新規劃與發展研究中心及海岸與海洋研究中心，主要的目的為促進環境永續的各項學術研究工作。目前中心有 50 位教師，11 位博士後研究員、9 位行政人員技士與超過 100 位來自世界各地的研究生。此中心自 2015 年成立後一直是 UTM 表現極為優異的研究中心，例如 RISE 在 2017 年共發表超過 400 篇文章，累積的被引用數為 5,158，平均每位中心成員每年可發表 8 篇文章。

UTM 研究中心聯盟最早成立於 2009 年，主要的目的為架構一個具備世界級的前沿研究實驗室(Cutting-Edge Research Center)，2015 年 UTM 重新強化研究中心聯盟功能，同時整併永續研究聯盟(Sustainability Research Alliance)、水研究聯盟(Water Research Alliance)及能源研究聯盟(Energy Research Alliance)，成為資源永續研究聯盟(Resource Sustainability Research Alliance, RSRA)。目前 RSRA 為 UTM 5 個正式及堅強的卓越研究聯盟之一，其主要的目標為成為東南亞乃至全世界資源永續的標竿研究中心，以帶領 UTM 成為國內及國際頂尖大學，目前包括 12 個研究實驗組，2 個卓越研究中心及 404 個研究人員，多數的研究領域與主題均與水-能源鏈結相關，如環境生物科技研究組、生態水文研究組、綠色科技研究組、水回收研究組、潔淨與效率能源管理研究組、及綠色能源與環境規劃研究組。

## **Background**

Universiti Teknologi Malaysia (also known as UTM) is a public research-intensive university in engineering, science and technology located in Iskandar Puteri, Johor and it has a branch campus in Kuala Lumpur. UTM is a graduate-focused university. UTM has a total student of 15956 (26% postgraduate), 3156 international students (82% postgraduate), and a total faculty staff of 2297 (265 international).

The history of UTM began in 1904 when a technical school began operation on Weld Road (now Jalan Raja Chulan) to teach Technical Assistants for the Federated Malay States Departments of Railways, Survey and Public Works. In 1941 the Advisory Committee of Technical Schools recommended that the school be elevated to college status and proposed that a new technical college be constructed. The new college was to be built on a 47-acre piece of government land in Gurney Road (now Jalan Sultan Yahya Petra), Kuala Lumpur.

In 1960 the college began a new era by upgrading its engineering courses to the degree level. Student following courses at the college sat for professional examinations conducted by the Institution of Civil Engineers and Institution of Mechanical Engineers, United Kingdom & the Royal Institute of British Architects, as well as the Royal Institute of Chartered Surveyors. Students for the professional courses were drawn from government servants for the Federation of Malaya Singapore, Borneo and Brunei.

On 14 March 1972, Malaysia's Ruler, Royal Highness Seri Paduka Baginda Yang Dipertuan Agong proclaimed the formation of Institut Teknologi Kebangsaan (National Technology Institute) (ITK) under section 6(1) of the University & University College Act 1971. The institution inherited all the amenities and facilities of the former Technical College of Gurney Road. On 1 April 1975, the journey from school to university was completed when the institution became Universiti Teknologi Malaysia (UTM). In 1976, the government approved the university constitution and the university Senate and Council were established.

On 3 December 3 1977, UTM witnessed its first group of 65 graduates being conferred their degrees in the inaugural convocation ceremony in Kuala Lumpur, graced by the Royal Highness Almarhum Sultan Ismail Ibni Almarhum Sultan Ibrahim, the first Chancellor of UTM.

The university moved to a new campus located on 2,400 acres of land in Skudai, Johor. Construction works had begun in 1978 and the campus opened on 16 September 1985 by His Majesty Sultan Iskandar Ibni Almarhum Sultan Ismail, then the Yang di Pertuan Agong, in his capacity as his capacity as the second Chancellor of UTM.

UTM's has regional and international academic collaborations, including Intel, Altera, and Proton. UTM is one of the few public universities in Malaysia that has attained research university status, opening avenues for research and industrial collaboration through government research grants.

On 8 January 2012, the Malaysian Ministry of Higher Education declared UTM to be the first Malaysian university to attain full autonomy from the government. This allows the university to select the best of the regional students, as well as handle most of the management internally for a more efficient administration.

Since becoming a research university, UTM is committed to becoming a graduate-focused university; more innovative research-based postgraduate programmes are offered and more attractive and varied modes of PhD programmes implemented. This not only provides flexibility in postgraduate study approaches, but at the same time contributes to increased publications and citations, while enhancing technological development and a value-driven economy.

Through a strategic transformation of its organisational structure, UTM is focused on creating a vibrant knowledge culture and fertile intellectual ecosystem that inspire creativity, innovation and entrepreneurial mindsets. This is also in tandem with the transformation plan of the Ministry of Higher Education to turn Malaysia into an educational hub renowned for high quality educational standards and research excellence in strategic key areas of knowledge and specialised disciplines as well as multi-disciplinary fields.

UTM aims to achieve the status of a global university and rank among 50 of the world's best universities by 2020. In July 2018, UTM began an organisational re-shuffling exercise, nicknamed “Synergy 4.0”, to consolidate the 18 schools established in 1972 and used until 2018, to only 7 major faculties.

## **Mission**

To lead in the development of holistic talents and innovative technologies for universal well-being and prosperity.

## **Vision**

To be a premier global academic and research institution, excelling in science, technology and engineering.

## **Strategic Thrusts**

- T1. Holistic, Innovative and Entrepreneurial Academia
- T2. Academic and Research Excellence
- T3. Global Prominence
- T4. Leading Industry and Community

## **Faculties, Schools and Departments (after July 2018 consolidation)**

### Faculty of Science

- Physics
- Chemistry
- Mathematical Sciences
- Biosciences

## Faculty of Engineering

- School of Chemical and Energy Engineering
- School of Electrical Engineering
- School of Civil Engineering
- School of Mechanical Engineering
- School of Biomedical Engineering and Health Sciences
- School of Computing

## Faculty of Built Environment and Surveying

- Geoinformation
- Real Estate
- Quantity Surveying
- Architecture
- Landscape Architecture
- Urban Regional Planning

## Faculty of Social Sciences and Humanities

- School of Education
- School of Human Resource Development and Psychology
- Islamic Civilisation Academy
- Language Academy
- Centre for Advanced Studies on Islam, Science and Civilisation (CASIS)

## Razak Faculty of Technology and Informatics

- Engineering Technology
- Science, Management and Design
- Advanced Informatics

- Perdana Centre

Malaysia-Japan International Institute of Technology (MJIT)

Azman Hashim International Business School

- Business Administration, UTM Kuala Lumpur
- Business Administration, UTM Johor Bahru
- Accounting and Finance, UTM Johor Bahru
- Information System, UTM Johor Bahru

School of Professional and Continuing Education (UTM SPACE)