UTM
UNIVERSITI TEKNOLOGI MALAYSIA

Faculty of
Built Environment
and Surveying

MASTER OF SCIENCE (GEOMATICS ENGINEERING)

MEASURING AND MODELLING THE EARTH TO SPACE

GEOMATICS ENGINEERING

This program aims to provide students with an opportunity to develop complete knowledge and advanced skills in geomatics engineering and manage, administrate, and update geospatial data professionally for decision-making related to geomatics applications. The experience, knowledge, and skills gained enable them to plan and implement geomatics engineering to support various academic, government, and industrial applications. The Master of Science (Geomatics Engineering) program is run under the Geoinformation Department and is supported by various backgrounds of academicians and lab facilities. In this program, students will acquire skills in handling and managing their research projects individually and independently with direct supervision of a supervisor. The Master of Science (Geomatics Engineering) program consists of 6 core courses, three elective courses, and 1 University course. In addition to these courses, students are required to submit a Master Project worth eight credits. To graduate, students must complete a total of 45 credits and they are assessed through assignments, presentations, and final examination.

CONTACT:

For further information, please contact our postgraduate office.
Email : pgfabu@utm.my

https://admission.utm.my/apply-now/

UNIVERSITY COURSE MODULE (3 credits)

- University Subject

CORE MODULES (22 credits)

***Compulsory**

- Geomatics Positioning
- Geomatics Data Analysis
- Advanced Mapping
- Geomatics Project Management
- Geographical Information System
- Research Methodology

ELECTIVE MODULES (8 credits)

***Choose three (3) courses**

- Cadastral Studies
- Advanced Engineering Survey
- Hydrographic Survey Application
- Underground Utility Surveying
- Geophysical for Utility Surveying
- Utility Mapping Standard & Practice

DISSERTATION (8 credits)

All students undertake an individual independent research project of 8 credits. The dissertation process includes an assessed research proposal presentation following dissertation submission. The department has a range of links with industry and other academic and non-academic partners, and dissertation projects may be carried out in collaboration with these organisations.

MODE AND DURATION OF STUDY

- Mode of Study : Full time
- Minimum Duration : 18 Months
- Maximum Duration : 48 Months

PROGRAMME FEES

Fees display only for three (3) semesters and does not include hostel rental and convocation

- Malaysia Student : RM10,660
- International Student : RM29,500

***Subject to change**

Fees

Scholarship & Financial Aids

ENTRY REQUIREMENTS

- A Bachelor's degree from Universiti Teknologi Malaysia or any other Instituition of Higher learning recognised by the Senate with minimum CGPA 3.00 in relevant field
- Other qualifications equivalent to a Bachelor's degree (CGPA < 3.00) and experience (2 years) in the relevant field recognised by the Senate; CGPA < 2.5 experience (5 years) in relevant field

ADDITIONAL REQUIREMENTS (International Applicant Only)

- An English Certificate of IELTS with minimum band of 6.0 or TOEFL iBT score of 60
- Cambridge English Qualification (CEQ) B2 first, C1 Advanced, C2 Proficiency Score of 169
- PTE Academic Score of 59
- MUET Band 4
- ELS Certified Intensive English Programme (CIEP) Level 108 and above

POTENTIAL CAREER

- Photogrammetrist
- Hydrographer
- Geodesist
- Surveying & Engineering Firm
- Government
- Academician
- Construction Agencies Business
- Energy and Utility Companies
- Oil and Mineral Exploration
- Researcher

EMPLOYABILITY

The range of generic, transferable skills provided by the degree programme are attractive to a range of employers. In general students gains fundamental understanding on method of geomatics engineering that concerns with the acquisition, analysis, and interpretation of mainly geospatial data, relating to the Earth, its physical features and the built environment. It comprises of tools and techniques of measuring, managing, presenting and analysing of geospatial data from diverse sources with well-defined characteristics on accuracy and continuity; and in the form of digital format. In the teaching and learning process students also develop their critical thinking, creativity, collaboration and communication skills through report writing, group assignment and engagement with different related stakeholders.