

## Postgraduate

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Overview In line with the university plan, establishment of postgraduate programmes is one of strategic planning in order to strengthen academic and research capability. Taking into account national agenda, pertinent industrial needs and state of the art of knowledge development, Fakulti Kejuruteraan Mekanikal developed their postgraduate programme focused on specific area. In the time being, FKM offers three postgraduate programmes, namely Master by Research, PhD by Research and Engineering Doctorate in Mechanical Engineering. Upon approval from MQA and JPT, FKM will offer 7 master programmes in particular area are as follow:

Master by Taught Course in:

- Energy Engineering
- Structural mechanics
- Automotive
- Product Design

Master by Mix-mode in:

- Energy
- Applied Mechanics
- Automotive

**Master by Research (Master of Science)** The Master of Research candidate is supervised by an academic staff (or a panel of supervisors) from the faculty. The directed research work will focus on a particular subject that introduces candidates to the processes by which new knowledge is developed or/and applied accordingly. The specific topic of investigation will be agreed upon by the supervisor (or panel of supervisors) and the candidate. The academic progress of a candidate is assessed through a research Progress Report submitted at the end of each semester. The degree is awarded based on an oral examination (viva-voce) of the thesis submitted by the candidate on completion of the study. Candidates intending to study by research may submit their application for admission throughout the year.

**Master by Mix Mode** Mixed Mode refers to the combination of taught course and research activities. The assessment depends upon both the coursework and dissertation (research work). The component for the coursework is 50% and the dissertation contributes the other 50%. The Mixed Mode program develops the research skill of the students on top of enhancing the theoretical knowledge of the subject area.

**Doctor Of Philosophy (PhD) By Research** The Doctoral candidate by research is supervised by an academic staff (or a panel of supervisors) from the faculty. The directed research work will focus on a particular subject that introduces candidate to the processes by which new knowledge is developed or/and applied accordingly. The specific topic of investigation will be agreed upon by the supervisor (or panel of supervisors) and the candidate. The academic progress of a candidate is assessed through a research Progress Report submitted at the end of each semester. The degree is awarded based on an oral examination (viva-voce) of the thesis submitted by the candidate on completion of the study. Candidates intending to study by research may submit their application for admission throughout the year.

**Engineering Doctorate Programme (EngD)** The Engineering Doctorate (EngD) is a 4 year doctoral level programme combining academic research and scholarship with industrial problem-solving and project management. The programme incorporates the industrial relevant research, team leadership and unique university-industry partnership. The academic degree awarded on the basis of advanced study and research in engineering is equivalent to a PhD degree in engineering/applied sciences. The innovative research output from the programme is expected to be immediately useful to the participating company. The Engineering Doctorate programme offers an opportunity for outstanding engineers to enhance their qualification through a mix of broadly based technical and professional training while completing an industry based research project. Successful researchers after completing the programme not only graduate with a title Doctor of Engineering, but also with the important mix of professional skills, technical knowledge and research experience that will enable them to progress to senior positions within industry at an acceleration rate.

### Entry Requirements

Candidates must have the following academic qualification(s):

**Master Degree Programmes**

- A relevant Bachelor's degree (honours) with good grades (minimum CGPA of 2.50) from UTeM or any other accredited institutions of higher learning; or
- Any other certificate that is recognised as equivalent to a Bachelor's degree (honours) or other relevant professional qualification and experience that are recognised by the UTeM Senate.

**PhD Degree Programme**

- A Master degree from UTeM; or
- A Master degree from any institution of higher learning recognized by the UTeM Senate; or
- Other equivalent Master degrees and relevant experience recognized by the UTeM Senate.