

Bachelor of Mechanical Engineering with Honours

(R/521/6/0093) (MQA/FA 4954) 11/2026

Mechanical engineering is one of the broadest engineering disciplines. Mechanical engineers design, develop, build, and test. They deal with anything that moves, from components to machines to the human body. It builds on physics, materials, and mathematics to achieve this goal. You might design automatic control systems or take charge of the operation of a smart building. You could manage the water supply for a whole state, design wind turbines or highly efficient, low-cost products for the developing world. You might be called on to work with the medical profession to create robots that can

operate with greater precision than a human or be at the cutting edge of advanced manufacturing using 3D printers to create aircraft parts with elegance and function. Growth industries include advanced manufacturing, smart buildings, renewable energy, sustainability development and consulting practice.

BENEFITS

Mechanical engineering is among the prime engineering fields. The graduate job market is known to be hard, but as mechanical engineers use maths and physics practices to design and produce the world's mechanical devices, graduates tend to be in high demand all around the world.

CAREER PROSPECTS

- Project Engineer
- Material Engineer
- Oil and Gas Engineer
- Automotive Engineer
- Robotic Engineer
- Manufacturing Engineer
- Design Engineer
- Aeronautic Engineer

ENTRY REQUIREMENTS

STPM: Two (2) Principal Grade C (GPA 2.00) in Mathematics and Science Physics subjects OR Foundation: Minimum CGPA of 2.00 OR Diploma in Mechanical Engineering: Minimum CGPA of 2.00 OR equivalent

For International Students
IELTS: Minimum 5.0

Duration of study
4 years

Credit Hours
135

SUBJECTS OFFERED

YEAR 1

- Engineering Mathematics 1
- Statics
- Engineering Drawing & CAD
- Engineering Mechanical Workshop
- Fundamental Of Electrical Circuit
- Engineering Mathematics 2
- Measurement and Instrumentation
- Mechanics Of Solids
- Dynamics
- Material Engineering

YEAR 2

- Hubungan Etnik/ Pengajian Malaysia 3
- Computer Software Application
- Mechanics Of Structure
- Fluid Mechanics 1

- Mechanics Of Machines
- Manufacturing Process
- English For Academic Purposes
- TITAS/ Bahasa Melayu Komunikasi 2
- Thermodynamics 1
- Engineering Vibration
- Project Economics and Quality Management
- Engineering Statistics

YEAR 3

- English For Employment
- Academic Skills
- Co-Curriculum
- Fluid Mechanics 2
- Engineering Management
- Application of Pneumatic & Hydraulics

- Control Engineering
- Heat Transfer
- Mechanical Engineering Design
- Thermodynamics 2
- Research Methodology
- Computer Aided Engineering

YEAR 4

- Entrepreneurship
- Final Year Project 1
- Air-Conditioning
- Engineering Lab
- Programmable Logic Control
- Electrical Power & Machines
- Industrial Training
- Final Year Project 2
- Engineers in Society
- Integrated Design Project
- Robot Technology