

# Diploma in Mechanical Engineering

(R/521/4/0107) (MQA/FA 5290) 02/2027

Mechanical engineering is at the forefront of developing new technologies for a number of industries including transport, healthcare, construction and robotics. This programme combines the basic knowledge of physical sciences as well as the engineering education.

## BENEFITS

▶ You can choose from a wide range of sub-disciplines to specialise in a niche within mechanical engineering, such as marine engineering, aerospace engineering, automobile engineering and many more. Your career choice could also bring you to some interesting places, depending on your choice, such as deserts, oil rigs, deep seas, power industries and automobile industries.

- ▶ A mechanical engineer is needed in almost every country worldwide, including the Americas, Asia and Europe. This is because engineering projects can be located all over the world, requiring you to meet customers and conduct investigative fieldwork as part of your responsibilities.
- ▶ Mechanical engineers make use of a wide range of tools, which include flowmeters, pressure gauges, computer software, combustion analysers, optical laser scanners and semiconductor process systems.
- ▶ There is a demand for mechanical engineers all over the world. Therefore, if you are an adventurous type with an interest in Mathematics, Physics and complex computations, take a plunge into mechanical engineering. This rewarding career will not restrict you to your country, but will give you opportunities to travel to another country of your choice.

## CAREER PROSPECTS

- Assistant Mechanical Engineer
- Inspector of Work
- Mechanical Maintenance Supervisor
- Mechanical Supervisor
- Mechanical R&D
- Technician
- Mechanical Drafter
- Production Technician
- Technical Assistant

## ENTRY REQUIREMENTS

SPM: Minimum 3 credits including Mathematics & Pass in English  
STPM: Pass in Mathematics & English

CERTIFICATE IN ENGINEERING/  
ENGINEERING TECHNOLOGY  
AND TECHNICAL / SKILLS  
CERTIFICATE: Minimum of 1 year  
of relevant work experience or 1  
semester of a bridging programme

For International Students  
IELTS: Minimum 5.0

Duration of study  
3 years

Credit Hours  
91

## SUBJECTS OFFERED

### YEAR 1

- Pengajian Malaysia 2/  
Bahasa Melayu Komunikasi 1\*
- Academic English 1
- Engineering Mathematics 1
- Statics
- Programming
- Academic English II
- Engineering Drawing
- Engineering Mathematics 2
- Professional  
Communication /  
Bahasa Kebangsaan A
- Academic English III
- Physics

### YEAR 2

- Co-curriculum
- Thermodynamics
- Dynamics
- Mechanics of Solids
- Fundamental of Electrical  
Circuit
- Mechanics of Structures
- Manufacturing Process
- Materials Science
- Engineering Lab
- Computer Aided Design
- Basic Entrepreneurship/  
Bahasa Kebangsaan A
- Fluid Mechanics

### YEAR 3

- Mechanics of Machines
- Engineering Workshop
- Fluids Power
- Applied thermodynamics
- Industrial Management
- Project
- Industrial Training