



**MAHSA**  
UNIVERSITY

Dual Award with



**University of  
East London**

# BACHELOR OF MECHANICAL ENGINEERING WITH HONOURS

KPT/JPS ( N/521/6/0179 ) ( MQA/PA9589 ) 06 / 25

**FACULTY OF ENGINEERING  
AND BUILT ENVIRONMENT**

“

"A good scientist is a person with original ideas. A good engineer is a person who makes a design that works with as few original ideas as possible. There are no prima donnas in engineering."

**- Freeman Dyson**

”

# OVERVIEW

The Bachelor of Mechanical Engineering with Honours kindles the knowledge of the students in the field of mechanical and manufacturing. Mechanical Engineers play an important role in the future development of a sustainable environment. Engineers with are trained in logical thinking and critical analysis, enabling them to think and react professionally and be ready for any future challenges.

The Bachelor of Mechanical Engineering with Honours is a four-year programme, designed in consultation with a panel of experts and has been approved by the Engineering Accreditation Council Malaysia (EAC) and Malaysian Qualifications Agency (MQA).

Upon completion of Semester 1 to Semester 6, the students will proceed to industrial training at the end of Semester 6. At the end of the training, students will be required to submit a report while the industries are required to evaluate and report on the students' job performance. The industrial training is necessary to meet the requirements of accreditation by the Engineering Accreditation Council of the Board of Engineers Malaysia. Students are exposed to real work environment and gain experience and knowledge in writing reports on technical works and projects. This programme not only prepares students with necessary advanced theoretical and practical skills but also trains them to plan and manage projects strategically.

## PROGRAMME STRUCTURE

### Year 1

- Electrical Technology
- Engineering Experimentation 1
- Engineering Drawing 1
- Engineering Materials
- Engineering Mathematics 1
- Engineering Mathematics 2
- Engineering Workshop
- Introduction to C Programming
- Materials Science
- Statics

### Year 2

- Dynamics
- Engineering Drawing 2
- Engineering Experimentation 2
- Engineering Statistics
- Fluid Mechanics 1
- Introduction to Mechanical Design
- Manufacturing Processes
- Numerical Methods
- Solid Mechanics 1
- Thermodynamics 1

### Year 3

- Component Design
- Control Engineering
- Creativity and Innovation
- Engineering Electronics and Microprocessors
- Engineering Experimentation 3
- Fluids Mechanic 2
- Measurements and Instrumentation
- Mechanics of Machines & Vibrations
- Multimedia Application
- Solid Mechanics 2
- Thermodynamics 2
- Industrial Training

### Year 4

- Elective 1, 2, 3 and 4
- Engineers in Society
- Engineering Management, Economics and Safety
- Industrial Engineering
- System Design
- Thesis 1
- Thesis 2

#### General Modules

- Community Services
- Entrepreneurship
- Youth Development

#### MALAYSIAN STUDENTS:

- Hubungan Etnik
- Tamadun Islam dan Tamadun Asia

#### INTERNATIONAL STUDENTS:

- Bahasa Melayu Komunikasi 2
- Malaysia Studies

#### Electives

- Acoustic and Noise
  - Contol and Measurements
- Material Processing
- Material Selection
- Nano-Materials

- Production Planning & Control
- Refrigeration & Air-Conditioning
- Robotics
- Vibration, Measurement

# PROGRESSION PATHWAY



## ENTRY REQUIREMENTS

### ACADEMIC QUALIFICATION REQUIREMENTS

- Diploma / Matriculation / Foundation** ♦ Related field pass with min. CGPA 2.0.
- STPM** ♦ Pass with min. Grade C (GCPA 2.0) in three (3) subjects including Mathematics and one (1) Science subject.
- A-Level** ♦ Pass in three (3) subjects including Mathematics and one (1) Science subject.
- UEC** ♦ Pass with Grade B in five (5) subjects including Mathematics and one (1) Science subject.
- Other** ♦ Recognised Malaysian qualifications or their equivalent.
- English Proficiency** ♦ MUET : BAND 2 (LOCAL), MUET : BAND 3 (INTERNATIONAL) | IELTS : 5.0 | TOEFL : 500

## CAREER OPPORTUNITIES

- Aerospace engineer
- Automotive engineer
- Design engineer
- Engineering consultant
- Industry Engineer
- Manufacturing engineer
- Mechatronics engineer
- Process engineer
- Quality assurance engineer
- Railways engineer
- Research Executive





# MAHSA360

At MAHSA University, we provide our students with the opportunity to develop quality skills and understanding that go beyond their field of study which will prepare them for their next leap upon graduation.

MAHSA 360 is our specially designed ecosystem that works to ensure every student is nurtured and supported throughout their student journey.



## MAHSA'S PASSPORT TO SUCCESS



Professional Industry-Driven Education (P.R.I.D.E) is MAHSA University's specially designed education pathway that give students the best of both academic and professional certifications. Students have the opportunity to gain professional skills through various programmes from MAHSA's collaborations with internationally recognised professional bodies. P.R.I.D.E increases the employability rate of our fresh graduates and puts them on par with the rest in the professional world.

### MASTERCLASS

Students of this programme are eligible to gain add-on certification in Masterclasses. There are more than fifty Masterclasses to choose from, and all are designed to further enhance the student's employability, in line with the Industrial Revolution 4.0.

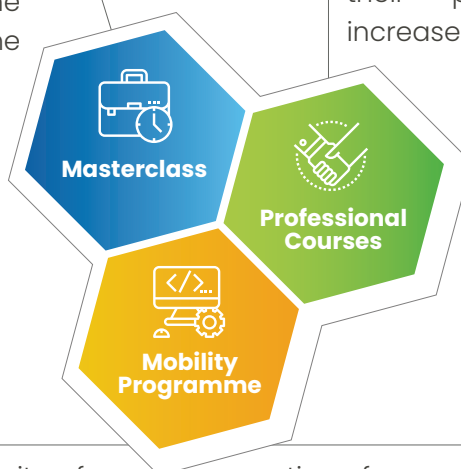
### PROFESSIONAL COURSES

Through MAHSA's collaboration with internationally recognised professional bodies, students will earn certifications that will enhance their professional skills and increase their employability rate.

### MOBILITY PROGRAMME

This is a unique opportunity for students to study abroad for up to one year. This programme lets students experience different cultures and

practices from around the world. Ask us about our university partners in over fifty different countries.



# MAHSA

U N I V E R S I T Y

# BE MORE



Engineering Lab Workshop



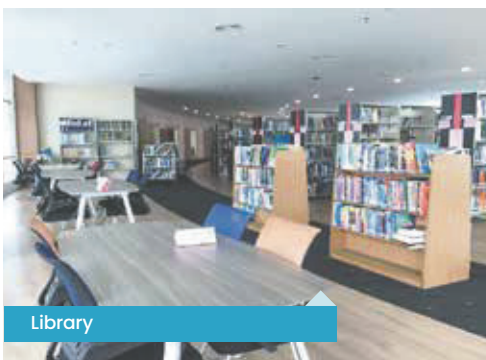
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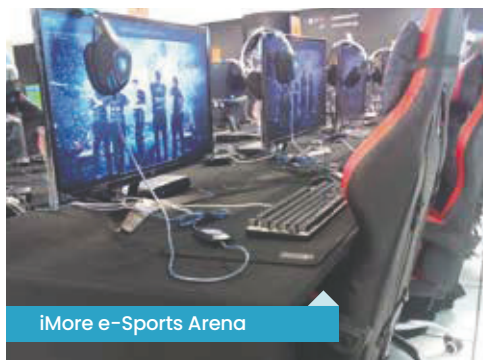
Computer Lab



The Habitat



Library





iMore e-Sports Arena


Contact us  
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