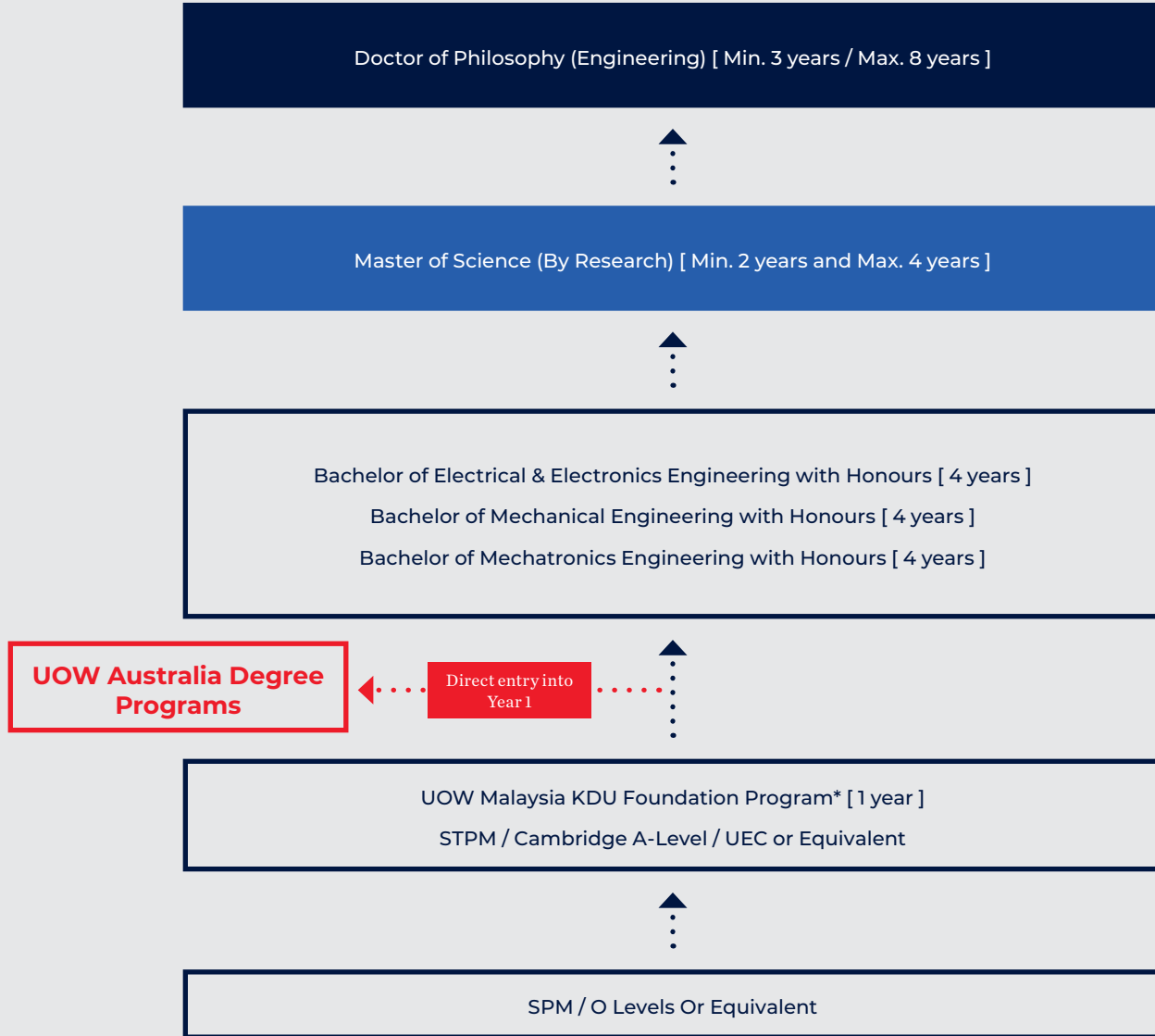




## Study route

 **Selangor**



\* Specific foundation programs that meet the entry requirement.  
For all Postgraduates programs, kindly refer to Postgraduates Brochure or website for more information.



R2/010/3/0236(07/24) A 10301

# Foundation in Engineering

**Intakes:**

January, May and September

**Duration:**

1 Year (Full-Time)

**Course Location:**

UOW Malaysia KDU University College, Glenmarie

Engineering plays a pivotal role in our lives and it's no surprise engineers are in great demand all over the world!

The UOW Malaysia KDU Foundation in Engineering is ideal for those looking to gain admission into engineering degree programs, providing students with opportunities to develop fundamental knowledge and skills set in physical sciences, technical knowledge in engineering and language skills for tertiary education. Students are introduced to engineering-based subjects such as mechanics, electronics, and robotics, enabling them to decide their specialised field of engineering to pursue upon completion.

Upon completion, students will be able to articulate seamlessly into engineering degree programs offered at UOW Malaysia KDU.

## COURSE STRUCTURE

### Modules

- Chemistry
- Engineering Mathematics 1
- Engineering Mathematics 2
- Engineering Mathematics 3
- Fundamentals of Mechanics
- Fundamentals of Physics
- Fundamentals of Information Technology
- Fundamentals of Electrical and Electronics
- Introduction to Communication
- Critical Writing and Research Skills
- Introduction to Robotics
- Technical Drafting & CAD

### MPU

- Pengajian Malaysia 1 (Malaysian Students) / Bahasa Melayu Komunikasi 1 (International Students)
- Cultural Studies
- Study Skills
- Bahasa Kebangsaan A\*
- \* Bahasa Kebangsaan A is compulsory for all Malaysian students
  - without a credit in SPM Bahasa Malaysia.
  - without SPM Bahasa Malaysia (applicable to students from UEC, O Levels, or other equivalent programs)

## ENTRY REQUIREMENT

### Academic Qualification

Academic Qualification	Requirement
SPM / GCE O Levels	Min. 5 Credits (5Cs) inclusive of a Credit in English, Mathematics and 1 Science subject
UEC	Min. 3 Credits (3Bs) inclusive of a Credit in English, Mathematics and 1 Science subject
Home Schooling with SAT	Pass Year 11 and SAT score of 1050 over 1600 with minimum score of 550 for Mathematics and Physics*

## ENGLISH REQUIREMENT

### Local Student

Credit (SPM / 1119 / UEC / O Levels English)

### International Student

Band 4.0 in IELTS; or a min score of 30 (IBT) or 397 (PBT) in TOEFL; or Cambridge English CAE & CPE (from 2015) (140); or PTE Academic (36); or MUET Band 2; or UOW Malaysia KDU English Entrance Test (60)

If English Language requirements are not fulfilled, additional English module(s) may be taken at UOW Malaysia KDU





# Bachelor of Electrical & Electronics Engineering with Honours

## Intakes:

January, May and September

## Duration:

4 Years (Full-Time)

## Course Location:

UOW Malaysia KDU University College, Glenmarie

## Enabling great technologies through electrical and electronics engineering.

Technologies such as universal electric power, television, medical imaging are all examples of how electrical and electronics engineering play a strong role in modern society. UOW Malaysia KDU's Bachelor of Electrical & Electronics Engineering with Honours provides students with a broad-based education in electrical and electronics engineering, and equips them with the technical knowledge and skills necessary to design, assess and improve electrical and electronic products and service.

This program is fully accredited by the Board of Engineers Malaysia (BEM). Our graduates are also recognised internationally through the Washington Accord of the International Engineering Alliance.

## Career Opportunities:

Appliances Engineer | Building Service Engineer | Computer Engineer | Control Engineer | Electrical and Electronics Engineer | Instrumentation Engineer | Maintenance Engineer | Microelectronics Engineer | Network Engineer | Power Engineer | Project Engineer | Signal Processing Engineer | Software Engineer | Telecommunications Engineer | Test Engineer | Transmission Engineer

## COURSE STRUCTURE

### Year 1

- Engineering Mathematics 1
- Circuit Theory
- Computer Programming for Engineers
- Engineering CAD
- Engineering Design Fundamentals
- Engineering Mathematics 2
- Analogue Electronics
- Digital Electronics
- Introduction to Communication Systems

### Year 2

- Engineering Mathematics 3
- Circuit Theory and Analysis
- Principles of Microcontroller Systems
- Object Oriented Programming
- Statistics
- Engineering Ethics, Safety and Environment
- Numerical Methods
- Electric Machines
- Signals and Systems
- Electromagnetic Field Theory and Applications
- Instrumentation and Measurement

### Year 3

- Power Electronics
- Advanced Electronics
- Control Systems
- Power Systems
- Computer Networks
- Digital Communication
- Microcontroller System Design
- Electric Machines and Drive Systems
- Engineering Project Management
- Capstone Project

### Year 4

- Digital Signal Processing
- Principles of Sustainable Engineering
- MEMS Sensors and Actuators
- Electrical Energy Utilisation
- Power Station and High Voltage Engineering
- Elective (2 subjects)
- Final Year Project
- Industrial Training

## Electives (Choose 2)

- Real Time Embedded Systems
- Very Large-Scale Integration (VLSI)
- Energy Storage
- Renewable Energy Systems

## MPU

- Penghayatan Etika dan Peradaban (Malaysian Students) / Bahasa Melayu Komunikasi 2 (International Students)
- Falsafah dan Isu Semasa
- Entrepreneurship
- Malaysia and Global Issues
- Global Social Responsibility
- Bahasa Kebangsaan A\*

\* Bahasa Kebangsaan A is compulsory for all Malaysian students

- without a credit in SPM Bahasa Malaysia.
- without SPM Bahasa Malaysia (applicable to students from UEC, O Levels, or other equivalent programs)

## ENTRY REQUIREMENT

### Academic Qualification

### Requirement

GCE A Levels	2 Principal Passes (2Es) inclusive of Mathematics and Physics
STPM	2 Principal Passes (2Cs) inclusive of Mathematics and Physics * minimum Grade C (GP 2.0)
UEC	Min. 5 Credits (5Bs) inclusive of Mathematics and Physics
Diploma / Foundation Studies	Pass with minimum CGPA of 2.00

## ENGLISH REQUIREMENT

**Local Student** Band 3 in MUET

**International Student** Band 5.5 in IELTS; or a min score of 46 (IBT) or 454 (PBT) in TOEFL; or score 51 and above for Pearson English Test

If English Language requirements are not fulfilled, additional English module(s) may be taken at UOW Malaysia KDU





R/521/6/0047(02/25) MQA/FA 2023

# Bachelor of Mechanical Engineering with Honours

**Intakes:**

January, May and September

**Duration:**

4 Years (Full-Time)

**Course Location:**

UOW Malaysia KDU University College, Glenmarie

**Master complex mechanical engineering systems.**

Mechanical engineers work with advanced technology across a wide range of specialisations.

At UOW Malaysia KDU University College, the Bachelor of Mechanical Engineering with Honours program enables students to apply the principles of physics and material science to design, produce and operate a wide variety of equipment and systems. Our approach is holistic learning to ensure graduates are well equipped with a solid platform for adaptation to ever-changing developments in science and technology, thus meeting the rigorous demands of global industries.

Students will gain various opportunities for hands-on training to hone their technical skills and knowledge through various subjects, to be completed in our state-of-the-art laboratories.

Our Design Centric Curriculum also ensures that students will be able to apply their analytical and design skills through creative problem-solving in industry projects.

This program is fully accredited by the Board of Engineers Malaysia (BEM). Our graduates are also recognised internationally through the Washington Accord of the International Engineering Alliance.

**Career Opportunities:**

- Aerospace Engineer | Aircraft Engineer | Automotive Engineer | Design Engineer | Industrial Engineer | Maintenance Engineer | Manufacturing Engineer | Materials Engineer | Mechanical Engineer | Mechatronic and Robotic Engineer | Oil & Gas Engineer | Process Engineer | Product Development Engineer | Project Engineer | Quality Assurance Engineer | Systems Engineer | Technical Support Engineer

**COURSE STRUCTURE**

**Year 1**

- Engineering Mathematics 1
- Statics
- Engineering Materials
- Computer Programming for Engineers
- Engineering CAD
- Industrial Design
- Engineering Mathematics 2
- Dynamics
- Mechanical Workshop Practices
- Principle of Electric and Electronics

**Year 2**

- Fluid Mechanics 1
- Solid Mechanics 1
- Electric Machines
- Statistics
- Engineering Ethics, Safety and Environment
- Numerical Methods
- Solid Mechanics 2
- Fluid Mechanics 2
- Engineering Thermodynamics
- Instrumentation and Measurement
- Engineering Mathematics 3

**Year 3**

- Advanced Thermodynamics
- Control Systems
- Manufacturing Processes
- Mechanical Vibrations
- Principles of Microcontroller Systems
- Engineering Project Management
- Component Design
- Capstone Project
- Heat Transfer
- Computer Aided Engineering

**Year 4**

- Computer Aided Manufacturing
- Total Quality Management
- Renewable Energy Systems
- Principles of Sustainable Engineering
- Elective (2 subjects)
- Industrial Training
- Final Year Project

**Elective (Choose 2)**

- Air Conditioning and Mechanical Ventilation
- Internal Combustion Engines
- Advance Materials Technology
- Materials Selection in Design

**MPU**

- Penghayatan Etika dan Peradaban (Malaysian Students) / Bahasa Melayu Komunikasi 2 (International Students)
  - Falsafah dan Isu Semasa
  - Entrepreneurship
  - Malaysia and Global Issues
  - Global Social Responsibility
  - Bahasa Kebangsaan A\*
- \* Bahasa Kebangsaan A is compulsory for all Malaysian students
- without a credit in SPM Bahasa Malaysia.
  - without SPM Bahasa Malaysia (applicable to students from UEC, O Levels, or other equivalent programs)

**ENTRY REQUIREMENT**

Academic Qualification	Requirement
GCE A Levels	2 Principal Passes (2Es) inclusive of Mathematics and Physics
STPM	2 Principal Passes (2Cs) inclusive of Mathematics and Physics * minimum Grade C (GP 2.0)
UEC	Min. 5 Credits (5Bs) inclusive of Mathematics and Physics
Diploma / Foundation Studies	Pass with minimum CGPA of 2.00

**ENGLISH REQUIREMENT**

<b>Local Student</b>	Band 3 in MUET
<b>International Student</b>	Band 5.5 in IELTS; or a min score of 46 (IBT) or 454 (PBT) in TOEFL; or score 51 and above for Pearson English Test

If English Language requirements are not fulfilled, additional English module(s) may be taken at UOW Malaysia KDU



N/521/6/0139(05/22) MQA/PA 8097

# Bachelor of Mechatronic Engineering with Honours

**Intakes:**

January, May and September

**Duration:**

4 Years (Full-Time)

**Course Location:**

UOW Malaysia KDU University College, Glenmarie

The interdisciplinary nature of mechatronics, which encompasses mechanical, electronics, computer, control and systems design engineering; is envisaged to become more important in the future, both domestically as well as globally. Mechatronics has been recognized as a continuous evolving reality in the creation of intelligent machines and advanced manufacturing and processing systems.

At UOW Malaysia KDU University College, the Bachelor of Mechatronics Engineering with Honours program is designed to expose students to the principles and practice of mechatronics by gaining knowledge of engineering processes, mechanical principles, as well as the use of digital electronics, 3D printing technology and computer-aided (CAD) software. It has a strong focus on design-and hands-on project-based learning activities that use equipment associated with robotics, industrial control and advanced manufacturing. Thus, provides a holistic preparation for students to embark into future challenges in existing and emerging sectors.

This program is fully accredited by the Board of Engineers Malaysia (BEM). Our graduates are also recognised internationally through the Washington Accord of the International Engineering Alliance.

**Career Opportunities:**

Robotics engineer | Automation engineer | Control system design engineer | Instrumentation engineer | Electronic engineer | Maintenance engineer | Mechatronics Project Engineer | Mechatronics, R&D or Systems Engineer | Industrial Engineer | Process Control Engineer | Service Engineer

**COURSE STRUCTURE**

**Year 1**

- Engineering Mathematics 1
- Statics
- Computer Programming for Engineers
- Circuit Theory
- Engineering CAD
- Engineering Design Fundamentals
- Engineering Mathematics 2
- Engineering Materials
- Analogue Electronics
- Dynamics

**Year 2**

- Engineering Mathematics 3
- Digital Electronics
- Principles of Microcontroller Systems
- Electric Machines
- Statistics
- Engineering Ethics, Safety and Environment
- Numerical Methods
- Component Design
- Signals and Systems
- Instrumentation and Measurement
- Engineering Thermodynamics

**Year 3**

- Control Systems
- Manufacturing Processes
- Automation and Robotics
- Artificial Intelligence
- Power Electronics
- Capstone Project
- Engineering Project Management
- Computer and Machine Vision
- Electric Machines and Drive Systems
- Computer Aided Engineering

**Year 4**

- Final Year Project
- Advanced Control Systems
- Digital Signal Processing
- Industrial Training (minimum 12 weeks)
- Computer Aided Manufacturing
- Elective (3 subjects)

**Elective (Choose 3)**

- Robotics Kinematics and Control
- MEMS Sensors and Actuators
- Real Time Embedded Systems
- Autonomous Mobile Robots

**MPU**

- Penghayatan Etika dan Peradaban (Malaysian Students) / Bahasa Melayu Komunikasi 2 (International Students)
- Falsafah dan Isu Semasa
- Entrepreneurship
- Malaysia and Global Issues
- Global Social Responsibility
- Bahasa Kebangsaan A\*
- \* Bahasa Kebangsaan A is compulsory for all Malaysian students
  - without a credit in SPM Bahasa Malaysia.
  - without SPM Bahasa Malaysia (applicable to students from UEC, O Levels, or other equivalent programs)

**ENTRY REQUIREMENT**

Academic Qualification	Requirement
GCE A Levels	2 Principal Passes (2Es) inclusive of Mathematics and Physics
STPM	2 Principal Passes (2Cs) inclusive of Mathematics and Physics * minimum Grade C (GP 2.0)
UEC	Min. 5 Credits (5Bs) inclusive of Mathematics and Physics
Diploma / Foundation Studies	Pass with minimum CGPA of 2.00

**ENGLISH REQUIREMENT**

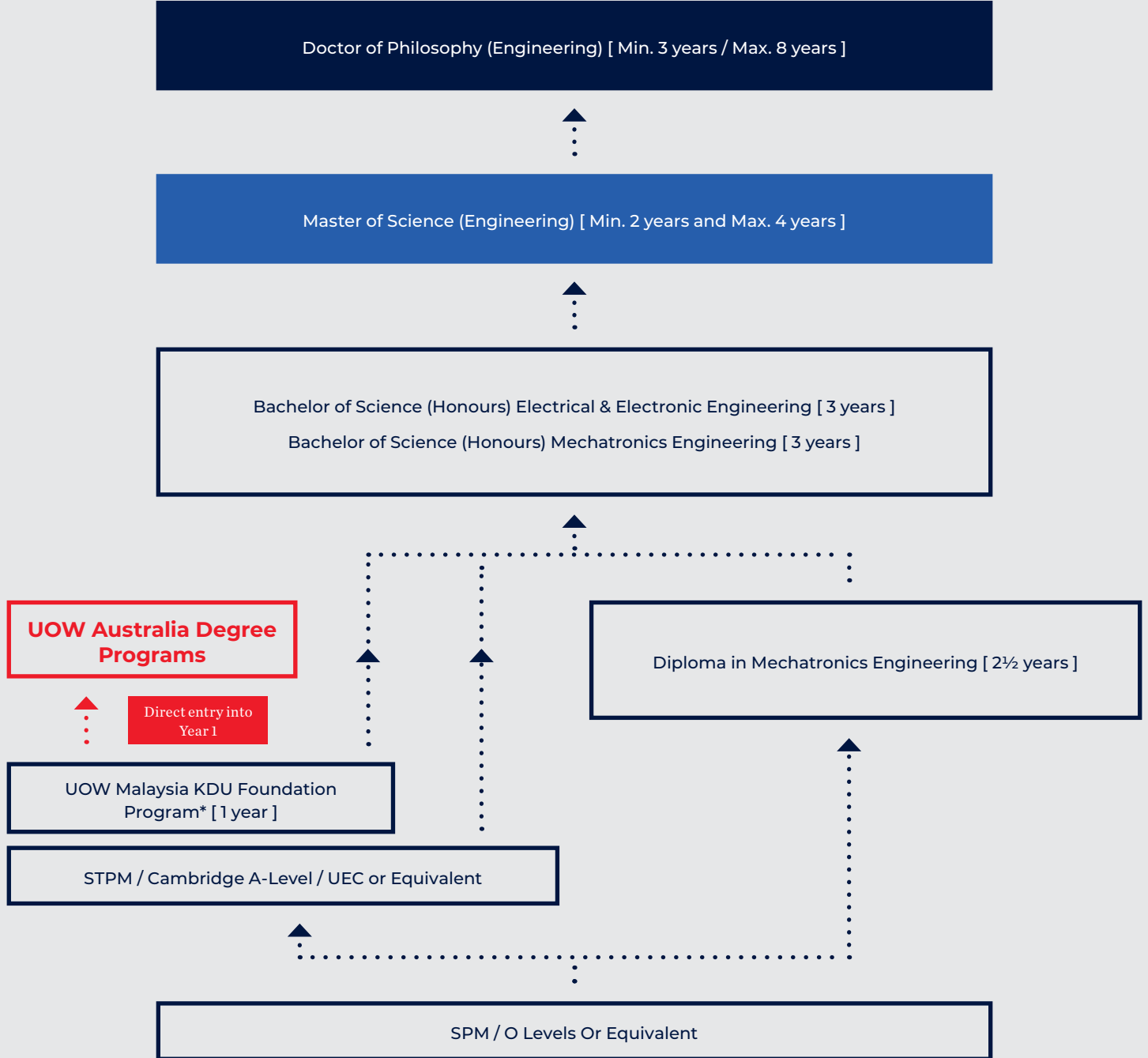
<b>Local Student</b>	Band 3 in MUET
<b>International Student</b>	Band 5.5 in IELTS; or a min score of 46 (IBT) or 454 (PBT) in TOEFL; or score 51 and above for Pearson English Test

If English Language requirements are not fulfilled, additional English module(s) may be taken at UOW Malaysia KDU



## Study route

 **Penang**



\* Specific foundation programs that meet the entry requirement.  
For all Postgraduates programs, kindly refer to Postgraduates Brochure or website for more information.



N/010/3/0419(12/21) MQA/FA 8033

# Foundation in Science

**Intakes:**

January, May and September

**Duration:**

1 Year (Full-Time)

**Course Location:**

UOW Malaysia KDU Penang  
University College, George Town  
  
UOW Malaysia KDU Penang  
University College, Batu Kawan

**Chase for your dreams!**

This Foundation program equips students with the necessary fundamental knowledge to pursue their university studies. This flexible program ensures students are grounded with a strong grasp of core subjects, as well as a variety of other subjects to give them a broad-based educational platform. It also helps them to explore new methods and ideas, as well as skills and concepts, to encourage independent and critical thinking.

The Foundation in Science is a one-year programme that provides students with 2 elective areas:

- Pure Science
- Engineering or IT or Computer Science

**COURSE STRUCTURE**

**Semester 1**

- English Grammar and Usage
- Study Skills
- Critical Thinking
- Mathematics 1
- Biology 1

**Semester 2**

- Advanced English Course
- Computer Application
- Chemistry 1
- Physics 1
- Mathematics 2

**Semester 3**

- Electives (2 subjects)
- Introduction to Programming
- Writing and Research Skills
- Statistics

**Elective: Pure Sciences**

- Chemistry 2
- Biology 2

**Elective: Physical Sciences**

- Mathematics 3
- Physics 2

**ENTRY REQUIREMENT**

**Academic Qualification Requirement**

SPM / GCE O Levels	5 Credits
UEC	3 Credits

**ENGLISH REQUIREMENT**

**Local Student** Pass (SPM / 1119 / UEC / O Levels examination)\*

**International Student** Band 4.0 in IELTS; or a min score of 30 (IBT) or 397 (PBT) in TOEFL; or Cambridge English CAE & CPE (from 2015) (140); or PTE Academic (36); or MUET Band 2; or UOW Malaysia KDU English Entrance Test (60)

If English Language requirements are not fulfilled, additional English module(s) may be taken at UOW Malaysia KDU

Notes: students with this program receives an additional offer letter from UOW Australia which allows them to complete their degree studies in Malaysia or Australia.



R/523/4/0014(04/21) MQA/FA 0284

# Diploma in Mechatronics Engineering

**Intakes:**

January, May and September

**Duration:**

2½ Years (Full-Time)

**Course Location:**

UOW Malaysia KDU Penang  
University College, George Town

Mechatronics is a multidisciplinary field that focuses on mechanical, electronics and computing, in creating engineering solution.

This program is broad-based and specifically designed to integrate three major areas – electrical, electronics and mechanical engineering – into one stream. These courses give students theoretical and practical introduction to a career in electrical, electronics & mechanical engineering. This comprehensive, organized and focused program provides the students with more flexibility in choosing or tailoring their career paths and endeavors.

**Career Opportunities:**

Automation & Control Technician | CAD/CAM Technician | Clerk of Works | Failure Analysis and Reliability Technician | Material and Production Controller | Process Designer | Process Technician | QC Supervisor | Sales and Marketing Executive

**COURSE STRUCTURE**

**Year 1**

- Semiconductor Devices & Applications
- Electric Circuit I
- Engineering Mathematics I
- Fundamentals of Computer Systems
- Digital Electronics
- Writing and Referencing
- Engineering Mathematics II
- Basic Programming
- Electric Circuit II

**Year 2**

- Engineering Mathematics III
- Microcontroller System Design & Applications
- Analogue Electronics
- Introduction to Inventive Problem Solving in Engineering
- Computer Aided Design/Drafting
- Engineering Materials
- Mechatronic System Design
- Instrumentation and Control
- Robotics and Automation
- Project Lab 1
- Industrial Training

**Year 3**

- Project Lab 2
- Electric Machines
- Pneumatics and Hydraulics

**MPU**

- Penghayatan Etika dan Peradaban (Malaysian Students) / Bahasa Melayu Komunikasi I (International Students)
  - Personal Development Skills
  - Society and Development in Malaysia
  - Teamwork and Community
  - Bahasa Kebangsaan A\*
- \* Bahasa Kebangsaan A is compulsory for all Malaysian students
- without a credit in SPM Bahasa Malaysia.
  - without SPM Bahasa Malaysia (applicable to students from UEC, O Levels, or other equivalent programs)

**ENTRY REQUIREMENT**

**Academic Qualification**

**Requirement**

SPM / GCE O Levels	3 Credits including Mathematics and 1 relevant Science subject
UEC	3 Credits including Credit in Mathematics and 1 Science subject
Sijil Kemahiran Malaysia (SKM)	Pass Level 3 in related field

**ENGLISH REQUIREMENT**

**Local Student**

Pass (English at SPM level or equivalent)

**International Student**

Band 5.0 in IELTS; or a min score of 42 (IBT) or 410 (PBT) in TOEFL; or Cambridge English CAE & CPE (from 2015) (154); or PTE Academic (47)

If English Language requirements are not fulfilled, additional English module(s) may be taken at UOW Malaysia KDU







# Bachelor of Science (Honours) Mechatronics Engineering

## Intakes:

January, May and September

## Duration:

3 Years (Full-Time)

## Course Location:

UOW Malaysia KDU Penang  
University College, George Town

## Build smart and sustainable solutions.

Mechatronics is considered modern mechanical engineering, that it integrates mechanical system with electrical & electronics for better feedback and control into a complete system. Mechatronics is the discipline that connects machines for better operations, productivity, reliability maintainability; supported by smart system. This program provides a well-established balance between theory and practical, and you will be well-prepared to enter into the industry.

## Career Opportunities:

Automotive | Aeronautical | Robotics | Biomedical | Automation | Process Control | Construction | Manufacturing | Semiconductor | Energy | Electrical & Electronics

The accreditation of this programme is done by Malaysian Qualification Agency (MQA) and not Engineering Accreditation Council (EAC). Hence the programme are not recognized by Board of Engineers Malaysia (BEM). In order to register as Graduate Engineer with BEM, graduates have to top up their study with a master degree by instruction (master by coursework) in the relevant field from accredited universities / institutions.

## COURSE STRUCTURE

### Year 1

- Engineering Mathematics 1
- Electrical and Electronic Principles
- Engineering Statics and Dynamics
- Engineering Materials
- Introduction to Inventive Problem Solving in Engineering
- Introduction to Engineering Design
- Engineering Skills in Experimentation and Presentation
- Engineering Mathematics 2
- Electric Power and Machines
- Engineering Drawing
- Computer Programming
- Workshop Technology

### Year 2

- Engineering Mathematics 3
- Strength of Materials
- Control Systems
- Engineers in Society
- Introduction to Robotics
- Thermo-Fluids Science
- Manufacturing Technology
- Numerical Methods
- Mechanical Engineering Design
- Microprocessors and Microcontrollers
- Instrumentation and Measurement
- Analogue Electronics

### Year 3

- Individual Engineering Project 1
- Operations Management
- Robotics and Automation
- Signal Processing and System Identification
- Heat, Ventilation and Air Conditioning
- Industrial Attachment
- Individual Engineering Project 2
- State-Space Control
- Industrial Automation
- Energy System and Conversion
- Elective (1 subject)

### Elective (choose 1)

- Dynamics of Machines
- Mechanical Design and Analysis
- Sustainable Energy Systems
- Artificial Intelligence in Engineering

## MPU

- Penghayatan Etika dan Peradaban (Malaysian Students) / Bahasa Melayu Komunikasi 2 (International Students)
  - Falsafah dan Isu Semasa
  - Entrepreneurship
  - Malaysia and Global Issues
  - Global Social Responsibility
  - Bahasa Kebangsaan A\*
- \* Bahasa Kebangsaan A is compulsory for all Malaysian students
- without a credit in SPM Bahasa Malaysia.
  - without SPM Bahasa Malaysia (applicable to students from UEC, O Levels, or other equivalent programs)

## ENTRY REQUIREMENT

Academic Qualification	Requirement
STPM	Pass with NGMP 2.00 and Grade C in Mathematics and Physical Science subject (Physics/ Chemistry)
GCE A Levels	2 Principal Passes inclusive of Mathematics and 1 Physical Science subject (Physics/ Chemistry)
UEC	Min. 5 Credits inclusive of Mathematics and 1 Physical Science subject (Physics/Chemistry)
Foundation / Matriculation	Pass with min. CGPA of 2.00 inclusive of Mathematics and Science subject
Australian Matriculation / Foundation	ATAR score of 70
Diploma in Engineering	Pass with CGPA $\geq$ 2.00

## ENGLISH REQUIREMENT

Local Student	MUET Band 3
International Student	Band 5.0 in IELTS; or a min score of 42 (IBT) or 410 (PBT) in TOEFL; or Cambridge English CAE & CPE (from 2015) (154); or PTE Academic (47)

If English Language requirements are not fulfilled, additional English module(s) may be taken at UOW Malaysia KDU





# Bachelor of Science (Honours) Electrical & Electronic Engineering

## Intakes:

January, May and September

## Duration:

3 Years (Full-Time)

## Course Location:

UOW Malaysia KDU Penang  
University College, George Town

## Electrical And Electronic Engineering Course In Penang, Malaysia.

In industry 4.0, Electrical and Electronic Engineering would be fundamental in connectivity and communication section, human-machine interaction as well as advanced manufacturing since most smart systems would rely on numerous sensors for real time analysis. This program provides a well-established balance between theory and practical. Graduates of the program can be in a broad area of applications which include industries such as integrated circuit(IC), automotive, aerospace, power plants, telecommunication and many more.

## Career Opportunities:

Appliances | Communication | Computer | Construction | Control | Electrical and Electronics | Instrumentation | Maintenance | Medical | Microelectronics | Network | Power | Project | Signal Processing | Software | Telecommunications | Test | Transmission

The accreditation of this programme is done by Malaysian Qualification Agency (MQA) and not Engineering Accreditation Council (EAC). Hence the programme are not recognized by Board of Engineers Malaysia (BEM). In order to register as Graduate Engineer with BEM, graduates have to top up their study with a master degree by instruction (master by coursework) in the relevant field from accredited universities / institutions.

## COURSE STRUCTURE

### Year 1

- Engineering Mathematics 1
- Semiconductor devices
- Circuit Theory
- Digital Electronics & Telecommunications
- Introduction to Inventive Problem Solving in Engineering
- Introduction to Engineering Design
- Engineering Skills in Experimentation and Presentation
- Engineering Mathematics 2
- Electric Power and Machines
- Electric Machine
- Computer Programming
- Electronic Devices

### Year 2

- Engineering Mathematics 3
- Digital Systems
- Engineering Product Development
- Communication Systems
- Signals, Circuits and Systems
- Power Generation
- Control Systems
- Numerical Methods
- C Programming
- Microprocessors and Microcontrollers
- Instrumentation and Measurement
- Analogue Electronics

### Year 3

- Individual Engineering Project 1
- Operations Management
- Digital Signal Processing
- Electronic Circuit Design
- Industrial Attachment
- Individual Engineering Project 2
- Artificial Intelligence in Engineering
- Power Electronics and Drive Systems
- Very Large Scale Integration
- Embedded Systems
- Elective (1 subject)

### Elective (choose 1)

- Digital System Design and Implementation
- Power System Analysis
- Wireless and RF Communication System Design
- Manufacturing Analysis

## MPU

- Penghayatan Etika dan Peradaban (Malaysian Students) / Bahasa Melayu Komunikasi 2 (International Students)
  - Falsafah dan Isu Semasa
  - Entrepreneurship
  - Malaysia and Global Issues
  - Global Social Responsibility
  - Bahasa Kebangsaan A\*
- \* Bahasa Kebangsaan A is compulsory for all Malaysian students
- without a credit in SPM Bahasa Malaysia.
  - without SPM Bahasa Malaysia (applicable to students from UEC, O Levels, or other equivalent programs)

## ENTRY REQUIREMENT

### Academic

Qualification	Requirement
STPM	Pass with NGMP 2.00 and Grade C in Mathematics and Physical Science subject (Physics/ Chemistry)
GCE A Levels	2 Principal Passes inclusive of Mathematics and 1 Physical Science subject (Physics/ Chemistry)
UEC	Min. 5 Credits inclusive of Mathematics and 1 Physical Science subject (Physics/Chemistry)
Foundation / Matriculation	Pass with min. CGPA of 2.00 inclusive of Mathematics and Science subject
Australian Matriculation / Foundation	ATAR score of 70
Diploma in Engineering	Pass with CGPA $\geq$ 2.00

## ENGLISH REQUIREMENT

Local Student	MUET Band 3
International Student	Band 5.0 in IELTS; or a min score of 42 (IBT) or 410 (PBT) in TOEFL; or Cambridge English CAE & CPE (from 2015) (154); or PTE Academic (47)

If English Language requirements are not fulfilled, additional English module(s) may be taken at UOW Malaysia KDU