



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

## Foundation in Engineering


<b>Intakes</b>	January, March, June and September
<b>Duration</b>	1 Year (Full-Time)
<b>Course Location</b>	 UOW Malaysia KDU University College, Utropolis, Glenmarie

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 material science, enabling them to decide their specialised field of engineering to pursue upon completion.



R2/523/4/0185(07/24) A 3807

## Diploma in Electrical & Electronics Engineering

<b>Intakes</b>	January, March, June and September
<b>Duration</b>	2 Years (Full-Time)
<b>Course Location</b>	 UOW Malaysia KDU University College, Utropolis, Glenmarie

With the Diploma in Electrical and Electronics Engineering, students gain understanding of engineering concepts and applications of power generation, transmission and distribution. The program grounds students with a strong foundation of knowledge and technical skills in the utilisation and control of electrical energy and technology. Students also gain hands-on training as they hone their technical skills in our cutting-edge laboratories.

### 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 Referencing
- Introduction to Robotics
- Technical Drafting & CAD

### COURSE STRUCTURE

#### YEAR 1

- |  |   |
|--|---|
| - Engineering Mathematics I                      | - Electric Circuits                     |
| - Engineering Physics and Electromagnetic Fields | - Electrical Wiring and Troubleshooting |
| - Technical Drafting and CAD                     | - Tertiary English 2                    |
| - Personal Development and Planning              | - Microcontroller Application           |
| - Tertiary English 1                             | - Digital Electronics                   |
| - Computer Programming                           | - Electric Power System Fundamentals    |
| - Engineering Mathematics II                     | - Engineering Project                   |
| - Analogue Electronics                           |   |


#### YEAR 2

- |  |   |
|--|---|
| - Engineering Mathematics III                    | - Electronic Instrumentation and Control Systems      |
| - Automation and Programmable Logic              | - Engineering Management, Practices & Ethics          |
| - Electric Machines                              | - Bahasa Kebangsaan A                                 |
| - Power Electronics                              | - Bahasa Melayu Komunikasi 1 (International Students) |
| - Fundamental of System Modelling                | - Co-Curricular Activities and Community              |
| - Industrial Project                             | - Malaysia Culture and Life                           |
| - Industrial Training                            | - Pengajian Malaysia 2 (Malaysian Students)           |
| - Microcontroller System Design and Applications |   |
| - Power Electronics                              |   |
| - Modern Power Systems                           |   |



N/521/4/0157(06/22) MQA/PA 8692

## Diploma in Mechanical Engineering


<b>Intakes</b>	January, March, June and September
<b>Duration</b>	2 Years (Full-Time)
<b>Course Location</b>	 UOW Malaysia KDU University College, Utropolis, Glenmarie

The two-year Diploma in Mechanical Engineering program is designed to provide students with strong technical, analytical, and problem-solving skills necessary for a variety of careers in the field of mechanical engineering. This program is suitable for students who are interested in the design, technology, construction and development of solutions for engineering problems. Catering to the demands of the engineering industry, this diploma will produce graduates who are not only skilful but also well-equipped with current and relevant knowledge in the advancement of this engineering discipline.



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

## Bachelor of Mechanical Engineering with Honours

<b>Intakes</b>	January, June and September
<b>Duration</b>	4 Years (Full-Time)
<b>Course Location</b>	 UOW Malaysia KDU University College, Utropolis, Glenmarie

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.

### 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
- Principles of Electrical 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

- Final Year Project 1
- Total Quality Management
- Industrial Training
- Final Year Project 2
- Computer Aided Manufacturing
- Elective (4 subjects)
- Entrepreneurship
- Bahasa Melayu Komunikasi 2
- Corporate Social Responsibility
- Hubungan Etnik (Malaysian Student)
- Life in Malaysia
- Pengajian Malaysia 3 (International Students)
- Tamadun Islam dan Tamadun Asia (Malaysian Student)

### ELECTIVES

- Air Conditioning and Mechanical Ventilation
- Energy Renewable Systems
- Internal Combustion Engines
- Principles of Sustainable Engineering
- Advance Materials Technology
- Engineering Ceramics and Polymer
- Fracture Mechanics
- Materials Selection in Design

### COURSE STRUCTURE

#### YEAR 1

- Engineering Mathematics I
- Engineering Physics
- Engineering Materials
- Personal Development and Leadership Skills-2
- Tertiary English 1
- Computer Programming
- Engineering Mathematics II
- Statics and Dynamics
- Technical Drafting and CAD
- Personal Development and Leadership Skills-1
- Tertiary English 2
- Electric Circuits
- Engineering Mathematics III
- Mechanical Design
- Strength of Materials
- Fluid Mechanics

#### YEAR 2

- Analogue Electronics
- Mechanics of Machines
- Thermodynamics
- Workshop Technology 1
- Industrial Automation 1
- Electric Machines
- Industrial Training
- Industrial Project
- Workshop Technology 2
- Industrial Automation 2
- Engineering Management, Practices & Ethics
- Bahasa Kebangsaan A
- Bahasa Melayu Komunikasi 1 (International Students)
- Co-Curricular Activities and Community
- Malaysia Culture and Life
- Pengajian Malaysia 2 (Malaysian Students)



R/523/6/0049(09/21) MQA/FA 0483

## Bachelor of Electrical & Electronics Engineering with Honours

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 and 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 through their specialisation.

**Intakes**

January, June and September

**Duration**

4 Years (Full-Time)

**Course Location**

 UOW Malaysia KDU University College, Utropolis, Glenmarie

### COURSE STRUCTURE

#### YEAR 1

- Engineering Mathematics 1
- Circuit Theory
- Computer Programming for Engineers
- Engineering CAD
- Analogue Electronics
- Engineering Design Fundamentals
- 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

- Final Year Project 1
- Final Year Project 2
- Digital Signal Processing
- Industrial Training
- Principles of Sustainable Engineering
- Elective (5 Subjects)
- Bahasa Melayu Komunikasi 2
- Entrepreneurship
- Corporate Social Responsibility
- Hubungan Etnik (Malaysian Student)
- Life in Malaysia
- Pengajian Malaysia 3 (International Students)
- Tamadun Islam dan Tamadun Asia (Malaysian Student)

### ELECTIVES: ELECTRICAL POWER & RENEWABLE ENERGY

- Advanced Power System Analysis
- Electrical Energy Utilisation
- Energy Storage
- Power Station and High Voltage Engineering
- Power System Protection
- Renewable Energy Systems
- Sustainable Power Generation
- Transmission and Distribution

### ELECTIVES: ELECTRONIC ENGINEERING

- Advanced Control Systems
- Advanced Digital Design with HDL
- Fault Diagnosis of Integrated Circuits
- Introduction to Opto-Electronic Devices
- Mixed Signals Circuit Design
- Real Time Embedded Systems
- VLSI


### ELECTIVES: COMMUNICATION ENGINEERING

- Advanced Digital Design with HDL
- Internet Protocol for Mobile Network
- Introduction to Opto-Electronic Devices
- Mixed Signals Circuit Design
- Optical Communication
- Radio Communication Systems
- RF Systems Design



N/521/6/0139(05/21) MQA/PA 8097

## Bachelor of Mechatronics Engineering with Honours


<b>Intakes</b>	January, June and September
<b>Duration</b>	4 Years (Full-Time)
<b>Course Location</b>	 UOW Malaysia KDU University College, Utropolis, Glenmarie

The Bachelor of Mechatronics Engineering with Honours is a multidisciplinary field of science that includes a combination of mechanical engineering, electronics, computer engineering, telecommunications engineering, systems engineering and control engineering. This program is suitable for students who are passionate and interested in understanding new designs or developing new sensors, actuators, control algorithms and use advanced functional materials for the design of mechanical systems.



N/520/8/0997(11/21) MQA/PA 8691

## Doctor of Philosophy (Engineering)

<b>Intakes</b>	January, June and September
<b>Duration</b>	Minimum 9 Semester, Maximum 18 Semester (Full-Time/Part-Time)
<b>Course Location</b>	 UOW Malaysia KDU University College, Utropolis, Glenmarie

The Doctor of Philosophy in Engineering program provides innovative training which enhances professional knowledge in a specialisation area and develops a wide range of advanced transferable skills, ensuring the development of high calibre graduates.

The nature of the program ensures that students develop academically in their professional capability, intellectual creativity, innovation, scientific skill sets and become an independent researcher, as well enhance their personal attributes through personal confidence, leadership traits, communication and entrepreneurial skills. Graduating with a Ph.D. signifies a contribution of the graduate to the community of engineering scholars around the world.

### COURSE STRUCTURE

#### YEAR 1

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

#### YEAR 2

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

#### 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 1
- Advanced Control Systems
- Digital Signal Processing
- Industrial Training
- Final Year Project 2
- Computer Aided Manufacturing
- Elective (3 Subjects)
- Bahasa Melayu Komunikasi 2
- Corporate Social Responsibility
- Entrepreneurship
- Hubungan Etnik (Malaysian Student)
- Life in Malaysia
- Pengajian Malaysia 3 (International Students)
- Tamadun Islam dan Tamadun Asia (Malaysian Student)

### ELECTIVES

- Autonomous Robotics Systems
- Digital Signal Processing
- MEMS Sensors and Actuators
- Real Time Embedded Systems
- Radio Communication System
- Robotics Kinematics and Control

### COURSE STRUCTURE

#### RESEARCH PROPOSAL

Students will systematically structure and develop their research by developing a research proposal, which would guide the student through the entire research process.

#### PROPOSAL DEFENCE

A presentation session chaired by UOW Malaysia KDU with invited panel of examiners to ensure the candidate is able to articulate their research ideas and plans, as well as having the necessary skills to carry out research activities as proposed.

#### RESEARCH

Upon approval of the research proposal, students will be guided by their supervisors to begin their research, and will work independently on their research projects

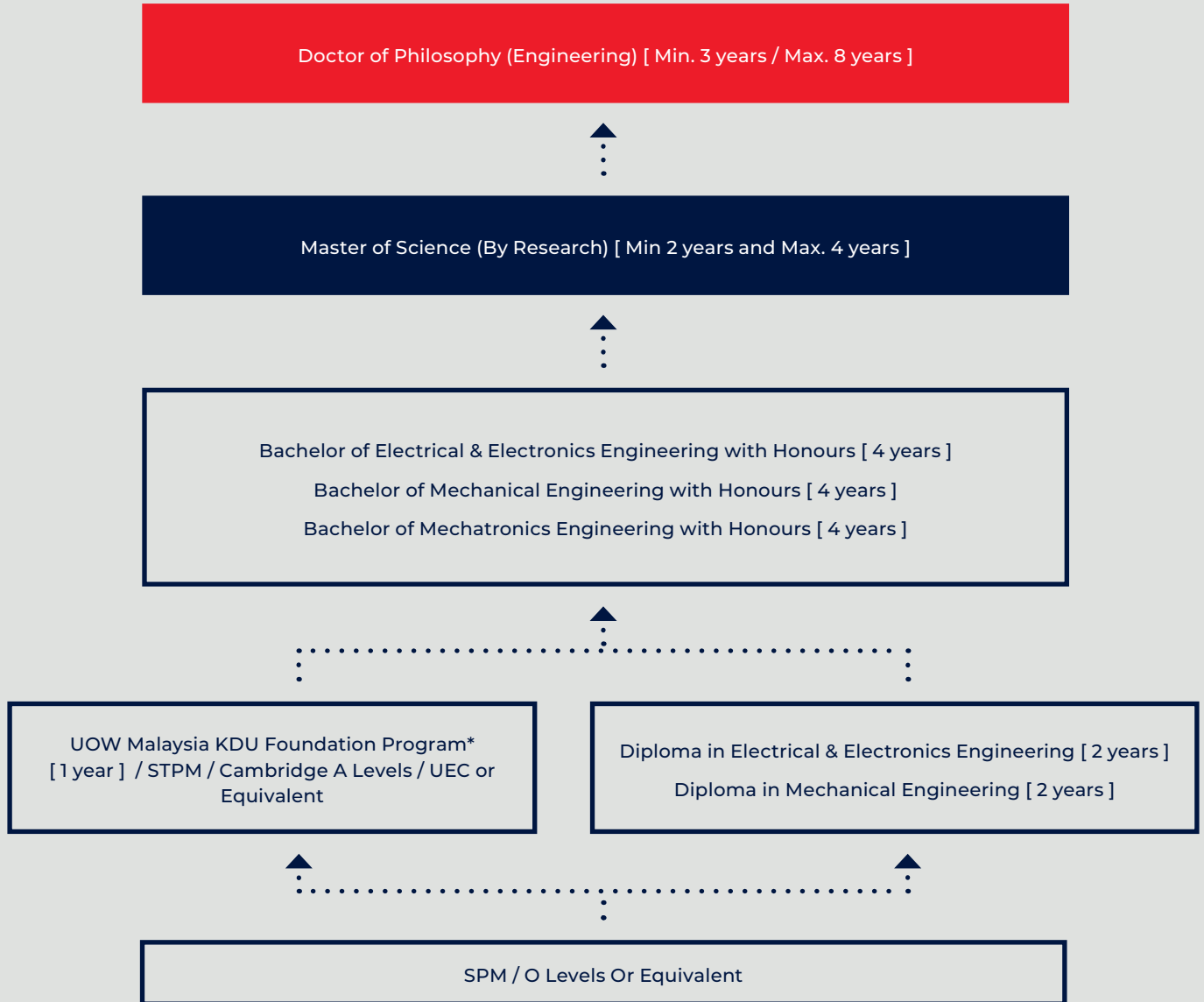
#### THESIS

Upon completion of their research, students will document the research project and process in a thesis. Typically, thesis for PhD should not be more than 80,000 words.

#### VIVA VOCE EXAMINATION

Upon completion of research and thesis, candidate will undergo an oral presentation, chaired by experts in the field.

## Study Route



\* Specific foundation programs that meet the entry requirement

## Entry Requirement

### – DIPLOMA IN ELECTRICAL & ELECTRONICS ENGINEERING – DIPLOMA IN MECHANICAL ENGINEERING

Academic Qualification	Requirement
SPM / O Levels	Min. 3 Credits (3Cs) inclusive of a Credit in Mathematics and Science and a “Pass” in English
UEC	Min. 3 Credits (3Bs) inclusive of a Credit in Mathematics and Science and a “Pass” in English
Certificate in relevant field	Pass with minimum CGPA of 2.00
Home Schooling with SAT	Pass Year 11 and SAT score of 1050 over 1600 with minimum score of 550 for Mathematics and Physics

### – BACHELOR OF MECHANICAL ENGINEERING WITH HONOURS – BACHELOR OF ELECTRICAL & ELECTRONICS ENGINEERING WITH HONOURS – BACHELOR OF MECHATRONICS ENGINEERING WITH HONOURS

Academic Qualification	Requirement
GCE A Levels	2 Principal Passes (2Es) for Mathematics and Physics
STPM	2 Principal Passes (2Cs) for Mathematics and Physics
UEC	5 Credits (5Bs) inclusive of a Credit in Mathematics and Physics
Diploma	Pass with minimum CGPA of 2.00
Foundation Studies	Pass with minimum CGPA of 2.00

### – DOCTOR OF PHILOSOPHY (ENGINEERING)

Academic Qualification	Requirement
Master Degree	Completion of Master’s Degree or equivalent in a related field

\* Any other qualifications is subject to review and approval of certified transcripts. For a full listing of the entry requirements and other details on the respective programs, please scan the QR Code above or check with the counsellor.

\*\* Bahasa Kebangsaan A is compulsory for all Malaysian students that do not fulfil the following requirements:

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



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

## Diploma in Mechatronics Engineering


<b>Intakes</b>	January, March, June and September
<b>Duration</b>	2½ Years
<b>Course Location</b>	 UOW Malaysia KDU Penang University College, George Town

Mechatronics is a multidisciplinary field that focuses on mechanical, electronics and computing, in creating engineering solution. These courses give students theoretical and practical introduction to a career in mechatronics engineering. Mechatronics experts create simpler, faster and smarter automation system for better effectiveness and efficiency.



R2/523/4/0231(12/24) A 9865

## Diploma in Electrical and Electronic Engineering

<b>Intakes</b>	January, March, June and September
<b>Duration</b>	2½ Years
<b>Course Location</b>	 UOW Malaysia KDU Penang University College, George Town

Electrical & Electronics Engineering is one of the most important engineering disciplines within the engineering society. These courses give students theoretical and practical introduction to a career in E&E engineering, as well as specialized courses in microelectronics which are highly demanded in Malaysia. You may further your career in the areas with applications in microelectronics, communications, embedded system, power as well as manufacturing and many more.

### COURSE STRUCTURE

#### YEAR 1

- |  |  |
|--|--|
| - Semiconductor Devices & Applications         | - Personal Development & Leadership Skills   |
| - Engineering Mathematics I                    | - Oral Communication (International Students & Malaysian Student with Credit in SPM Malay) |
| - Engineering Mathematics II                   | - Bahasa Kebangsaan A (Malaysian Student without Credit in SPM Malay)                      |
| - Fundamentals of Computer Systems             | - Pengajian Malaysia 2 (Malaysian Student)   |
| - Electric Circuit I                           | - Bahasa Melayu Komunikasi 1 (International Student)                                       |
| - Digital Electronics                          |  |
| - Basic Programming                            |  |
| - Microcontroller System Design & Applications |  |
| - Ethics and Moral 2                           |  |

#### YEAR 2

- |  |                                   |
|--|-----------------------------------|
| - Engineering Mathematics III                              | - Computer Aided Design/ Drafting |
| - Electric Circuit II                                      | - Instrumentation and Control     |
| - Electric Machines  | - Robotics and Automation         |
| - Introduction to Inventive Problem Solving in Engineering | - Project Lab 1                   |
| - Technopreneurship  | - Holistic Personal Development   |
| - Mechatronic System Design                                | - Industrial Training             |

#### YEAR 3

- |                         |                                     |
|-------------------------|-------------------------------------|
| - Engineering Materials | - Applied Pneumatics and Hydraulics |
| - Project Lab 2         |                                     |

### COURSE STRUCTURE

#### YEAR 1

- |  |  |
|--|--|
| - Semiconductor Devices & Applications         | - Personal Development & Leadership Skills   |
| - Engineering Mathematics I                    | - Oral Communication (International Students & Malaysian Student with Credit in SPM Malay) |
| - Engineering Mathematics II                   | - Bahasa Kebangsaan A (Malaysian Student without Credit in SPM Malay)                      |
| - Fundamentals of Computer Systems             | - Pengajian Malaysia 2 (Malaysian Student)   |
| - Electric Circuit I                           | - Bahasa Melayu Komunikasi 1 (International Student)                                       |
| - Digital Electronics                          |  |
| - Basic Programming                            |  |
| - Microcontroller System Design & Applications |  |
| - Ethics and Moral 2                           |  |

#### YEAR 2

- |  |                                      |
|--|--------------------------------------|
| - Engineering Mathematics III                              | - Advanced Computer Programming      |
| - Electric Circuit II                                      | - Power Electronics                  |
| - Analogue Electronics                                     | - Wafer Fabrication and IC Packaging |
| - Electric Machines  | - Project Lab 1                      |
| - Introduction to Inventive Problem Solving in Engineering | - Holistic Personal Development      |
| - Technopreneurship  |                                      |

#### YEAR 3

- |                                       |                                |
|---------------------------------------|--------------------------------|
| - Electric Power Systems Fundamentals | - Very Large Scale Integration |
|                                       | - Project Lab 2                |





N/523/6/0309(08/25) MQA/PA9777

## Bachelor of Science (Hons) Mechatronics Engineering (Dual Award Program)

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.

### Intakes

January, June and September

### Duration

3 Years (Full-Time)

### Course Location

 UOW Malaysia KDU Penang University College, George Town

## COURSE STRUCTURE

### YEAR 1

- Engineering Mathematics 1
- Engineering Mathematics 2
- Electrical and Electronic Principles
- Engineering Statics and Dynamics
- Engineering Materials
- Introduction to Inventive Problem Solving in Engineering
- Engineering Skills in Experimentation and Presentation
- Introduction to Engineering Design
- Electric Power and Machines
- Engineering Drawing
- Computer Programming
- Workshop Technology
- IELTS Preparatory Course (International Students & Malaysian Student with Credit in SPM Malay)
- Bahasa Kebangsaan A (Malaysian Student without Credit in SPM Malay)
- Hubungan Etnik (Malaysian Student)
- Pengajian Malaysia (International Student)

### YEAR 2

- Engineering Mathematics 3
- Numerical Methods
- Strength of Materials
- Operational Management and Engineering Economics
- Engineers in Society
- Introduction to Robotics
- Thermo-Fluids Science
- Manufacturing Technology
- Instrumentation and Control
- Mechanical Engineering Design
- Microprocessors and Microcontrollers
- Analogue Electronics
- Holistic Professional Development
- Ethics and Moral 3
- TITAS (Malaysian Student)
- Bahasa Melayu Komunikasi (International Student)

### YEAR 3

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

### Educational partners:



Graduates of a dual award degree program receive a degree award from both UOW Malaysia KDU Penang University College and our partner university. A dual award degree program constitutes completion of a single program of study and is differentiated from a double-degree.





N/523/6/0308(08/25) MQA/PA 9776

## Bachelor of Science (Hons) Electrical & Electronic Engineering (Dual Award Program)

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.

### Intakes

January, June and September

### Duration

3 Years (Full-Time), 6 Years (Part-Time)

### Course Location

 UOW Malaysia KDU Penang University College, George Town

## COURSE STRUCTURE

### YEAR 1

- Engineering Mathematics 1
- Engineering Mathematics 2
- Semiconductor devices
- Circuit Theory
- Digital Electronics & Telecommunications
- Introduction to Inventive Problem Solving in Engineering
- Engineering Skills in Experimentation and Presentation
- Introduction to Engineering Design
- Electric Power and Machines
- Electric Machine
- Computer Programming
- Electronic Devices
- IELTS Preparatory Course (International Students & Malaysian Student with Credit in SPM Malay)
- Bahasa Kebangsaan A (Malaysian Student without Credit in SPM Malay)
- Hubungan Etnik (Malaysian Student)
- Pengajian Malaysia (International Student)

### YEAR 2

- Engineering Mathematics 3
- Numerical Methods
- Digital Systems
- C Programming
- Engineering Product Development
- Communication Systems
- Signals, Circuits and Systems
- Instrumentation and Control
- Power Generation and Transmission
- Microprocessors and Microcontrollers
- Sustainable Energy Systems
- Analogue Electronics
- Holistic Professional Development
- Ethics and Moral 3
- TITAS (Malaysian Student)
- Bahasa Melayu Komunikasi (International Student)

### YEAR 3

- Project Management
- Digital Signal Processing
- Manufacturing Analysis
- Electronic Circuit Design
- Power Electronics and Drive Systems
- Specialisation (3 subjects)
- Individual Engineering Project 1
- Individual Engineering Project 2
- Industrial Attachment

## SPECIALISATION

- Microelectronic (Very Large Scale Integration, Digital System Design and Implementation, Embedded Systems)
- Communication (Wireless and RF Communication System Design, Optical Communication System Design, Computer Networking and Security)
- Power (High Voltage Engineering, Industrial Instrumentation and Modern Control Systems, Power System Analysis)

### Educational partner:




Graduates of a dual award degree program receive a degree award from both UOW Malaysia KDU Penang University College and our partner university. A dual award degree program constitutes completion of a single program of study and is differentiated from a double-degree.



N/520/7/0110(01/23) MQA/PA 9272

## Master of Science (Engineering)

<b>Intakes</b>	January, June and September
<b>Duration</b>	2-4 years (Full-time), 3-6 years (Part-time)
<b>Course Location</b>	 UOW Malaysia KDU Penang University College, George Town

This program provides you opportunity to specialise in a chosen field of engineering research. You will understand, study and demonstrate your expertise in an engineering research topic through your dissertation. You will develop your research skills through two taught modules, i.e. research methodology and quantitative analysis. You will be then be supervised by an academic team.

### COURSE STRUCTURE


#### MODULES

- Research Methods
- Quantitative Analysis
- Dissertation/Thesis



N/520/8/0105(01/23) MQA/PA 9273

## Doctor of Philosophy (Engineering)

<b>Intakes</b>	January, June and September
<b>Duration</b>	3-6 years (Full-time), 4-8 years (Part-time)
<b>Course Location</b>	 UOW Malaysia KDU Penang University College, George Town

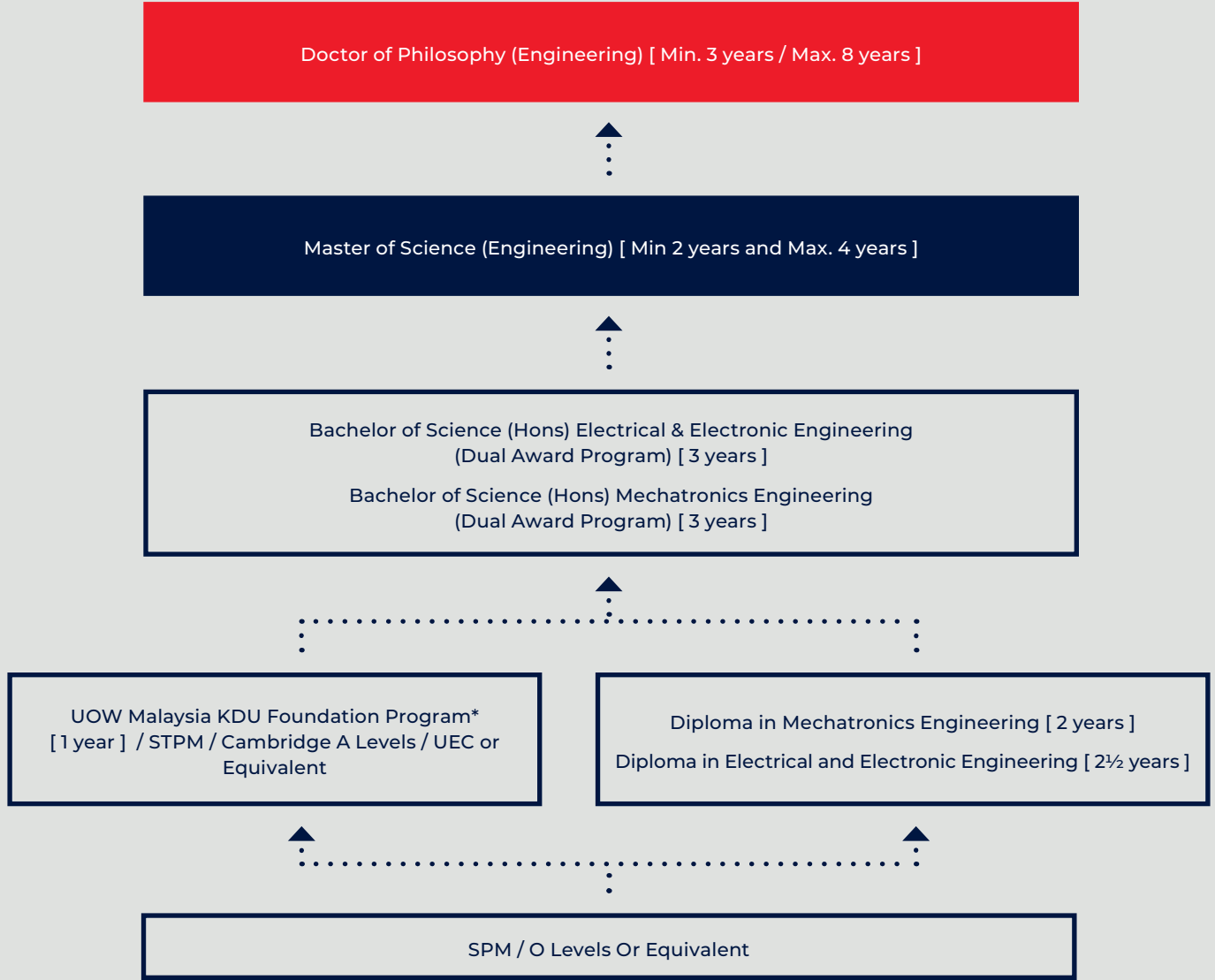
This program provides you with the opportunity to specialise in a chosen field of engineering research. You will understand, study and demonstrate your novelty in engineering research and contribution to engineering knowledge through your dissertation. This is the best way for you to demonstrate your research passion, discover new knowledge, contribute to engineering knowledge and being recognized for your contribution through attainment of a doctoral degree. You will develop your research skills through two taught modules, i.e. research methodology and quantitative analysis. You will be then be supervised by an academic team as you complete your studies.

### COURSE STRUCTURE

#### MODULES

- Research Methods
- Quantitative Analysis
- Dissertation/Thesis

## Study Route



\* Specific foundation programs that meet the entry requirement

## Entry Requirement

### – DIPLOMA IN MECHATRONICS ENGINEERING – DIPLOMA IN ELECTRICAL AND ELECTRONIC ENGINEERING

Academic Qualification	Requirement
SPM / O Levels	3 Credits including Mathematics and 1 relevant Science subject
UEC	3 Credits including Mathematics and 1 Science subject
Sijil Kemahiran Malaysia (SKM)	Pass Level 3 in related field and Pass SPM with a minimum of 1 Credit and Pass in Mathematics

### – BACHELOR OF SCIENCE (HONS) MECHATRONICS ENGINEERING (DUAL AWARD PROGRAM) – BACHELOR OF SCIENCE (HONS) ELECTRICAL & ELECTRONIC ENGINEERING (DUAL AWARD PROGRAM)

Academic Qualification	Requirement
GCE A Levels	Pass A-Level (EE) with Principal Pass in Mathematics and Physical Science subject (Physics/ Chemistry)
STPM	Pass STPM with NGMP 2.0 / Grade C in Mathematics and Physical Science subject (Physics/ Chemistry)
UEC	5 Credits (Min B6) including Mathematics and one of Science subject
Diploma	A Diploma (Level 4 MQF) in Engineering or equivalent with minimum CGPA of 2.00
Foundation Studies	Pass with minimum CGPA of 2.00 in relevant field

### – MASTER OF SCIENCE (ENGINEERING)

Academic Qualification	Requirement
Bachelor's Degree	A Bachelor's Degree in Engineering or Engineering Technology degree with minimum CGPA of 2.75 or equivalent, as accepted by the Senate; or  A Bachelor's Degree in Engineering or Engineering Technology degree with minimum CGPA of 2.50 and not meeting CGPA of 2.75 or equivalent, can be accepted subject to rigorous internal assessment; or  A Bachelor's Degree in Engineering or Engineering Technology not meeting CGPA of 2.50 or equivalent, can be accepted subject to a minimum of 5 years working experience in relevant field.  Other qualifications recognised by the government.

### – DOCTOR OF PHILOSOPHY (ENGINEERING)

Academic Qualification	Requirement
Master's Degree	Master's Degree in Engineering or Engineering Technology or equivalent, as accepted by the Senate

\* Any other qualifications is subject to review and approval of certified transcripts. For a full listing of the entry requirements and other details on the respective programs, please scan the QR Code above or check with the counsellor.

\*\* Bahasa Kebangsaan A is compulsory for all Malaysian students that do not fulfil the following requirements:

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