

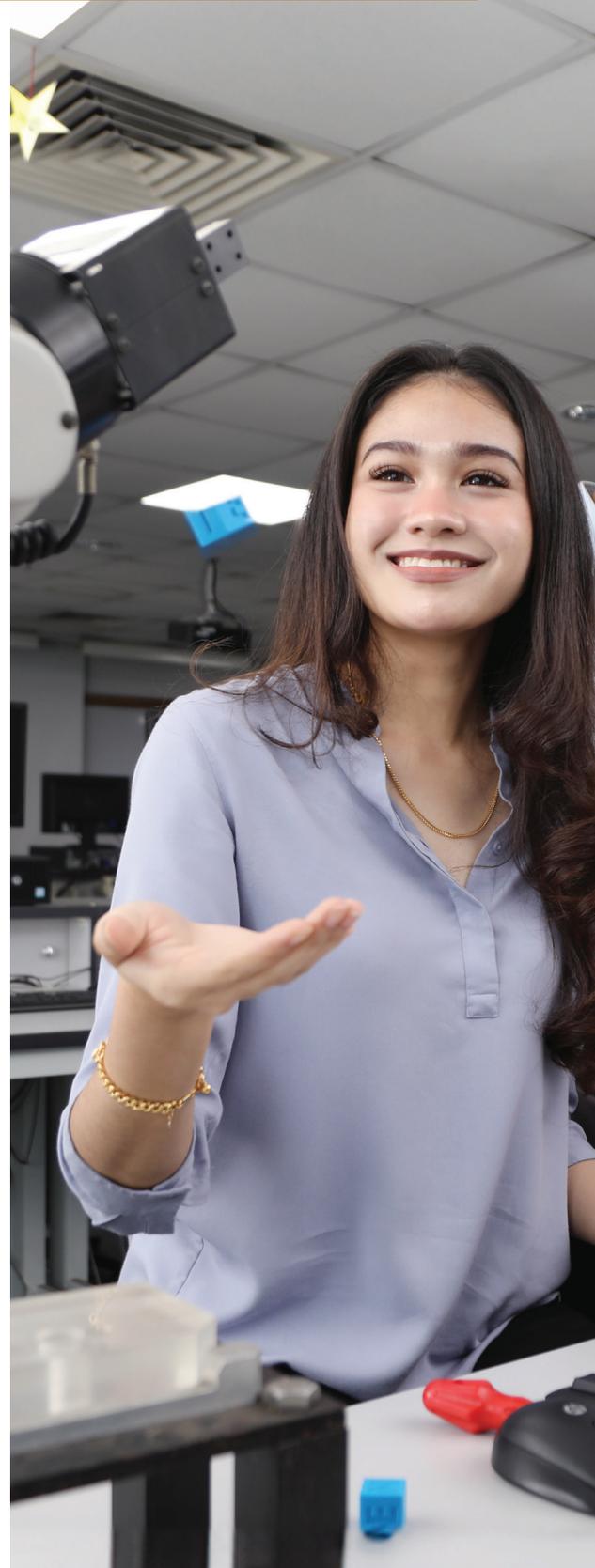
# COLLEGE OF ENGINEERING (COE)

The College of Engineering (COE) at UNITEN has kept pace with the demands of scientific and technological world. The college strives to provide a first-rate educational experience and first-class education to its undergraduate students.

Today, the college comprises of four departments, which are Electrical and Electronics Engineering, Mechanical Engineering, Civil Engineering, and Engineering Foundation and General Studies. COE offers programmes at Bachelor, Diploma, and Foundation levels, and in collaboration with the College of Graduate Studies, offering programmes at Master and PhD levels.

Recognised by

- Ministry of Higher Education
- Self-accrediting Private University
- Lembaga Jurutera Malaysia
- IEA Washington Accord





## Programmes offered by COE

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### Foundation in Engineering

R2/0710/3/0001 (06/28) (MQA/A9167)

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### Diploma in Mechanical Engineering

R2/0714/4/0004 (05/28) (MQA/FA15341)

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### Diploma in Electrical Engineering

R2/0712/4/0001 (05/28) (MQA/FA15340)

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### Bachelor of Mechanical Engineering (Honours)

R2/0714/6/0003 (06/26) (MQA/FA9202)

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### Bachelor of Electrical and Electronics Engineering (Honours)

R2/0713/6/0003 (06/26) (MQA/FA9204)

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### Bachelor of Electrical Power Engineering (Honours)

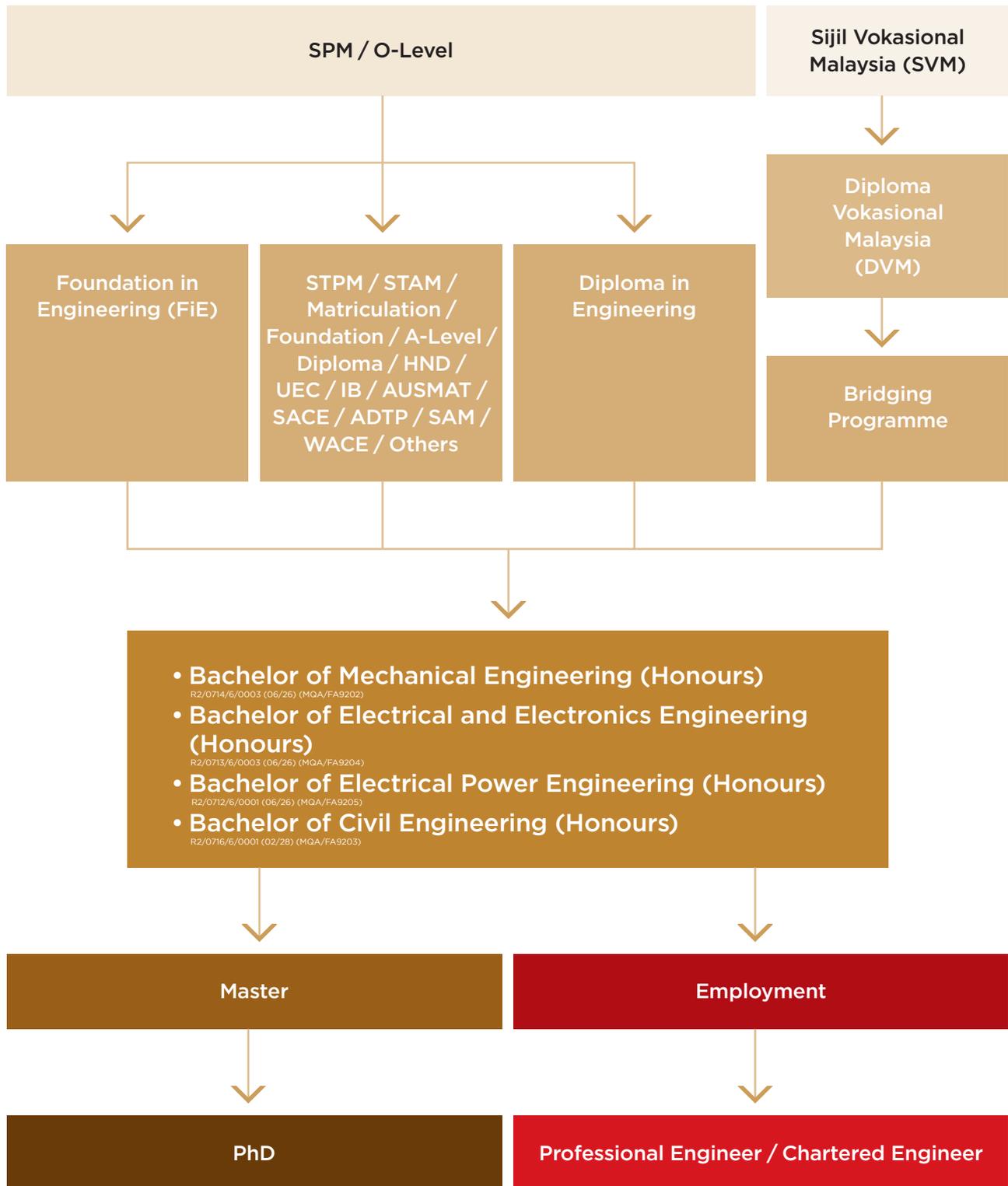
R2/0712/6/0001 (06/26) (MQA/FA9205)

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### Bachelor of Civil Engineering (Honours)

R2/0716/6/0001 (02/28) (MQA/FA9203)

# Pathways



# Foundation in Engineering

R3/0710/3/0001 (06/28) (MQA/A9167)

The Foundation in Engineering programme has been developed to equip students with the necessary knowledge and skills to enable them to successfully pursue their respective degree programmes.

The syllabus of this foundation studies includes Introductory Calculus and Analytic Geometry, Physics, Chemistry, Computing Skills, and other relevant subjects.

Apart from interactive lectures, students will also be exposed to supervised laboratories and workshops, and the application of knowledge through project work and practical training.

🕒 1 year

📄 50 credit hours

📅 January, July, and September

## Prospect

This 1-year long programme comprising of general and core engineering subjects is designed as an entry route for those who are interested in pursuing their studies in Bachelor of Mechanical Engineering (Honours), Bachelor of Electrical and Electronics Engineering (Honours), Bachelor of Electrical Power Engineering (Honours), or Bachelor of Civil Engineering (Honours).



# Diploma in Mechanical Engineering

R2/0714/4/0004 (05/28) (MQA/FA15341)

Diploma in Mechanical Engineering aims to prepare students for professional career in hands-on technical work, or to further their studies in related engineering field.

The syllabus for this programme includes Circuit Theory, Mathematics, Fundamentals in Engineering Design, Manufacturing Process, Workshops, and other relevant subjects.

Apart from interactive lectures, supervised laboratories, and Final Year Project, students are also given the chance to experience working in the industry via the Industrial Trainee programme to develop their skills and building their network. This certainly gives them more confidence when applying for future roles.



🕒 2.5 years

📄 92 credit hours

📅 January, July, and September

## Potential Career Paths

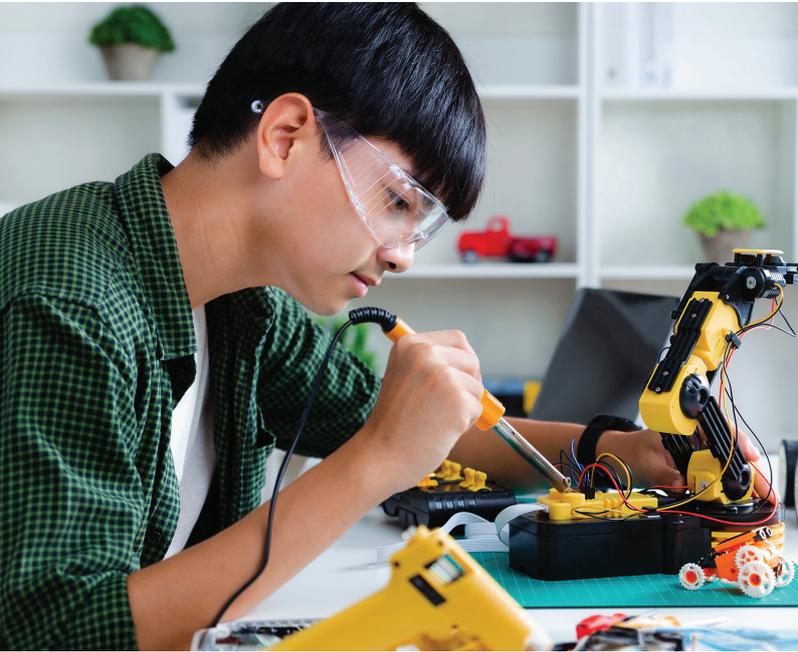
With such comprehensive coverage and combination of subjects, Diploma in Mechanical Engineering allows graduates to either join competent workforce as technician or assistant engineer, or to pursue any related Bachelor programme, such as Bachelor of Mechanical Engineering (Honours), Bachelor of Electrical and Electronics Engineering (Honours), Bachelor of Electrical Power Engineering (Honours), and Bachelor of Civil Engineering (Honours).

Popular roles and career pathways for graduates of Diploma in Mechanical Engineering include:

- Appliances Assistant Engineer
- Assistant Auditor
- Assistant Cite Engineer
- Assistant Project Planner / Manager
- Assistant Quality Control Engineer
- Communication Assistant Engineer
- Construction Assistant Engineer
- Consulting Assistant Engineer
- Design Assistant Engineer
- Foreman
- Instrumentation & Control Assistant Engineer
- Maintenance Assistant Engineer
- Manufacturing Assistant Engineer
- Mechatronic Assistance Engineer
- Medical Assistant Engineer
- Operation Assistant Engineer
- Project Assistant Engineer
- Research & Development Assistant Engineer
- Safety Supervisor
- Supervisor
- Technician
- Test Assistant Engineer
- Vocational Training Assistant Officer
- Welder

# Diploma in Electrical Engineering

R2/0712/4/0001 (05/28) (MQA/FA15340)



Diploma in Electrical Engineering aims to prepare students for professional career in hands-on technical work, or to further their studies in related engineering field.

The syllabus for this programme includes Circuit Theory, Electrical Installation, Industrial Automation, Mathematics, Power System & Electronics, and other relevant subjects.

Apart from interactive lectures, supervised laboratories, and Final Year Project, students are also given the chance to experience working in the industry via the Industrial Trainee programme to develop their skills and building their network. This certainly gives them more confidence when applying for future roles.

🕒 2.5 years

📄 92 credit hours

📅 January, July, and September

## Prospect

With such comprehensive coverage and combination of subjects, Diploma in Electrical Engineering allows graduates to either join competent workforce as technician or assistant engineer, or to pursue any related Bachelor programme, such as Bachelor of Mechanical Engineering (Honours), Bachelor of Electrical and Electronics Engineering (Honours), Bachelor of Electrical Power Engineering (Honours), and Bachelor of Civil Engineering (Honours).

Popular roles and career pathways for graduates of Diploma in Electrical Engineering include:

- Appliances Assistant Engineer
- Assistant Auditor
- Assistant Cite Engineer
- Assistant Project Planner/Manager
- Assistant Quality Control Engineer
- Communication Assistant Engineer
- Construction Assistant Engineer
- Consulting Assistant Engineer
- Design Assistant Engineer
- Drafter
- Foreman
- Instrumentation & Control Assistant Engineer
- Maintenance Assistant Engineer
- Manufacturing Assistant Engineer
- Mechatronic Assistance Engineer
- Medical Assistant Engineer
- Operation Assistant Engineer
- Project Assistant Engineer
- Research & Development Assistant Engineer
- Research Assistant/Tutor
- Safety Supervisor
- Supervisor
- Technician
- Test Assistant Engineer
- Vocational Training Assistant Officer

# Bachelor of Mechanical Engineering (Honours)

R2/0714/6/0003 (06/26) (MQA/FA9202)



COE is home to top-level Engineering undergraduate programmes, including one that leads to the award of Bachelor of Mechanical Engineering (Honours). The programme is designed to produce graduates with the expertise needed to tackle real-world problems in an ever-changing industry.

Our well-established curriculum combines both theory and experiments, featuring general subjects and core Mechanical Engineering subjects, including Mechanics of Fluids, Mechanics of Materials, Theory of Machines, Modelling & Control of Dynamics Systems, and more.

This Bachelor of Mechanical Engineering (Honours) programme is also designed to enable students to pursue higher qualifications, such as to obtain a higher-level specialised Master and Doctor of Philosophy from reputable institutions of higher learning.

🕒 4 years

📄 138 credit hours

📅 January, July, and September

## Potential Career Paths

With Bachelor of Mechanical Engineering (Honours), graduates can pursue a career as:

- Automotive Engineer
- Consulting Engineer
- Control Engineer
- Design Engineer
- Drilling Engineer
- Instrumentation & Control Engineer
- Maintenance Engineer
- Manufacturing Engineer
- Mechanical Engineer
- Mechatronic Engineer
- Operation Engineer
- Power Station Engineer
- Project Engineer
- Research & Development Engineer
- Test Engineer
- Well Engineer

# Bachelor of Electrical and Electronics Engineering (Honours)

R2/0713/6/0003 (06/26) (MQA/FA9204)

This wide-ranging Electrical & Electronics Engineering degree aims to develop and nurture students' understanding of the field and their ability to solve engineering problems independently.

Our well-established curriculum combines both theory and experiments, featuring general subjects and core Electrical & Electronics Engineering subjects, including Electronics Analysis & Design, Signals & Systems, Electromagnetic Fields & Waves, and more.

This Bachelor of Electrical and Electronics Engineering (Honours) programme is also designed to enable students to pursue higher qualifications, such as to obtain a higher-level specialised Master and Doctor of Philosophy from reputable institutions of higher learning.



🕒 4 years

📄 138 credit hours

📅 January, July, and September

## Potential Career Paths

With Bachelor of Electrical and Electronics Engineering (Honours), graduates can pursue a career as

- Appliances Engineer
- Communication Engineer
- Computer Engineer
- Consulting Engineer
- Control Engineer
- Design Engineer
- Electrical and Electronics Engineer
- Instrumentation & Control Engineer
- Maintenance Engineer
- Mechatronic Engineer
- Microelectronics Engineer
- Operation Engineer
- Power Engineer
- Project Engineer
- Research & Development Engineer
- Signal Processing Engineer
- System & Network Engineer
- Telecommunications Engineer
- Test Engineer

# Bachelor of Electrical Power Engineering (Honours)

R2/0712/6/0001 (06/26) (MQA/FA9205)

This Bachelor of Electrical Power Engineering (Honours) programme has been designed to be relevant to the needs of modern industry and to produce graduates who are able to deal with issues at the forefront of this discipline.

Our well-established curriculum combines both theory and experiments, featuring general subjects and core Electrical Power Engineering subjects, including Electrical Machines, Electronics Analysis & Design, Signals & Systems, Electromagnetic Fields & Waves, Technical Communications, and more.

This Bachelor of Electrical Power Engineering (Honours) programme is also designed to enable students to pursue higher qualifications, such as to obtain a higher-level specialised Master and Doctor of Philosophy from reputable institutions of higher learning.

🕒 4 years

📄 138 credit hours

📅 January, July, and September

## Potential Career Paths

With Bachelor of Electrical Power Engineering (Honours), graduates can pursue a career as:

- Appliances Engineer
- Communication Engineer
- Consulting Engineer
- Control Engineer
- Design Engineer
- Electrical and Electronics Engineer
- Electrical Distribution Engineer
- Instrumentation & Control Engineer
- Maintenance Engineer
- Mechatronic Engineer
- Microelectronics Engineer
- Operation Engineer
- Power System Engineer
- Power Station Engineer
- Project Engineer
- Research & Development Engineer
- Signal Processing Engineer
- Telecommunications Engineer
- Test Engineer



# Bachelor of Civil Engineering (Honours)

R2/0716/6/0001 (02/28) (MQA/FA9203)



The Bachelor of Civil Engineering (Honours) programme intends to produce industry-ready graduates with innovative sense who are highly skilled and creative in adapting to new challenges and deliver sustainable solutions for modern society.

Our well-established curriculum combines both theory and experiments, featuring general subjects and core Civil Engineering subjects, including Engineering Geology, Surveying for Engineers, Hydraulic Engineering, Civil Engineering Drafting Technology, and more.

This Bachelor of Civil Engineering (Honours) programme is also designed to enable students to pursue higher qualifications, such as to obtain a higher-level specialised Master and Doctor of Philosophy from reputable institutions of higher learning.

🕒 4 years

📄 138 credit hours

📅 January, July, and September

## Potential Career Paths

With Bachelor of Civil Engineering (Honours), graduates can pursue a career as:

- Construction Engineer
- Consulting Engineer
- Dam Engineer
- Design Engineer
- Geotechnical Engineer
- Highway Engineer
- Instrumentation & Control Engineer
- Maintenance Engineer
- Manufacturing Engineer
- Materials Engineer
- Operation Engineer
- Project Engineer
- Research & Development Engineer
- Soil Engineer
- Structural Engineer
- Test Engineer
- Transportation Engineer