FLEXILEARN
WEEKEND & EVENING CLASSES

Approved by MQA
The Chartered Institute of Logistics and Transport
Accredited by CILTM

JPT/BPP(R/522/6/0021) 07/22, MQA/FA 1624
BACHELOR OF ENGINEERING WITH HONOURS
ELECTRICAL
The broad field of electrical engineering involves working with all manners of electronic devices, from pocket calculators to super-computers. Often overlapping with computer engineering, a degree in electrical engineering can open up the door to a career in almost any industry. Since technology is always changing and expanding, the need for electrical engineers is always growing. Through an understanding of the ways electricity is generated and controlled electrical engineers specifically design, develop, and test electrical equipment. Like any other kind of scientist, they must also know how to communicate their ideas to others in their field. A successful electrical engineer possesses not only an understanding of his or her area of concentration, but also a broad grasp of engineering in general. This is why most degree programs offering electrical engineering begin with the fundamentals of engineering itself. Once the student has mastered these fundamentals, they can start to focus on a specialty.

Electrical engineering students learn through a combination of design and lab work. This mix of theoretical and practical application allows students to think things through and then apply their ideas in a variety of real-life situations. Students also learn to diagnose problems and develop a variety of solutions for specific engineering problems.

**ENTRY REQUIREMENT**

- STPM or its equivalent with minimum CGPA of 2.50 and a grade of B- in Mathematics and Physical Sciences subjects.
- Matriculation/Foundation in Science and Technology Programme/Foundation in Science programme or equivalent, with a minimum CGPA of 2.50 and a grade of B- in Mathematics and Physical Sciences subjects.
- International Baccalaureate (IB) with a minimum of 24 point and attained a minimum score of 4 in Mathematics and Physical Sciences subjects.
- A-Level with a minimum grade of C in Mathematics and Physical Sciences subjects.
- Diploma in related Engineering/Engineering Technology field from higher education provider recognized by Government of Malaysia with CGPA of 2.50.
- Diploma in related Engineering/Engineering Technology field from higher education provider recognized by Government of Malaysia with CGPA of 2.00 AND at least 2 years working experiences in the related Engineering/Engineering Technology field.

Other Requirements

- A pass in SPM with credit in Mathematics and no health issues to impede learning.

**PROGRAMME STRUCTURE**

**SEMESTER 1**
- Fundamental English
- Professional English
- Mathematics for Engineers 1
- Basic Electrical Lab
- Taman Islam & Taman Asia (TITAS) (Local Students)
- Pengajian Malaysia 3 (International Students)

**SEMESTER 2**
- Circuit Theory 1
- Electronic Devices
- Computer Programming for Engineers
- Mathematics for Engineers 2

**SEMESTER 3**
- Engineering Mechanics
- Circuit Theory 2
- Digital Electronic Fundamentals
- Engineering Practice and Professionalism

**SEMESTER 4**
- Mathematics for Engineers 3
- Mandarin 1
- Measurement and Instrumentation
- Engineering Drawing & CAD Electronics Lab

**SEMESTER 5**
- Electronic Circuits
- Electrical Machines & Drives
- Microcontroller & Interfacing
- Professional English 2
- Mandarin 2

**SEMESTER 6**
- Statistics for Engineers
- Power Systems
- Communication System
- Power Electronics

**SEMESTER 7**
- Electrical Power Lab
- MPU U4: Co-Curriculum
- Control System Analysis
- Electromagnetic Theory
- Industrial Safety & Health

**SEMESTER 8**
- Power System Analysis
- Electrical Engineering Design
- MPU U2: Entrepreneurship
- MPU U1.1: Hubungan Etnik/Pengajian Malaysia 3
- Bahasa Melayu Komunikasi 2 (for International Students)

**SEMESTER 9**
- High Voltage Engineering
- Elective 1
- Elective 2
- Engineers in Society

**INTRA INTER SEMESTER 9 & 10**
- Industrial Training

**SEMESTER 10**
- Power System Control
- Engineering Final Year Project 1
- Isu-isu Kontemporari Muslim di Malaysia (for Local Muslim Students)
- Culture and Lifestyle in Malaysia (Non-muslim/International Students)

**SEMESTER 11**
- Engineering Final Year Project 2
- Innovation Management
- Elective 3

*credit transfer or exemption based on prior learning