UNDERGRADUATE PROGRAMME

ELECTRICAL AND ELECTRONICS ENGINEERING

JPT/BPP(R2/523/6/0198)11/26

UNIVERSITI TEKNOLOGI PETRONAS

What is Electrical and Electronics Engineering?

Electrical and electronics engineering is a wide-ranging field that starts from the generation and distribution of electrical power to utilising electronic systems for communication and control. Part of it deals with various techniques in designing effective and efficient electrical systems, complemented with the design of intelligent electronic systems that measure and control data from electrical systems.

This engineering field deals with large electrical facility such as an electrical power station down to small microelectronic devices such as microcontrollers, wireless communication modules and sensors. Electrical and electronic enginnering is crucial in almost every industry, including government, manufacturing, transportation, information technology and communication.

What does an Electrical and Electronics Engineer do?

Electrical and electronics engineers design, develop, test and supervise the manufacturing of electrical equipment, such as electric motors, radar and navigation systems, communications systems and power generation equipment.

They also design and develop electronic equipment, such as broadcast, and communications systems such as portable music players, to global positioning systems (GPS).

A peek into an Electrical and Electronics Engineer's day

Why study Electrical and Electronics Engineering at UTP?

1. Comprehensively designed programme with strong inputs from industry experts
2. Students can choose specialisations that are in demand by the industry during their final year of study
3. World-class teaching and learning, research capabilities as well as state-of-the-art labs and facilities
4. Strong partnership with multinational oil and gas companies such as PETRONAS, Schlumberger, Baker Hughes, Shell and ExxonMobil
5. UTP graduates are highly sought after by oil and gas industry, with 90% being employed within 6 months after graduation
6. More than 70% of UTP alumni are currently working in oil and gas industry
7. The academic staff are highly qualified and experienced, and a high percentage of them are chartered and professional engineers. Thus, undergraduate students can benefit greatly from their knowledge and expertise
8. The programme is accredited by the Engineering Accreditation Council (EAC) which is recognised by all countries under the Washington Accord signatories
9. Top 250 QS World University Rankings by Subject in 2019

TOP 250 2022
Engineering Electrical Electronic
QS WORLD UNIVERSITY RANKINGS
BY SUBJECT

What am I going to learn?

National / University

- Management, Social Sciences and Humanities
- Introduction to Oil and Gas
- Scientific Inquiry
- Co-Curriculum

Common Engineering

- Engineering Mathematics
- Engineering Economics
- Health, Safety and Environment
- Data Analytics
- Engineers in Society

Core Discipline by Programme

- Data and Computer Networking
- Instrument and Measurement
- Control System
- Communication Systems
- Power System
- Microelectronics
- Power Electronics
- Electrical Machines
- Microprocessor and Computer Architecture

Specialisation

- Computer and Communication
- Instrumentation and Control
- Power Systems Engineering
- Electronics and Devices

Project Based

- Engineering Team Project
- 7 months Structured Industrial Internship Programme
- Community Engagement Project
- Final Year Research Project
- Integrated Systems Design Project

Minor (Optional)

- Entrepreneurship
- International Relations
- Project Management
- Big Data Analytics

How much does it cost?

Category	Malaysian	International
Duration	4 years	
Registration (new students only)	RM1,300	RM11,000
Estimated Tuition Fees	RM84,000	RM101,000
Accommodation	RM8,200	RM8,200
Total	**RM93,500**	**RM120,200**

Contact

Assoc. Prof. Dr. Mohamad Naufal bin Mohamad Saad
Chair, Electrical & Electronics Engineering Department

Email naufal_saad@utp.edu.my

For further details, visit www.utp.edu.my and click ASK UTP for enquiries.

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