

Master of **ELECTRICAL ENGINEERING**

Structure B

Course Overview

Master of Electrical Engineering is designed to provide advanced knowledge and expertise in the field of electrical engineering through a combination of coursework and research. This degree is typically pursued by individuals who wish to deepen their understanding of electrical systems, technology, and applications. You will develop strong problem-solving skills and obtain the capacity to design and analyse complex electrical systems. Graduates of this programme are well-prepared for a wide range of career opportunities.

Duration

- **1 – 3 Years** (Full time)
- **2 – 4 Years** (Part time)

Fees

- **RM 28,100.00** (Malaysian)
- **RM 31,100.00** (International)

Entry Requirements

- A bachelor's degree in the field or related fields with a minimum CGPA of 2.75 or equivalent, as accepted by the HEP Senate; or
- A bachelor's degree in the field or related fields or equivalent with a minimum CGPA of 2.50 and not meeting CGPA of 2.75, can be accepted subject to rigorous internal assessment; or
- A bachelor's degree in the field or related fields or equivalent with minimum CGPA of 2.00 and not meeting CGPA of 2.50, can be accepted subject to a minimum of 5 years working experience in the relevant field and rigorous internal assessment.
- Candidates without a qualification in the related fields or relevant working experience must undergo appropriate prerequisite courses determined by the HEP and meet the minimum CGPA based on (i) to (iii).
- For international students: Test of English as a Foreign Language (TOEFL) score of 500 or International English Language Testing System (IELTS) score of 5.0 or its equivalent.

Key Research Areas

- Automation and Embedded Computing System
- Communication Systems and Networks
- Micro and Nano Engineering
- Photonics Technologies
- Radio Frequency and Microwave Engineering
- Signal Processing and Control Systems
- System and Machine Intelligence
- Distributed Generation
- High Voltage Systems
- Power Quality
- Power System Analysis
- Renewable Energy and Energy Efficiency
- Smart Grid

Core Courses

(9+20 Credit Hours)

- Advanced Engineering Mathematics
- Engineering Diagnostic Tools
- Research Methodology
- Research Project – Dissertation (20 Credit hours)

Elective Courses

(12 Credit Hours - Any 4 Subjects)

- Introduction to Advanced Communication System
- Advanced Applied Telecommunication System
- Local Area Network Design and Analysis
- Cellular and PCS Radio System
- Advanced Digital Signal Processing
- Optical Fiber Communication
- Laser Technology and Applications
- Digital Communications Systems
- Antennas Technology for Wireless Communications
- Power System Dynamics
- High Voltage Direct Current Transmission System (HVDC)
- Power System Operation and Planning
- High Voltage Engineering
- Power System Protection
- Power System Steady State Analysis
- Alternative Energy Sources for Electricity Generation
- Computer Controlled Systems



CONTACT US

CoGSHelpdesk@uniten.edu.my