## UniKL AWARD & RECOGNITION







# FLEXILEARN

**EVENING CLASSES** 

EARN HIGHER QUALIFICATION WITHOUT QUITTING YOUR JOB NOW!



# FINANCIAL **ASSISTANCE**



**MARA** Loan



**HRDF** Claimable



**EPF** Withdrawal



**PTPTN** 

\* Subject to Terms & Conditions

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JPT/BPP (R/522/6/0021) 07/22, MQA/FA1624

**BACHELOR OF** 

**ENGINEERING WITH HONOURS** 

### **OVERVIEW**

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.

## **FLEXIBLE LEARNING**

Offering flexibility to cater to your schedule, so that you can pursue additional knowledge without interfering with your work schedule.

UniKL offers the flexibility to cater to your work schedule and provide you with the opportunity to enhance your skills whilst not compromising your work time. This workaround learning schedule is the main reason many professionals choose to enter UniKL's FlexiLearn programmes. Selected Professional Certificates can be embedded into the programmes as well. Furthermore, prior academic qualifications and working experience may be taken into consideration for syllabus exemptions.

## APEL

Accreditation of Prior Experiential Learning

APEL (Accreditation of Prior Experiential Learning) is a systematic process which involves the IDENTIFICATION, DOCUMENTATION, and ASSESSMENT of prior experience related to a study programme.

APEL is a systematic process that involves the identification, documentation and assessment of prior experiential learning, i.e. knowledge, skills and attitudes, to determine the extent to which an individual has achieved the desired learning outcomes, for access to a programme of study and/or award of credits.

# PROFESSIONAL CERTIFICATES

• GREEN Card CIDB

# ENTRY REQUIREMENT

- Passed in STPM or its equivalent with a minimum CGPA of 2.00 and a grade of C in Mathematics and one (1) of the Physical Science subjects (i.e Chemistry, Physics and etc).
- Pass A-Level with minimum Grade D in Mathematics and ONE (1) of the Physical Science subjects (Chemistry or Physics).
- Pass Matriculation or its equivalent, with a minimum CGPA of 2.00 and a grade of C in Mathematics and one (1) of the Physical Science subjects (i.e Chemistry, Physics and etc).
   OR
- Passed in International Baccalaureate Diploma (IBD) with minimum of 24 points and attained a minimum score of 4 in Mathematics and one (1) of the Physical Science subjects (i.e Chemistry, Physics and etc).
   OR
- STAM with minimum Jayyid and pass SPM or equivalent with minimum CGPA 2.00 with minimum Grade C (CGPA 2.0) in Mathematics and ONE (1) relevant physical sciences subject (i.e Chemistry, Physics and etc).
- Passed in Diploma (Level 4, KKM) related to Engineering / Engineering Technology field from higher education provider recognized by Government of Malaysia with a minimum CGPA of 2.00.
- Pass Higher National Diploma (HND) UK (MQF Level 4) in related area and recognized by government of Malaysia and according to approval by UniKL Senate.
- Passed in other equivalent qualification recognized by Government of Malaysia.



# PROGRAMME STRUCTURE

#### **SEMESTER 1**

- Mathematics for Engineers 1
- Fundamental English
- Professional English 1
- Tamadun Islam & Tamadun Asia (TITAS)
   / Bahasa Melayu Komunikasi 2
- Internet of Things Engineering

#### **SEMESTER 2**

- Circuit Theory 1
- Electronic Devices
- Engineering Mechanics
- Computer Programming for Engineers
- Mathematics for Engineers 2
- Engineering Practice and Professionalism
- Foreign Language 1

#### SEMESTER 3

- Circuit Theory 2
- · Digital Electronic Fundamentals
- Statistics for Engineers
- Engineering Drawing and CAD
- Basic Electrical Lab
- Mathematics for Engineers 3
- Foreign Language 2

#### SEMESTER 4

- Electronic Circuits
- Electrical Machines and Drives
- Microcontroller and Interfacing Systems
- Electronics Lab
- Communication System
- Professional English 2
- Co-curriculum 2

#### **SEMESTER 5**

- Power Systems
- Electrical Power Lab
- Technopreneurship
- Power Electronics
- Integrated Design Project 1
  Isu-isu Kontemporari Muslim di Malaysia / Culture and Lifestyle in Malaysia 2
- "Hubungan Etnik /Pengajian Malaysia 3"

#### SEMESTER 6

- Electromagnetic Theory
- · Engineers in Society
- Integrated Design Project 2
- Control System Analysis
- Industrial Safety and Health

#### **INTER SEMESTER**

Industrial Training

#### SEMESTER 7

- High Voltage Engineering
- Elective 1
- Elective 2
- Power System Analysis
- Engineering Final Year Project 1
- Electrical Energy Utilisation

#### **SEMESTER 8**

- Power System Control
- Elective 3
- Innovation Management
- Engineering Final Year Project 2

\* the duration of the programme will be based in the actual credit transfer and number of courses taken by student on every semester.