Bachelor of Electrical Engineering Technology (Sustainable Energy) with Honours

Semester 1

- Fundamental English
- Professional English 1
- Engineering Mathematics 1
- Tamadun Islam & Tamadun Asia (TITAS)
- Bahasa Melayu Komunikasi 2
- Electrical and Electronics Workshop
- Engineering Mechanics

Semester 2

- Engineering Mathematics 2
- Introduction to Electronics
- Industrial Instrumentation
- Introduction to Electric Circuits
- Introduction to Digital Electronics
- Hubungan Etnik / Pengajian Malaysia 3

Semester 3

- Engineering Mathematics 3
- Computational Engineering for RE System
- Electrical Circuit Theorems
- Programming for Engineers
- Sustainable Energy
- Essential Management Principles
- Foreign Language 1

Semester 4

- Electromagnetic Waves
- Network Analysis
- Internet of Things and System Integration
- Power Electronics
- Energy Efficiency
- Industrial Safety and Health
- Foreign Language 2
- Professional English 2

Semester 5

- Power System

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- Isu-isu Kontemporari Muslim di Malaysia / Culture & Lifestyle in Malaysia

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Semester 6

- Final Year Project 1
- Power Quality
- Energy Management
- Programmable Logic Controller and Application
- Industrial Photovoltaic
- Electrical Machines and Drives
- Elective 1

Semester 7

- Final Year Project 2
- Innovation Management
- Co-Curriculum
- Elective 2
- Elective 3

Semester 8

- Power Quality
- Elective 3
- Innovation Management
- Engineering Final Year Project 2

Bachelor of Electrical Engineering Technology with Honours

Semester 1

- Fundamental English
- Professional English 1
- Engineering Mathematics 1
- Tamadun Islam & Tamadun Asia (TITAS)
- Bahasa Melayu Komunikasi 2
- Programming for Engineers
- Electrical and Electronics Workshop

Semester 2

- Engineering Mechanics
- Introduction to Electric Circuit
- Introduction to Electronics
- Engineering Mathematics 2
- Hubungan Etnik
- Pengajian Malaysia 3
- Introduction to Digital Electronics

Semester 3

- Engineering Mathematics 3
- Digital Electronics
- Electronics Devices and Circuits
- Electrical Circuit Theorem
- Essential Management Principles
- Mandarin 1

Semester 4

- Network Analysis
- Electronics Amplifier Circuits
- Introduction to Microprocessor
- FPGA Principles and Applications
- Engineering Mathematics 4
- Mandarin 2

Semester 5

- Professional English 2
- Semiconductor Technology
- Control System
- Microcontroller & Interfacing
- Isu-isu Kotemporari Muslim di Malaysia
- Culture & Lifestyle in Malaysia
- Printed Circuit Design and Engineering Drawing

Semester 6

- Final Year Project 1
- Signals and Systems
- Industrial Safety and Health
- Communication Systems
- Introduction to Measurement and Instrumentation
- Elective subject 1

Semester 7

- Final Year Project 2
- System Engineering
- Innovation Management
- Elective subject 2
- Co-Curriculum 2

Semester 8

- Industrial Training

Electives

- Robotic and Intelligent System
- Measurement and Instrumentation Systems
- Image Processing
- Satellite Communications
- Artificial Intelligence
- Optoelectronic Devices
- VLSI Design and Testing

- ARM Cortex-M Microcontroller

Bachelor of Electrical Engineering with Honours

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

Bachelor of Electronic Engineering Technology (Medical Electronics) with Honours

Semester 1

- Fundamental English
- Professional English 1
- Engineering Mathematics 1
- Tamadun Islam & Tamadun Asia (TITAS)
- Bahasa Melayu Komunikasi 2
- Electrical and Electronics Workshop
- Introduction to Electric Circuits
- Engineering Mechanics

Semester 2

- Engineering Mathematics 2
- Introduction to Electronics
- Introduction to Digital Electronics
- Electrical Circuit Theorems
- Programming For Engineers
- Hubungan Etnik
- Pengajian Malaysia 3
- Professional English 2

Semester 3

- Engineering Mathematics 3
- Digital Electronics
- Introduction to Medical Device & Systems
- Human Anatomy & Physiology
- Electronic Devices and Circuits
- Essential Management Principles
- Foreign Language

Semester 4

- Signals and Systems
- Communication Systems
- Microprocessor and Embedded System
- Physiological Measurement
- Medical Physics
- Industrial Safety and Health
- Foreign Language 2

Semester 5

- Machine Learning in Medical System
- Internet of Things (IoT) Technology
- Biomedical Imaging Systems
- Medical Instrumentation
- Technopreneurship
- Isu-isu Kotemporari Muslim di Malaysia
- Culture & Lifestyle in Malaysia

Semester 6

- Final Year Project 1
- Engineering Ethics and Professionalism in Society
- Biomedical Optics and Photonics
- Medical Devices Technology
- Innovation Management
- Elective*

Semester 7

- Final Year Project 2
- Hospital Management and Regulatory Safety Practice
- Elective*
- Elective*
- Co-Curriculum 2

Semester 8

- Industrial Training

***Elective Subject**

- Rehabilitation Engineering
- Telemedicine Technology
- Electromechanical Medical Devices
- Introduction to Bio-nanotechnology
- Biomedical Laser Technology
- Biomedical Management & Planning
- Physics of Diagnostic Radiology
- Digital Communication System
- Multimedia over Data Networks
- Optoelectronics and Optical Fibre
- Digital Signal Processing

- Satellite Communication
- Network Security Operation
- Probability and Stochastic Processes
- Electronic Ticketing Systems
- Semiconductor Materials and Devices
- Analog and Digital IC Design
- Applied Python Programming
- Mobile System Development
- Industrial IoT
- IC Faults and Tests
- Electronic Power Systems
- Certification, Standards, and Regulations in Electronic Assemblies
- Green Building
- Smart Grid and SE System
- Robotics and Intelligent Systems

Bachelor of Electronic Engineering Technology with Honours

Semester 1

- Fundamental English
- Professional English 1
- Engineering Mathematics 1
- Tamadun Islam & Tamadun Asia (TITAS)
- Bahasa Melayu Komunikasi 2
- Technopreneurship

Semester 2

- Engineering Mathematics 2
- Introduction to Electronics
- Electrical and Electronics Workshop
- Introduction to Electric Circuits
- Introduction to Measurement and Instrumentation
- Introduction to Digital Electronics
- Hubungan Etnik / Pengajian Malaysia 3

Semester 3

- Engineering Mathematics 3
- Electronics Devices and Circuits
- Electrical Circuit Theorems
- Engineering Mechanics
- Essential Management Principles
- Programming for Engineers
- Mandarin 1

Semester 4

- Engineering Mathematics 4
- Network Analysis
- Electronics Amplifier Circuits
- Power Electronics
- Printed Circuit Design and Engineering Drawing
- Mandarin 2

Semester 5

- Power System
- Control System
- Professional English 2
- Introduction to Microprocessor
- Electrical Machines and Drives
- Isu-isu Kontemporari Muslim di Malaysia / Culture & Lifestyle in Malaysia

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Semester 6

- Final Year Project 1
- Power Quality
- Programmable Logic Controller and Application
- Communication Systems
- Industrial Safety and Health
- Elective 1

Semester 7

- Final Year Project 2
- Innovation Management
- Electrical Systems in Building
- Siswa-siswi Pertahanan Awam 2
- Elective 2

Semester 8

- Industrial Training

***Elective 1**

- Measurement and Instrumentation System
- Industrial Control
- Power Protection System
- Artificial Intelligence

***Elective 2**

- Robotics and Intelligent Systems
- Intoduction to Renewable Energy
- High Voltage Technology
- Optoelectronic Devices

Bachelor of Telecommunication Engineering Technology with Honours

Semester 1

- Fundamental English
-
- Professional English 1
-
- Engineering Mathematics 1
-
- Tamadun Islam & Tamadun Asia (TITAS) or Bahasa Melayu Komunikasi 2
-
- Electrical and Electronics Workshop
-
- Engineering Mechanics

Semester 2

- Engineering Mathematics 2
- Professional English 2
- Isu-isu Kontemporari Muslim di Malaysia (LM) or Culture and Lifestyle in Malaysia 2
- Introduction to Electronics
- Introduction to Electric Circuits
- Programming for Engineers
- Hubungan Etnik or Pengajian Malaysia 3

Semester 3

- Engineering Mathematics 3
- Introduction to Digital Electronics
- Electronic Devices and Circuits
- Electrical Circuit Theorems
- Foreign Language 1
- Network Fundamental
- Transmission Systems

Semester 4

- Communication Technology Principles
- Optical Fibre Technology
- Electromagnetic Waves
- Network Technology
- Internet of Things (IoT) Technology
- Foreign Language 2

- Essential Management Principles

Semester 5

- Technopreneurship
- Industrial Safety and Health
- Signals and Systems
- Engineering Ethics and Professionalism in Society
- Wireless Network Architecture
- Data Communications

Semester 6

- Final Year Project 1
- Application Interface Controller
- Advanced Data Communications
- Innovation Management
- RF, Microwave and Antenna
- Elective
- Co-Curriculum 2

Semester 7

- Final Year Project 2
- Network Security
- Mobile Communications
- Elective
- Elective

Semester 8

- Industrial Training

Diploma of Engineering Technology in Electrical and Electronics

Semester 1

- Technical Mathematics 1
- Engineering Physics
- Fundamentals of Electrical and Electronics Workshop
- Introduction to Entrepreneurship
- Competency English
- Pengajian Malaysia 2
- Bahasa Melayu Komunikasi 1
- Co-Curriculum 1

Semester 2

- Technical Mathematics 2
- Fundamentals of Electronics
- Fundamentals of Electrical Circuits
- Fundamentals of Digital Electronics
- Fundamentals of Programming
- Communication English 1

Semester 3

- Technical Mathematics 3
- Fundamentals of Microprocessor and Embedded Systems
- Fundamentals of Electrical Circuit Theorems
- Fundamentals of Electronic Devices and Circuits
- Fundamentals of Measurement and Instrumentations
- Communication English 2

Semester 4

- Engineering Project Design
- Fundamentals of Control Systems
- Foreign Language 1
- Interpersonal skills
- Amalan Islam di Malaysia
- Religious Practices in Malaysia
- Elective

Semester 5

- Final Year Project
- Internet of Things
- Foreign Language 2

- Elective

Semester 6

- Industrial Training

Electives

- Power Electronics Principles and Devices
- Electrical Power
- Fundamental Electronic Design Automation
- Application of Electrical Systems in Building
- Programmable Logic Controller
- Digital IC Design
- Advance Digital Electronics
- Industrial Electronics

Diploma of Engineering Technology in Telecommunication

Semester 1

- Technical Mathematics 1
- Engineering Physics
- Fundamentals of Electrical and Electronics Workshop
- Introduction to Entrepreneurship
- Competency English
- Pengajian Malaysia 2 / Bahasa Melayu Komunikasi 1
- Co-Curriculum 1

Semester 2

- Technical Mathematics 2
- Fundamentals of Electronics
- Fundamentals of Electrical Circuits
- Fundamentals of Digital Electronics
- Fundamentals of Programming
- Communication English 1

Semester 3

- Technical Mathematics 3
- Introduction to Telecommunication
- Fundamentals of Electrical Circuit Theorems
- Transmission Lines
- Amalan Islam di Malaysia/ Religious Practices in Malaysia
- Communication English 2

Semester 4

- Engineering Project Design
- Data Communications and Networks 1
- Foreign Language 1
- Interpersonal skills
- Optical Fibre Communication Systems
- Introduction to Entrepreneurship

Semester 5

- Final Year Project
- Introduction to Internet of Things
- Foreign Language 2
- Data Communication and Networks 2
- Elective

Semester 6

- Industrial Training

Doctor of Philosophy (Electrical and Electronic Engineering)

Areas of Research

- Microelectronic
- Telecommunication
- Electrical Power
- Control and Robotic
- Measurement and Instrumentation
- Power Electronics Drive
- Intelligent Systems (Image Signal Processing)

Compulsory Module

- Research Methodology
- Innovation Technology and Entrepreneurship

Full-time (6 Semesters)

Semester 1 – 6

- Thesis

* *Thesis preparation needs minimum 6 months to graduate*

Part-time (8 Semesters)

Semester 1 – 8

- Thesis

* *Thesis preparation needs minimum 8 months to graduate*

Master of Engineering Technology (Electrical and Electronics)

Areas of Research

- Microelectronic
- Telecommunication
- Electrical Power
- Control and Robotic
- Measurement and Instrumentation
- Power Electronics Drive
- Intelligent Systems (Image Signal Processing)

Compulsory Module

- Research Methodology
- Innovation Technology and Entrepreneurship

Full-time (6 Semesters)

Semester 1

- Research Methodology

Semester 2

- Innovation Technology and Entrepreneurship

Semester 3 – 6

- Thesis

** Thesis preparation needs minimum 6 months to graduate*

Part-time (8 Semesters)

Semester 1 – 8

- Thesis

** Thesis preparation needs minimum 8 months to graduate*