

# COURSE PLANNER



## Bachelor of Engineering (Honours) (Electrical and Electronic)

BH-EEE

Intake: Aug/Sept 2023

### Recommended Sequence

Units are listed on your Course Planner in a recommended sequence. However, this can be amended depending on unit availability, unit progression, timetabling and the semester in which you commenced your course.

### Year One

Semester 1   Aug/Sept 2023		
Unit Code	Unit Name	Pre-requisites
ENG10001	Humanitarian Engineering Design Project	Nil
COS10009	Introduction to Programming	Nil
MTH10012	Calculus and Applications	Nil
PHY10001	Energy and Motion	Nil
MPU3193	Philosophy and Current Issues ( <i>Malaysian and International Students</i> )	Nil
Semester 2   Feb/Mar 2024		
COS10025	Technology in an Indigenous Context Project	Nil
MTH10013	Linear Algebra and Applications	Nil
ENG10002	Engineering Materials	Nil
ENG10003	Engineering Mechanics	Nil
MPU3183	Penghayatan Etika dan Peradaban ( <i>Malaysian Students Only</i> )	Nil
MPU3143	Malay Language Communication 2 ( <i>International Students Only</i> )	Nil
Winter Term   June/July 2024		
MPU3212	Bahasa Kebangsaan A ( <i>Malaysian students who do not have SPM Bahasa Melayu credit</i> )	Nil

### Year Two

Semester 3   Aug/Sept 2024		
Unit Code	Unit Name	Pre-requisites
ENG20010	Engineering Technology Design Project	Nil
MTH20017	Mathematical Methods and Statistics for Engineering	MTH10012 & MTH10013
Elective 1	Elective 1	
Elective 2	Elective 2	
Semester 4   Feb/Mar 2025		
ENG20009	Engineering Technology Inquiry Project	Nil
EEE20006	Circuits & Electronics 1	MTH10013 & COS10025
TNE20003	Internet and Cybersecurity for Engineering Applications	COS10009
COS40007	Artificial Intelligence for Engineering	100 CPs & COS10009

### Year Three

Semester 5   Aug/Sept 2025		
Unit Code	Unit Name	Pre-requisites
ENG40011	Engineering Technology Innovation Project®	Nil
EEE20005	Electrical Machines	MTH10012 & EEE20006
EEE20013	Power Protection®	EEE20006
EEE40016	Design of Smart Power Grids®	200 CPs
EAT20008	Professional Experience in Engineering#	Introductory Seminar
Semester 6   Feb/Mar 2026		
ENG30002	Engineering Technology Sustainability Project®	Nil
EEE30002	Electrical Power Systems®	EEE20005
RME30002	Control and Automation®	PHY10004/EEE20006 & MTH20014/MTH20017
Choose 1:	Choose 1:	
EEE30001	Analogue Electronics 2	EEE20006
OR	OR	
EEE40002	Integrated Circuit Design	ENG20009

### Year Four

Semester 7   Aug/Sept 2026		
Unit Code	Unit Name	Pre-requisites
ENG40007	Engineering Technology Project A®	250 CPs
EEE40005	Power Electronics®	EEE20005
EEE40007	Power System Operation and Control®	EEE30002
TNE30024	Deploying Secure Engineering Applications Online	TNE20003
Semester 8   Feb/Mar 2027		
ENG40008	Engineering Technology Project B®	ENG40007
EEE40015	Renewable Energy®	EEE30002
EEE30006	Hydrogen and Energy Storage®	EEE30002 & EEE20013/EEE20004
PHY40001^	Electromagnetic Waves	MTH20017

#### Notes

- # EAT20008 Professional Experience in Engineering is compulsory for all engineering students and must be taken before the last semester of study as part of EAC's requirement. Introductory Seminar will be conducted in week 4 of normal semester.
- @ Honours merit units
- ^ You must take this unit to fulfill EAC's requirements

Any students who wish to change their elective units must obtain approval from the Head of Department.

#### How to use your Course Planner

Refer to the below table to help explain what units are required each semester throughout your course. The units in your planner are colour coded to assist you with mapping out your studies.

#### Course Information

To qualify for the award of this course, students must complete 33 units (400 credit points) comprising of:

**10 Core Units**  
125 credit points

A set of compulsory units you MUST complete as part of your Course.

**18 Electrical and Electronic Major Units**  
225 credit points

A set of compulsory units you MUST complete as part of your Course.

**4 Elective Units**  
50 credit points

A combination of elective units

**1 Industry Placement Unit**  
0 credit point

A compulsory, not-for-credit unit

**General Studies/Mata Pelajaran Umum**  
0 credit points

- \* Compulsory units to complete as a pre-requisite to graduate (see statement below)
- \* Advisable to enrol in Year One
- \* Email [tu@swinburne.edu.my](mailto:tu@swinburne.edu.my) for queries

All commencing students of Master, Degree, Diploma and Foundation programs will be automatically registered for the **Academic Integrity Training Module** in the first semester (Note: Students articulating from Foundation Studies are expected to undertake this unit as a refresher). There are 4 topics in this online module that are recommended for completion during Week 1-4 of your commencing study period. At the end of this module, students are required to complete a quiz comprised of 10 questions and achieve a score of at least 90%.

Ministry of Education requires that all NEW Cohorts pursuing Degree program (International and Malaysian) students must take the MPU units as a prerequisite for the award of their degree.

- Malaysian students: Must take and pass the units as a prerequisite for the award of their degree.
- International students: Must take and pass the units as a prerequisite for the award of their degree