## **COURSE PLANNER**



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

## **BH-EEE**

Intake: Feb/Mar 2024

#### **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   Feb/Mar 2024						
	Unit Code	Unit Name	Pre-requisites				
	ENG10001 Humanitarian Engineering Design Project		Nil				
		Introduction to Programming	Nil				
		Calculus and Applications	Nil				
Р	PHY10001	Energy and Motion	Nil				
	MPU3273	Integrity and Anti-Corruption (Malaysian and International Students)	Nil				
	Winter Term   June 2024						
	MPU3212	Bahasa Kebangsaan A (Malaysian students who do not have SPM Bahasa Melayu credit)	Nil				
	Semester 2	2   Aug/Sep 2024					
	COS10025	Technology in an Indigenous Context Project	Nil				
3		Linear Algebra and Applications	Nil				
		Engineering Materials	Nil				
	ENG10003	Engineering Mechanics	Nil				
	MPU3193	Philosophy and Current Issues (Malaysian and International Students)	Nil				

#### **Year Two**

Semester 3   Feb/Mar 2025						
<b>Unit Code</b>	Unit Name	Pre-requisites				
EEE20006	Circuits & Electronics 1	MTH10013 & COS10025				
ENG20009	Engineering Technology Inquiry Project	Nil				
TNE20003	Internet and Cybersecurity for Engineering	Nil				
Applications						
Elective 1 Elective 1						
MPU3183	Penghayatan Etika dan Peradaban	Nil				
WIPU5165	(Malaysian Students Only)	INII				
MPU3143	Malay Language Communication 2	Nil				
	(International Students Only)	1411				
Semester 4	Aug/Sep 2025					
ENG20010	Engineering Technology Design Project	Nil				
EEE20005	Electrical Machines	MTH10012 & EEE20006				
EEE20013	Power Protection <sup>®</sup>	EEE20006				
MTH20017	Mathematical Methods and Statistics for Engineering	MTH10012 & MTH10013				

## **Year Three**

Semester 5   Feb/Mar 2026					
<b>Unit Code</b>	Unit Name	Pre-requisites			
ENG30002	Engineering Technology Sustainability Project®	Nil			
EEE30002	Electrical Power Systems <sup>®</sup>	EEE20005			
RME30002	Control and Automation <sup>®</sup>	PHY10004/EEE20006 &			
		MTH20014/MTH20017			
COS40007	Artificial Intelligence for Engineering	100CPs & COS10009			
EAT20008	Professional Experience in Engineering <sup>#</sup>	Introductory Seminar			
Semester 6	Semester 6   Aug/Sep 2026				
ENG40011	Engineering Technology Innovation Project®	Nil			
EEE40005	Power Electronics <sup>®</sup>	EEE20005			
EEE40007	Power System Operation and Control®	EEE30002			
TNE30024	<b>Deploying Secure Engineering Applications Online</b>	TNE20003			
Von Four					

## **Year Four**

Semester 7	Feb/Mar 2027	
<b>Unit Code</b>	Unit Name	Pre-requisites
ENG40007	Engineering Technology Project A <sup>®</sup>	250 CPs
EEE40015	Renewable Energy <sup>®</sup>	EEE30002
EEE30006	Hydrogen and Energy Storage <sup>®</sup>	EEE30002 &
		EEE20013/EEE20004
PHY40001^	Electromagnetic Waves	MTH20017
Semester 8	Aug/Sep 2027	
ENG40008	Engineering Technology Project B <sup>®</sup>	ENG40007
EEE40016	Design of Smart Power Grids <sup>®</sup>	200 CPs
Elective 2	Elective 2	
Elective 3	Elective 3	

## 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

#### **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 prerequisite to graduate (see statement below)
- \* Advisable to enrol in Year One
- \* Email  $\underline{\text{ltu@swinburne.edu.my}} \text{ for queries}$

All commencing students of Master, Degree, Diploma and Foundation courses 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 course (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

# **Note:** Semester 1 refers to Feb/Mar semester; Semester 2 refers to Aug/Sep semester

List of Recommended Electives for BH-EEE						
<b>Unit Code</b>	Unit Name	Pre-requisites	Offered in			
TNE10006	Networks and Switching	Nil	Semester 1 & 2			
COS10022	Data Science Principles	Nil	Semester 1 & 2			
TNE10005	Network Administration	Nil	Semester 1 only			
COS10005	Web Development	Nil	Semester 2 only			
RME40003	Robot Systems Design	250 CPs	Semester 1 only			
COS20007	Object Oriented Programming	COS10009/SWE20004	Semester 1 & 2			
EEE40017	Machine Vision	EEE20006 & MTH20017	Semester 2 only			
EEE40002	Integrated Circuit Design	EEE20001 or ENG20009	Semester 1 only			
RME30003	Robotic Control	RME30002	Semester 2 only			