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

Unit Code Unit Name Pre-requisites ENG10001 Humanitarian Engineering Design Project Nil COS10009 Introduction to Programming Nil MTH10012 Calculus and Applications Phy10001 Energy and Motion Nil MPU3193 Philosophy and Current Issues (Malaysian and International Students) Semester 2 Feb/Mar 2024 COS10025 Technology in an Indigenous Context Project MTH10013 Linear Algebra and Applications ENG10003 Engineering Mechanics Nil EEE20006 Circuits & Electronics 1 MPU3183 MPU3183 MPU3183 MPU3183 MPU3184 MPU3212 Bahasa Kebangsaan A (Malaysian students who do not have SPM Bahasa Melayu credit) Nil MPU3212 Bahasa Kebangsaan A (Malaysian students who do not have SPM Bahasa Melayu credit)					
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 (Malaysian and International Students) Semester 2 Feb/Mar 2024 COS10025 Technology in an Indigenous Context Project Nil MTH10013 Linear Algebra and Applications Nil ENG10003 Engineering Mechanics Nil EEE20006 Circuits & Electronics 1 MTH10013 & COS10025 MPU3183 Penghayatan Etika dan Peradaban (Malaysian Students Only) MAIay Language Communication 2 (International Students Only) Winter Term June 2024 MPU3212 Bahasa Kebangsaan A (Malaysian students who do not have SPM Bahasa Melayu	Semester 1	Aug/Sept 2023			
COS10009 Introduction to Programming Nil MTH10012 Calculus and Applications Nil PHY10001 Energy and Motion Nil MPU3193 Philosophy and Current Issues (Malaysian and International Students) Semester 2 Feb/Mar 2024 COS10025 Technology in an Indigenous Context Project Nil MTH10013 Linear Algebra and Applications Nil ENG10003 Engineering Mechanics Nil EEE20006 Circuits & Electronics 1 MTH10013 & COS10025 MPU3183 Penghayatan Etika dan Peradaban (Malaysian Students Only) MAIay Language Communication 2 (International Students Only) Winter Term June 2024 MPU3212 Bahasa Kebangsaan A (Malaysian students who do not have SPM Bahasa Melayu	Unit Code	Unit Name	Pre-requisites		
MTH10012 Calculus and Applications Nil PHY10001 Energy and Motion Nil MPU3193 Philosophy and Current Issues (Malaysian and International Students) Semester 2 Feb/Mar 2024 COS10025 Technology in an Indigenous Context Project Nil MTH10013 Linear Algebra and Applications Nil ENG10003 Engineering Mechanics Nil EEE20006 Circuits & Electronics 1 MTH10013 & COS10025 MPU3183 Penghayatan Etika dan Peradaban (Malaysian Students Only) MAIAY Language Communication 2 (International Students Only) Winter Term June 2024 MPU3212 Bahasa Kebangsaan A (Malaysian students who do not have SPM Bahasa Melayu	ENG10001	Humanitarian Engineering Design Project	Nil		
PHY10001 Energy and Motion Nil MPU3193 Philosophy and Current Issues (Malaysian and International Students) Semester 2 Feb/Mar 2024 COS10025 Technology in an Indigenous Context Project Nil MTH10013 Linear Algebra and Applications Nil ENG10003 Engineering Mechanics Nil EEE20006 Circuits & Electronics 1 MTH10013 & COS10025 MPU3183 Penghayatan Etika dan Peradaban (Malaysian Students Only) MPU3143 Malay Language Communication 2 (International Students Only) Winter Term June 2024 MPU3212 Bahasa Kebangsaan A (Malaysian students who do not have SPM Bahasa Melayu	COS10009	Introduction to Programming	Nil		
MPU3193 Philosophy and Current Issues (Malaysian and International Students) Semester 2 Feb/Mar 2024 COS10025 Technology in an Indigenous Context Project Nil MTH10013 Linear Algebra and Applications Nil ENG10003 Engineering Mechanics Nil EEE20006 Circuits & Electronics 1 MTH10013 & COS10025 MPU3183 Penghayatan Etika dan Peradaban (Malaysian Students Only) MPU3143 Malay Language Communication 2 (International Students Only) Winter Term June 2024 MPU3212 Bahasa Kebangsaan A (Malaysian students who do not have SPM Bahasa Melayu	MTH10012	Calculus and Applications	Nil		
Semester 2 Feb/Mar 2024 COS10025 Technology in an Indigenous Context Project Nil MTH10013 Linear Algebra and Applications Nil ENG10003 Engineering Mechanics Nil EEE20006 Circuits & Electronics 1 MTH10013 & COS10025 MPU3183 Penghayatan Etika dan Peradaban (Malaysian Students Only) MPU3143 Malay Language Communication 2 (International Students Only) Winter Term June 2024 MPU3212 Bahasa Kebangsaan A (Malaysian students who do not have SPM Bahasa Melayu	PHY10001	Energy and Motion	Nil		
COS10025 Technology in an Indigenous Context Project Nil MTH10013 Linear Algebra and Applications Nil ENG10003 Engineering Mechanics Nil EEE20006 Circuits & Electronics 1 MTH10013 & COS10025 MPU3183 Penghayatan Etika dan Peradaban (Malaysian Students Only) MPU3143 Malay Language Communication 2 (International Students Only) Winter Term June 2024 MPU3212 Bahasa Kebangsaan A (Malaysian students who do not have SPM Bahasa Melayu	MPU3193		Nil		
MTH10013 Linear Algebra and Applications ENG10003 Engineering Mechanics EEE20006 Circuits & Electronics 1 MTH10013 & COS10025 MPU3183 Penghayatan Etika dan Peradaban (Malaysian Students Only) MPU3143 Malay Language Communication 2 (International Students Only) Winter Term June 2024 MPU3212 Bahasa Kebangsaan A (Malaysian students who do not have SPM Bahasa Melayu	Semester 2	? Feb/Mar 2024			
ENG10003 Engineering Mechanics Nil EEE20006 Circuits & Electronics 1 MTH10013 & COS10025 MPU3183 Penghayatan Etika dan Peradaban (Malaysian Students Only) MPU3143 Malay Language Communication 2 (International Students Only) Winter Term June 2024 MPU3212 Bahasa Kebangsaan A (Malaysian students who do not have SPM Bahasa Melayu	COS10025	Technology in an Indigenous Context Project	Nil		
EEE20006 Circuits & Electronics 1 MTH10013 & COS10025 MPU3183 Penghayatan Etika dan Peradaban (Malaysian Students Only) MPU3143 Malay Language Communication 2 (International Students Only) Winter Term June 2024 MPU3212 Bahasa Kebangsaan A (Malaysian students who do not have SPM Bahasa Melayu	MTH10013	Linear Algebra and Applications	Nil		
MPU3183 Penghayatan Etika dan Peradaban (Malaysian Students Only) MPU3143 Malay Language Communication 2 (International Students Only) Winter Term June 2024 MPU3212 Bahasa Kebangsaan A (Malaysian students who do not have SPM Bahasa Melayu	ENG10003	Engineering Mechanics	Nil		
MPU3183 (Malaysian Students Only) Malay Language Communication 2 (International Students Only) Winter Term June 2024 MPU3212 Bahasa Kebangsaan A (Malaysian students who do not have SPM Bahasa Melayu	EEE20006	Circuits & Electronics 1	MTH10013 & COS10025		
Winter Term June 2024 MPU3212 Bahasa Kebangsaan A (Malaysian students who do not have SPM Bahasa Melayu	MPU3183		Nil		
MPU3212 Bahasa Kebangsaan A Nil (Malaysian students who do not have SPM Bahasa Melayu	MPU3143		Nil		
(Malaysian students who do not have SPM Bahasa Melayu	Winter Term June 2024				
	MPU3212	Bahasa Kebangsaan A	Nil		

Year Two

Semester 3	Aug/Sept 2024			
Unit Code	Unit Name	Pre-requisites		
ENG10002	Engineering Materials	Nil		
ENG20010	Engineering Technology Design Project	Nil		
EEE20005	Electrical Machines	MTH10012 & EEE20006		
EEE20013	Power Protection [®]	EEE20006		
Semester 4 Feb/Mar 2025				
ENG20009	Engineering Technology Inquiry Project	Nil		
TNE20003	Internet and Cybersecurity for Engineering	Nil		
	Applications			
EEE30002	Electrical Power Systems®	EEE20005		
EEE40002&	Integrated Circuit Design	ENG20009 (Co-Requisite)		

Year Three

Semester 5 Aug/Sept 2025				
Unit Code	Unit Name	Pre-requisites		
EEE40005	Power Electronics [®]	EEE20005		
ENG40011	Engineering Technology Innovation Project®	Nil		
EEE40007	Power System Operation and Control®	EEE30002		
MTH20017	Mathematical Methods and Statistics for Engineering	MTH10012 & MTH10013		
EAT20008	Professional Experience in Engineering#	Introductory Seminar		
Semester 6				
COS40007	Artificial Intelligence for Engineering	100CPs & COS10009		
ENG30002	Engineering Technology Sustainability Project®	Nil		
RME30002	Control and Automation®	PHY10004/EEE20006 &		
		MTH20014/MTH20017		
EEE30006	Hydrogen and Energy Storage [®]	EEE30002 &		
		EEE20013/EEE20004		

Year Four

Semester 7	Aug/Sept 2026	
Unit Code	Unit Name	Pre-requisites
ENG40007	Engineering Technology Project A [®]	250 CPs
EEE40016	Design of Smart Power Grids [®]	EEE30006
TNE30024	Deploying Secure Engineering Applications Online	TNE20003
EEE40017 ^{&}	Machine Vision	EEE20006 & MTH20017
Semester 8	Feb/Mar 2027	
ENG40008	Engineering Technology Project B [®]	ENG40007
EEE40015	Renewable Energy [®]	EEE30002
EEE30005 &	Electrical Integrated Design Project	EEE30002
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 (Tentative)
- & Recommended Elective units [Industry 4.0]. Please approach your Discipline Leader if you wish to take other elective unit

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

150 credit points

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

18 Electrical and Electronic Major Units

200 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 <u>ltu@swinburne.edu.my</u> 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 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