

Bachelor of Engineering (Honours) (Software)
BH-ESE1

Semester 2 | 2026

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 2026		
Unit Code	Unit Name	Pre-requisites
COS10009	Introduction to Programming	Nil
PHY10001	Energy and Motion	Nil
ENG10001	Humanitarian Engineering Design Project	Nil
MTH10012	Calculus and Applications	Nil
MPU3312	Academic Integrity and Professional Conduct <i>(Malaysian and International Students)</i>	Nil
Semester 2 Feb/Mar 2027		
ENG10006	Engineering Technology with Indigenous Context	Nil
ENG10002	Engineering Materials	Nil
ENG10003	Engineering Mechanics	Nil
MTH10013	Linear Algebra and Applications	Nil
MPU3172	Aspirasi Negara Bangsa – BM <i>(Malaysian Students Only)</i>	Nil
[OR]	[OR]	
MPU3142	Malay Language Communication 2 <i>(International Students Only)</i>	
Winter Term June 2027		
MPU3212	Bahasa Kebangsaan A <i>(Malaysian students who do not have SPM BM credit)</i>	Nil

Year Two

Semester 3 Aug/Sept 2027		
Unit Code	Unit Name	Pre-requisites
ENG20009	Engineering Technology Inquiry Project	Nil
COS20007	Object-Oriented Programming	COS10009/SWE20004
MTH20017	Mathematical Methods and Statistics for Engineering	MTH10012 & MTH10013
COS10026	Web Technology Project	Nil
MPU3222	Career Development <i>(Malaysian and International Students)</i>	Nil
Semester 4 Feb/Mar 2028		
COS20019	Cloud Computing Architecture	50 cp
ENG20010	Engineering Technology Design Project	Nil
TNE20003	Internet and Cybersecurity for Engineering Applications	Nil
COS30019	Introduction to Artificial Intelligence*	COS20007
MPU3112	Kursus Integriti dan Antirasuah (KIAR) – BM <i>(Malaysian Students Only)</i>	Nil
[OR] MPU3112	[OR] Kursus Integriti dan Antirasuah (KIAR) – ENG <i>(International Students Only)</i>	

Year Three

Semester 5 Aug/Sept 2028		
Unit Code	Unit Name	Pre-requisites
COS30008	Data Structures and Patterns*	COS20007
SWE30009	Software Testing and Reliability*	COS20007
COS30017	Software Development for Mobile Devices*	COS20007
ENG30002	Engineering Technology Sustainability Project*	Nil
MPU3122	Falsafah dan Cabaran Semasa - BM <i>(Malaysian Students Only)</i>	Nil
[OR] MPU3152	[OR] Citra Malaysia <i>(International Students Only)</i>	
EAT20008	Professional Experience in Engineering#	Introductory Seminar
Semester 6 Feb/Mar 2029		
COS30043	Interface Design and Development*	COS20007 & ENG20009
SWE40006	Software Deployment and Evolution*	COS20031 OR ENG20010
ENG40011	Engineering Technology Innovation Project*	Nil
SWE30003	Software Architecture and Design*	COS20007 & 150 cps
MPU3412	Service Learning	Nil

Year Four

Semester 7 Aug/Sept 2029		
Unit Code	Unit Name	Pre-requisites
EAT40005	Engineering Technology Project A*	250 cps
TNE30024	Deploying Secure Engineering Applications Online	TNE20003
COS40003	Concurrent Programming*	COS20007
COS30020	Advanced Web Development	COS10009 & COS10026
Semester 8 Feb/Mar 2030		
EAT40006	Engineering Technology Project B*	EAT40005
COS40007	Artificial Intelligence for Engineering	COS10009 & 100CP
COS10022	Data Science Principles	Nil
SWE30011	IoT Programming	COS10026

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 Software 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, or a Minor.

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 enroll in Year One Email ltu@swinburne.edu.my for queries

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 attempt all coursework and final exam as a prerequisite for the award of their degree

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

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

