

COURSE PLANNER

Bachelor of Engineering (Honours) (Mechanical) BH-EME

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

Year Two

Semester 3 Aug/Sept 2027		
Unit Code	Unit Name	Pre-requisites
MEE20003	Fluid Mechanics 1: Forces and Energy	MTH10013 & MTH10012
MEE20005	Materials Processing and Machining	ENG10002
MEE20006	Engineering Dynamics	MTH10013 & MTH10012 & PHY10001
PEH20004	Built and Sustainable Communities	Nil
MPU3222	Career Development <i>(Malaysian and International Students)</i>	Nil
Semester 4 Feb/Mar 2028		
MEE20001	Thermodynamics	PHY10001
MEE20004	Structural Mechanics	ENG10002/ENG10003
MEE20007	Design and Product Visualisation Project	ENG10001
MTH20010	Statistics and Computation for Engineering	MTH10013 & MTH10012
MPU3112	Kursus Integriti dan Antirasuah (KIAR) – BM <i>(Malaysian Students Only)</i>	Nil
MPU3112	[OR] Kursus Integriti dan Antirasuah (KIAR) – ENG <i>(International Students Only)</i>	Nil

Year Three

Semester 5 Aug/Sept 2028		
Unit Code	Unit Name	Pre-requisites
MEE30004 *	Solid Mechanics	MEE20004
MEE40001 *	Heat Transfer	MEE20001 OR MTH20010
MEE40051	Heating, Ventilation, and Air Conditioning	MEE20001 & MEE20003
MME30002 *	Engineering Management Project	100 credit points
MPU3122	Falsafah dan Cabaran Semasa – BM <i>(Malaysian Students Only)</i>	Nil
MPU3152	[OR] Citra Malaysia <i>(International Students Only)</i>	Nil
EAT20008 #	Professional Experience in Engineering	Introductory Seminar
Semester 6 Feb/Mar 2029		
MEE30007	Vibration, Data Analysis and Data Decomposition	MTH10012 & MTH10013
MEE30001 *	Manufacturing Engineering	MEE20005
MEE30002 *	Control Engineering	Co-requisite: MEE20008 Or Pre-requisites: MTH20011
MEE30005 *	Machine Design Project	MEE20004
MPU3412	Service Learning <i>(Malaysian and International Students)</i>	Nil



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

Each unit is equivalent to 12.5 credit points.
To qualify for the award of this course, students must complete 33 units (400 credit points) in addition of the General Studies/Mata Pelajaran Umum, comprising of:

10 Core Units
125 credit points
A set of compulsory units you MUST complete as part of your Course.

17 Mechanical Major Units
212.5 credit points
A set of compulsory units you MUST complete as part of your Course.

5 Elective Units
62.5 credit points
A combination of elective units or a Minor package.

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 mpu@swinburne.edu.my for queries

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

Year Four

Semester 7 Aug/Sept 2029		
Unit Code	Unit Name	Pre-requisites
ENG40005 *	Final Year Capstone Project 1	287.5 credit points
MEE40004 *	Fluid Mechanics 2: Machine, Supersonics and Modelling	MEE20003
MEE40010 *	Integrated Engineering Design Project	MEE30005
MEE40011 *	Renewable Energy and Hydrogen Technologies	Nil
Semester 8 Feb/Mar 2030		
ENG40006 *	Final Year Capstone Project 2	ENG40005
MEE40003 *	Machine Dynamics	MEE20006
RME40003	Robot System Design	250 credit points
MEE40050	Introduction to Building Services Engineering	200 credit points

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.