

# COURSE PLANNER



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

Semester 2 | 2022

### 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 2022		
Unit Code	Unit Name	Pre-requisites
ENG10003	Mechanics of Structures	Nil
ENG10004	Digital and Data Systems	Nil
MTH10013	Linear Algebra and Applications	Nil
PHY10004	Electronics and Electromagnetism	Nil
MPU3193	Philosophy and Current Issues <i>(Malaysian and International Students)</i>	Nil
Semester 2   Feb/Mar 2023		
ENG10001	Engineering, Design and Innovation	Nil
ENG10002	Engineering Materials	Nil
MT10012	Calculus and Applications	Nil
PHY10001	Energy and Motion	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   July 2023		
☐MPU3212	Bahasa Kebangsaan A <i>(Malaysian students who do not have SPM Bahasa Melayu credit)</i>	Nil

### Year Two

Semester 3   Aug/Sept 2023		
Unit Code	Unit Name	Pre-requisites
MTH20011	Mathematics 4A	MTH10013 & MTH10012
MEE20005	Materials & Manufacturing 1	ENG10002
MEE20003	Fluid Mechanics 1	MTH10013 & MTH10012
MEE20006	Machine Dynamics 1	MTH10013 & MTH10012 & PHY10001
Semester 4   Feb/Mar 2024		
MEE20002	Computer Aided Engineering Mechanical	ENG10001
MEE20004	Structural Mechanics	ENG10003
MEE20001	Thermodynamics	PHY10001
MTH20010	Mathematics 3A	MTH10013 & MTH10012

### Year Three

Semester 5 Aug/Sept 2024		
Unit Code	Unit Name	Pre-requisites
MEE40001 *	Heat Transfer	MTH20010
MEE30004 *	Solid Mechanics	MEE20004
SWE20004	Technical Software Development	ENG10004
MME30001 *	Engineering Management 1	100 credit points
EAT20008 #	Professional Experience in Engineering	Introductory Seminar
Semester 6   Feb/Mar 2025		
MEE30003 *	Machine Design	MEE20004
MEE30002 *	Control Engineering	MTH20011
MEE30001 *	Materials and Manufacturing 2	MEE20005
MME40001 *	Engineering Management 2	100 credit points

### Year Four

Semester 7   Aug/Sept 2025		
Unit Code	Unit Name	Pre-requisites
ENG40001 *	Final Year Research Project 1	287.5 credit points
MEE40004 *	Fluid Mechanics 2: Machine, Supersonics and Modelling	MEE20003
MEE40010 *	Integrated Engineering Design Project	MEE30003/MEE30005
MEE40051	Heating, Ventilation, and Air Conditioning	MEE20001 & MEE20003
Semester 8   Feb/Mar 2026		
ENG40002 *	Final Year Research Project 2	ENG40001
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.

### 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:

#### 12 Core Units 150 credit points

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

#### 16 Mechanical 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 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 [ltu@swinburne.edu.my](mailto:ltu@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

\* Honours merit units.