

COURSE PLANNER

Bachelor of Engineering (Honours) (Mechanical)

BH-EME

Semester 1 | 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 | Feb/Mar 2026

| Unit Code | Unit Name | Pre-requisites |
|-----------|---|----------------|
| ENG10001 | Humanitarian Engineering Design Project | Nil |
| COS10009 | Introduction to Programming | Nil |
| MTH10013 | Linear Algebra and Applications | Nil |
| PHY10001 | Energy and Motion | Nil |
| MPU3272 | Integrity and Anti-Corruption (Malaysian and International Students) | Nil |

Winter Term | June 2026

| | | |
|---------|---|-----|
| MPU3212 | Bahasa Kebangsaan A (Malaysian students who do not have SPM Bahasa Melayu credit) | Nil |
|---------|---|-----|

Semester 2 | Aug/Sept 2026

| | | |
|----------|--|-----|
| ENG10006 | Engineering Technology with Indigenous Context | Nil |
| ENG10002 | Engineering Materials | Nil |
| ENG10003 | Engineering Mechanics | Nil |
| MTH10012 | Calculus and Applications | Nil |

MPU3192 Philosophy and Current Issues
(Malaysian and International Students)

Year Two

Semester 3 | Feb/Mar 2027

| Unit Code | Unit Name | Pre-requisites |
|-----------|---|---------------------|
| MEE20001 | Thermodynamics | PHY10001 |
| MEE20004 | Structural Mechanics | ENG10002/ENG10003 |
| MEE20007 | Design and Product Visualisation Project | ENG10001 |
| MTH20010 | Statistics and Computation for Engineering | MTH10013 & MTH10012 |
| MPU3182 | Penghayatan Etika dan Peradaban (Malaysian Students Only) | Nil |
| [OR] | [OR] | |
| MPU3142 | Malay Language Communication 2 (International Students Only) | Nil |

Semester 4 | Aug/Sept 2027

| | | |
|------------|--|--------------------------------|
| MEE20003 | Fluid Mechanics 1: Forces and Energy | MTH10013 & MTH10012 |
| MEE20005 | Materials Processing and Machining | ENG10002 |
| MEE20006 | Engineering Dynamics | MTH10013 & MTH10012 & PHY10001 |
| MME30002 * | Engineering Management Project | 100 credit points |
| MPU3412 | Service Learning (Malaysian and International Students) | Nil |

Year Three

Semester 5 | Feb/Mar 2028

| Unit Code | Unit Name | Pre-requisites |
|------------|---|--|
| MEE30007 | Vibration, Data Analysis and Data Decomposition | MTH10012 & MTH10013 & 150 credit points |
| MEE30001 * | Manufacturing Engineering | MEE20005 |
| MEE30002 * | Control Engineering | Co-requisite: MEE20008/ MEE30007 Or Pre-requisites: MTH20011 |
| MEE30005 * | Machine Design Project | MEE20004 |
| EAT20008 # | Professional Experience in Engineering | Introductory Seminar |

Semester 6 | Aug/Sept 2028

| | | |
|------------|---------------------------------------|----------------------|
| MEE30004 * | Solid Mechanics | MEE20004 |
| MEE40001 * | Heat Transfer | MEE20001 OR MTH20010 |
| MEE40010 * | Integrated Engineering Design Project | MEE30005 |
| PEH20004 | Built and Sustainable Communities | 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 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

Year Four

| Semester 7 Feb/Mar 2029 | | |
|----------------------------------|---|-----------------------|
| Unit Code | Unit Name | Pre-requisites |
| ENG40005 * | Final Year Capstone Project 1 | 287.5 credit points |
| MEE40003 * | Machine Dynamics | MEE20006 |
| RME40003 | Robot System Design | 250 credit points |
| MEE40050 | Introduction to Building Services Engineering | 200 credit points |

| Semester 8 Aug/Sept 2029 | | |
|-----------------------------------|---|---------------------|
| ENG40006 * | Final Year Capstone Project 2 | ENG40005 |
| MEE40004 * | Fluid Mechanics 2: Machine, Supersonics and Modelling | MEE20003 |
| MEE40011 * | Renewable Energy and Hydrogen Technologies | Nil |
| MEE40051 | Heating, Ventilation, and Air Conditioning | MEE20001 & MEE20003 |

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.