

COURSE PLANNER

Bachelor of Engineering (Honours) (Mechanical) / Bachelor of Business (Management)

BB-EMEBUS3
Semester 1 | 2025

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 2025 | | |
|----------------------------|---|----------------|
| 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 |
| MPU3273 | Integrity and Anti-Corruption <i>(Malaysian and International Students)</i> | Nil |
| Winter Term July 2025 | | |
| MPU3212 | Bahasa Kebangsaan A <i>(Malaysian students who do not have SPM Bahasa Melayu credit)</i> | Nil |
| Semester 2 Aug/Sept 2025 | | |
| COS10025 | Technology in an indigenous Context Project | Nil |
| ENG10002 | Engineering Materials | Nil |
| ENG10003 | Engineering Mechanics | Nil |
| MTH10013 | Linear Algebra and Applications | Nil |
| MPU3193 | Philosophy and Current Issues <i>(Malaysian and International Students)</i> | Nil |

Year Two

| Semester 3 Feb/Mar 2026 | | |
|----------------------------|--|--------------------------------|
| Unit Code | Unit Name | Pre-requisites |
| MEE20001 | Thermodynamics | PHY10001 |
| MEE20004 | Structural Mechanics | ENG10003 |
| MTH20010 | Statistics and Computation for Engineering | MTH10013 & MTH10012 |
| ACC10007 | Financial Information for Decision Making | Nil |
| MPU3183 | Penghayatan Etika dan Peradaban <i>(Malaysian Students Only)</i> | Nil |
| MPU3143 | Malay Language Communication 2 <i>(International Students Only)</i> | Nil |
| Semester 4 Aug/Sept 2026 | | |
| MEE20003 | Fluid Mechanics 1: Forces and Energy | MTH10013 & MTH10012 |
| MEE20006 | Engineering Dynamics | MTH10013 & MTH10012 & PHY10001 |
| ECO10005 | Economics for Business Decision Making | Nil |
| INF10024 | Business Digitalisation | Nil |

Year Three

| Semester 5 Feb/Mar 2027 | | |
|----------------------------|---|----------------------|
| Unit Code | Unit Name | Pre-requisites |
| MEE20007 | Design and Product Visualisation Project | ENG10001 |
| MEE20008 | Vibration, Data Analysis and Data Decomposition | MTH10012 & MTH10013 |
| MEE30005 * | Machine Design Project | MEE20004 |
| BUS10014 | Business for Sustainability, Social Change and Impact | Nil |
| EAT20008 # | Professional Experience in Engineering | Introductory Seminar |
| Semester 6 Aug/Sept 2027 | | |
| MEE20005 | Materials Processing and Machining | ENG10002 |
| MEE30004 * | Solid Mechanics | MEE20004 |
| MME30002 * | Engineering Management Project | 100 credit points |
| MKT10009 | Marketing and the Consumer Experience | 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 41 units (500 credit points) in addition of the General Studies/Mata Pelajaran Umum, comprising of:

10 Core Units for Bachelor of Engineering (Honours) 125 credit points

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

4 Core Units for Bachelor of Business 50 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.

8 Management Major Units 100 credit points

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

1 Recommended Elective Unit 12.5 credit points

MTH20010 Statistics and Computation for Engineering

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 tu@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

Year Four

| Semester 7 Feb/Mar 2028 | | |
|----------------------------|---|--|
| Unit Code | Unit Name | Pre-requisites |
| MEE30001 * | Manufacturing Engineering | MEE20005 |
| MEE30002 * | Control Engineering | Co-requisite: MEE20008 Or Pre-requisites: MTH20011 |
| MEE40003 * | Machine Dynamics | MEE20006 |
| MGT10010 | Ethics of Innovation | 50 credit points |
| Semester 8 Aug/Sept 2028 | | |
| MEE40001 * | Heat Transfer | MTH20010 |
| MEE40004 * | Fluid Mechanics 2: Machine, Supersonics and Modelling | MEE20003 |
| MEE40010 * | Integrated Engineering Design Project | MEE30005 |
| MEE40011 * | Renewable Energy and Hydrogen Technologies | Nil |

Year Five

| Semester 9 Feb/Mar 2029 | | |
|-----------------------------|--|---|
| Unit Code | Unit Name | Pre-requisites |
| ENG40003 * | Final Year Research Project 1 (Eng/Bus) | 350 credit points & MKT10009, ECO10005, ACC10007 and INF10024 |
| MGT20008 | Business, Society and Sustainability | MME30001 OR ENG10001 & COS10025 |
| MGT20007 | Organisational Behaviour | MME30002 |
| MGT30005 | Strategic Planning | 187.5 credit points |
| Semester 10 Aug/Sept 2029 | | |
| ENG40004 * | Final Year Research Project 2 (Eng/Bus) | ENG40003 |
| MGT30008 | Leadership Practice and Skills | MME30002 & 187.5 credit points |
| HRM30012 | Digital Management and the Future of Work | 150 credit points & ENG10001 & COS10025 |
| PRM30001 | Project Management Essentials | 100 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.