

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

BB-EMEBUS3

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<br><i>(Malaysian and International Students)</i> | Nil            |
| Summer Term   Jan/Feb 2027 |                                                                                              |                |
| MPU3212                    | Bahasa Kebangsaan A<br><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<br><i>(Malaysian Students Only)</i>                              | Nil            |
| MPU3142                    | [OR]<br>Malay Language Communication 2<br><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            |
| MEE20006                   | Engineering Dynamics                                                                         | MTH10013 & MTH10012 & PHY10001 |
| ECO10005                   | Economics for Business Decision Making                                                       | Nil                            |
| MKT10009                   | Marketing and the Consumer Experience                                                        | Nil                            |
| MPU3222                    | Career Development<br><i>(Malaysian and International Students)</i>                          | Nil                            |
| Semester 4   Feb/Mar 2028  |                                                                                              |                                |
| MEE20001                   | Thermodynamics                                                                               | PHY10001                       |
| MEE20004                   | Structural Mechanics                                                                         | ENG10002/ENG10003              |
| ACC10007                   | Financial Information for Decision Making                                                    | Nil                            |
| INF10024                   | Business Digitalisation                                                                      | Nil                            |
| MPU3112                    | Kursus Integriti dan Antirasuah (KIAR) – BM<br><i>(Malaysian Students Only)</i>              | Nil                            |
| MPU3112                    | [OR]<br>Kursus Integriti dan Antirasuah (KIAR) – ENG<br><i>(International Students Only)</i> | Nil                            |

Year Three

| Semester 5   Aug/Sept 2028 |                                                                      |                      |
|----------------------------|----------------------------------------------------------------------|----------------------|
| Unit Code                  | Unit Name                                                            | Pre-requisites       |
| MEE20005                   | Materials Processing and Machining                                   | ENG10002             |
| MEE30004 *                 | Solid Mechanics                                                      | MEE20004             |
| MME30002 *                 | Engineering Management Project                                       | 100 credit points    |
| FIN10002                   | Financial Statistics                                                 | Nil                  |
| MPU3122                    | Falsafah dan Cabaran Semasa – BM<br><i>(Malaysian Students Only)</i> | Nil                  |
| MPU3152                    | [OR]<br>Citra Malaysia<br><i>(International Students Only)</i>       | Nil                  |
| EAT20008 #                 | Professional Experience in Engineering                               | Introductory Seminar |
| Semester 6   Feb/Mar 2029  |                                                                      |                      |
| MEE20007                   | Design and Product Visualisation Project                             | ENG10001             |
| MEE30001 *                 | Manufacturing Engineering                                            | MEE20005             |
| MEE30005 *                 | Machine Design Project                                               | MEE20004             |
| MTH20010                   | Statistics and Computation for Engineering                           | MTH10013 & MTH10012  |
| MPU3412                    | Service Learning<br><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 41 units (500 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.

**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 Finance 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 [mpu@swinburne.edu.my](mailto: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                                              |
| MEE40001 *                 | Heat Transfer                                         | MEE20001 OR MTH20010                                        |
| 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  |                                                       |                                                             |
| MEE30007                   | Vibration, Data Analysis and Data Decomposition       | MTH10012 & MTH10013                                         |
| MEE30002 *                 | Control Engineering                                   | Co-requisite: MEE20008<br>Or<br>Pre-requisites:<br>MTH20011 |
| MEE40003 *                 | Machine Dynamics                                      | MEE20006                                                    |
| BUS10014                   | Business for Sustainability, Social Change and Impact | Nil                                                         |

# Year Five

| Semester 9   Aug/Sept 2030 |                                         |                                                               |
|----------------------------|-----------------------------------------|---------------------------------------------------------------|
| Unit Code                  | Unit Name                               | Pre-requisites                                                |
| ENG40012 *                 | Final Year Capstone Project 1 (Eng/Bus) | 350 credit points & MKT10009, ECO10005, ACC10007 and INF10024 |
| FIN20016                   | Ethics and International Finance        | ECO10004                                                      |
| FIN20014                   | Financial Management                    | ACC10007 & 75 credit points                                   |
| FIN30014                   | Financial Risk Management               | FIN20014                                                      |
| Semester 10   Feb/Mar 2031 |                                         |                                                               |
| ENG40013 *                 | Final Year Capstone Project 2 (Eng/Bus) | ENG40012                                                      |
| FIN30016                   | Management of Investment Portfolios     | FIN10002 & FIN20014                                           |
| FIN30021                   | Fixed Income and Debt Markets           | FIN10002 & FIN20014                                           |
| FIN30020                   | Alternative Investments                 | FIN10002 & FIN20014                                           |

## 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.