

# COURSE PLANNER

## Bachelor of Engineering (Honours) (Civil) / Bachelor of Business (Finance)

### BB-ECVBUS3

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            |
| ENG10003                  | Engineering Mechanics   | Nil            |
| MPU3273                   | Integrity and Anti-Corruption<br>(Malaysian and International Students) | Nil            |

| Winter Term   July 2025 |  |     |
|-------------------------|--|-----|
| MPU3212                 | Bahasa Kebangsaan A<br>(Malaysian students who do not have SPM Bahasa Melayu credit) | Nil |

| Semester 2   Aug/Sept 2025 |   |     |
|----------------------------|---|-----|
| ENG10002                   | Engineering Materials   | Nil |
| PHY10001                   | Energy and Motion   | Nil |
| MTH10013                   | Linear Algebra and Applications   | Nil |
| COS10025                   | Technology in an Indigenous Context Project                             | Nil |
| MPU3193                    | Philosophy and Current Issues<br>(Malaysian and International Students) | Nil |

#### Year Two

| Semester 3   Feb/Mar 2026 |   |                     |
|---------------------------|---|---------------------|
| Unit Code                 | Unit Name   | Pre-requisites      |
| CVE20001                  | Topographical Engineering                                       | MTH10012            |
| MEE20004                  | Structural Mechanics  | ENG10003            |
| MTH20010                  | Statistics and Computation for Engineering                      | MTH10012 & MTH10013 |
| MKT10009                  | Marketing and the Consumer Experience                           | Nil                 |
| MPU3183                   | Penghayatan Etika dan Peradaban<br>(Malaysian Students Only)    | Nil                 |
| MPU3143                   | Malay Language Communication 2<br>(International Students Only) | Nil                 |

| Semester 4   Aug/Sept 2026 |                                      |                               |
|----------------------------|--------------------------------------|-------------------------------|
| MEE20003                   | Fluid Mechanics 1: Forces and Energy | MTH10012 & MTH10013           |
| CVE20003                   | Design of Concrete Structures        | MEE20004                      |
| CVE20005                   | Road Engineering                     | CVE20001                      |
| CVE20015                   | Digital Engineering Project          | Concurrent CVE10002, ENG10003 |

#### Year Three

| Semester 5   Feb/Mar 2027 |   |                      |
|---------------------------|---|----------------------|
| Unit Code                 | Unit Name                                 | Pre-requisites       |
| CVE30001 <sup>†</sup>     | Urban Water Resources                     | MEE20003             |
| CVE30002 <sup>†</sup>     | Design of Steel Structures                | MEE20004             |
| CVE30003 <sup>†</sup>     | Transport Engineering                     | CVE20005             |
| ACC10007                  | Financial Information for Decision Making | Nil                  |
| EAT20008 <sup>#</sup>     | Professional Experience in Engineering    | Introductory Seminar |

| Semester 6   Aug/Sept 2027 |  |          |
|----------------------------|--|----------|
| CVE20004                   | Geomechanics                           | ENG10003 |
| MME30002 <sup>†</sup>      | Engineering Management Project         | 100 CPS  |
| ECO10005                   | Economics for Business Decision Making | Nil      |
| INF10024                   | Business Digitalisation                | Nil      |

#### Year Four

| Semester 7   Feb/Mar 2028 |   |                |
|---------------------------|---|----------------|
| Unit Code                 | Unit Name   | Pre-requisites |
| CVE40001 <sup>*†</sup>    | Geotechnical Engineering                              | CVE20004       |
| FIN10002                  | Financial Statistics                                  | Nil            |
| FIN20016                  | Ethics of International Finance                       | ECO10005       |
| BUS10014                  | Business for Sustainability, Social Change and Impact | Nil            |

| Semester 8   Aug/Sept 2028 |   |                             |
|----------------------------|---|-----------------------------|
| CVE30005 <sup>†</sup>      | Cost Engineering Project                    | 175 CPS                     |
| CVE40011 <sup>†</sup>      | Engineering Data Analytics and Applications | CVE20015 or CVE20002        |
| CVE40010 <sup>*†</sup>     | Water Engineering Design Project            | CVE30001                    |
| FIN20014                   | Financial Management                        | ACC10007 + 75 credit points |

#### Year Five

| Semester 9   Feb/Mar 2029 |   |                                 |
|---------------------------|---|---------------------------------|
| Unit Code                 | Unit Name                               | Pre-requisites                  |
| ENG40003 <sup>*†</sup>    | Final Year Capstone Project 1           | 350 CPS & 4 core Business units |
| CVE40002 <sup>*†</sup>    | Structural Design of Low Rise Buildings | CVE20003 & CVE30002             |
| FIN30014                  | Financial Risk Management               | FIN20014                        |
| FIN30020                  | Alternative Investments                 | FIN10002 + FIN20014             |

| Semester 10   Aug/Sept 2029 |   |                     |
|-----------------------------|---|---------------------|
| ENG40004 <sup>*†</sup>      | Final Year Research Project 2 (ENG/BUS) | ENG40003            |
| CVE40006 <sup>*†</sup>      | Infrastructure Design Project           | CVE20003 & CVE30002 |
| FIN30016                    | Management of Investment Portfolios     | FIN10002 + FIN20014 |
| FIN30021                    | Fixed Income and Debt Markets           | FIN10002 + FIN20014 |

#### Notes

<sup>#</sup> 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. The introductory Seminar will be conducted in week 4 of the normal semester.

<sup>\*</sup> 6 Outcome units – completion demonstrates the attainment of course learning outcomes

<sup>†</sup> 12 Honours merit units – the results are used in the honours merit calculation

#### 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 32 units (400 credit points), EAT20008 and 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.

#### 18 Civil Major Units 225 credit points

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

#### 4 Business Core Units 50 credit points

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

#### 8 Finance Units 100 credit points

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

#### 1 Industry Placement Unit 0 credit point

EAT20008<sup>#</sup> is a COMPULSORY, non-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](mailto: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 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