

# COURSE PLANNER

## Bachelor of Computer Science – Software Development BA-CS

Intake: Mar 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.

### 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.

## Year One

| Semester 1   Feb/Mar 2025  |   |                |
|----------------------------|---|----------------|
| Unit Code                  | Unit Name   | Pre-requisites |
| COS10009                   | Introduction to Programming   | Nil            |
| COS10026                   | Web Technology Project  | Nil            |
| COS10025                   | Technology in an Indigenous Context Project                                       | Nil            |
| COS10003                   | Computer and Logic Essentials*  | Nil            |
| MPU3273                    | Integrity and Anti-Corruption (Malaysian and International Students)              | Nil            |
| Winter Term   June 2025    |   |                |
| MPU3212                    | Bahasa Kebangsaan A (Malaysian students who do not have SPM Bahasa Melayu credit) | Nil            |
| Semester 2   Aug/Sept 2025 |   |                |
| COS20007                   | Object-oriented Programming   | COS10009       |
| TNE10006                   | Networks & Switching  | Nil            |
| COS20019                   | Cloud Computing Architecture  | 50cp           |
| Elective 1                 |   |                |
| MPU3193                    | Philosophy and Current Issues (Malaysian and International Students)              | Nil            |

### Course Information

This course has 24 units (300 credit points) consisting of

#### 8 Core Units

100 credit points

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

#### 8 Software Development Major Units

100 credit points

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

#### 6 Elective Units

75 credit points

A combination of elective units / second-major / Minor

#### 1 WIL Placement Units

25 credit points

An industry placement in a professional organization, corporation, or an institution.

#### General Studies/MPU

0 credit points

\* Compulsory units to complete as a pre-requisite to graduate (see statement below)

\* Advisable to enroll in Year One

\* Email [itu@swinburne.edu.my](mailto:itu@swinburne.edu.my) for queries

#### Work-Integrated Learning Placement (3 month) – Offer in Winter/Summer Term

\* ICT20016 Completing Work-Integrated Learning Internship (25 credit points).

\* Students must complete at least 12 units

\* WIL placement can be taken in Year 3 (before your final semester)

All commencing students of Master, Degree, Diploma and Foundation courses 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 course (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 attempt all coursework and final exam as a prerequisite for the award of their degree

## Year Two

| Semester 1   Feb/Mar 2026  |   |                     |
|----------------------------|---|---------------------|
| Unit Code                  | Unit Name   | Pre-requisites      |
| COS30043                   | Interface Design and Development  | COS20007 & COS10026 |
| COS20031                   | Database Design Project   | COS10009 / COS10026 |
| COS30019                   | Introduction to Artificial Intelligence*  | COS20007            |
| Elective 2                 |   |                     |
| MPU3183                    | Penghayatan Etika dan Peradaban (Malaysian Students Only)   | Nil                 |
| MPU3143                    | Malay Language Communication 2 (International Students Only)  | Nil                 |
| Semester 2   Aug/Sept 2026 |   |                     |
| COS10004                   | Computer Systems  | Co-req : COS10009   |
| COS30049                   | Computing Technology Innovation Project   | COS10009 / COS10026 |
| COS30008                   | Data Structure and Patterns   | COS20007            |
| SWE30009                   | Software Testing and Reliability  | COS20007            |
| ICT20016                   | - Completing Work-Integrated Learning Internship (equivalent to 2 elective units)<br>- Students need to complete at least 12 units to enroll<br>- WIL internship placement can be taken in Year Three |                     |

## Year Three

| Semester 1   Feb/Mar 2027  |                                  |                  |
|----------------------------|----------------------------------|------------------|
| Unit Code                  | Unit Name                        | Pre-requisites   |
| COS40005                   | Computing Technology Project A   | 175cp            |
| SWE30003                   | Software Architecture and Design | COS20007 & 150cp |
| Elective 3                 |                                  |                  |
| Semester 2   Aug/Sept 2027 |                                  |                  |
| COS40006                   | Computing Technology Project B   | COS40005         |
| COS40003                   | Concurrent Programming           | COS20007         |
| Elective 4                 |                                  |                  |

| Recommended Elective Units |   |                     |                         |
|----------------------------|---|---------------------|-------------------------|
| Unit Code                  | Unit Name                               | Pre-requisites      | Offered in              |
| COS30017                   | Software Development for Mobile Devices | COS20007            | Aug/Sept only           |
| COS30020                   | Advanced Web Development                | COS10009 & COS10026 | Aug/Sept only           |
| COS20030                   | Malware Analysis                        | TNE10006            | Aug/Sept only           |
| COS30018                   | Intelligent Systems                     | COS20007            | Feb/Mar only            |
| INF10024                   | Business Digitalisation                 | NIL                 | Feb/Mar & Aug/Sept only |
| SWE40006                   | Software Deployment and Evolution       | COS20031 / SWE30003 | Feb/Mar only            |
| Minor   Big Data Analytics |   |                     |                         |
| COS10022                   | Data Science Principles                 | NIL                 | Feb/Mar & Aug/Sept      |
| COS10082                   | Applied Analytics in Business           | NIL                 | Aug/Sept only           |
| COS20083                   | Advanced Data Analytics                 | COS10022 & COS10009 | Feb/Mar only            |
| COS20028                   | Big Data Architecture and Application   | COS10022 & COS20007 | Aug/Sept only           |

### Notes

\* Pre-scribed Elective