

# **Bachelor of Computer Science – Cybersecurity 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.

### Year One

| Semester 1 | Feb/Mar 2025  |                          |
|------------|---|--------------------------|
| Unit Code  | Unit Name   | Pre-requisites           |
| COS10009   | Introduction to Programming   | Nil                      |
| COS10026   | Web Technology Project  | Nil (Anti-req: COS10011) |
| COS10025   | Technology in an Indigenous Context<br>Project  | Nil                      |
| COS10003   | Computer and Logic Essentials*  | Nil                      |
| MPU3273    | Integrity and Anti-Corruption<br>(Malaysian and International Students)                 | Nil                      |
| Winter Ter | m   June 2025   |                          |
| MPU3212    | Bahasa Kebangsaan A<br>(Malaysian students who do not have SPM<br>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<br>(Malaysian and International Students)                 | Nil                      |

## Year Two

| Semester 1   Feb/Mar 2026   |   |                                   |  |
|---|---|-----------------------------------|--|
| Unit Code   | Unit Name   | Pre-requisites                    |  |
| TNE20003  | Internet and Cybersecurity for Engineering<br>Applications      | Nil                               |  |
| COS20031  | Database Design Project   | COS10009 / COS10026               |  |
| COS30015  | IT Security   | COS10009 & COS10026 &<br>TNE10006 |  |
|   | Elective 2  |                                   |  |
| MPU3183   | Penghayatan Etika dan Peradaban<br>(Malaysian Students Only)    | Nil                               |  |
| MPU3143   | Malay Language Communication 2<br>(International Students Only) | Nil                               |  |
| Semester  | Semester 2   Aug/Sept 2026                                      |                                   |  |
| COS10004  | Computer Systems  | Co-req: COS10009                  |  |
| COS30049  | Computing Technology Innovation Project                         | COS10009 / COS10026               |  |
| TNE30009  | Network Security and Resilience                                 | TNE10006                          |  |
| COS30019  | Introduction to Artificial Intelligence*                        | COS20007                          |  |
| ICT20016 - Completing Work-Integrated Learning Internship (equivalent to 2 elective |   | hip (equivalent to 2 elective     |  |

units) - Students need to complete at least 12 units to enroll

- WIL internship placement can be taken in Year Three

## Year Three

**Recommended Elective Units** 

| Semester 1   Feb/Mar 2027 |                                  |                  |  |
|---------------------------|----------------------------------|------------------|--|
| Unit Code                 | Unit Name                        | Pre-requisites   |  |
| COS40005                  | Computing Technology Project A   | 175ср            |  |
| SWE30003                  | Software Architecture and Design | COS20007 & 150cp |  |
|                           | Elective 2                       |                  |  |

### 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 colourcoded to assist you with mapping out your studies.

### **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 Cybersecurity 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 prerequisite to graduate (see statement below)

- \* Advisable to enroll in Year One
- \* Email <u>ltu@swinburne.edu.my</u> 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 inthis 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.

| Semester 2 | Semester 2   Aug/Sept 2027     |          |  |  |
|------------|--------------------------------|----------|--|--|
| COS40006   | Computing Technology Project B | COS40005 |  |  |
| COS20030   | Malware Analysis               | TNE10006 |  |  |
|            | Elective 4                     |          |  |  |
|            |                                |          |  |  |

- 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

| Unit Code                  | Unit Name                             | Pre-requisites      | Offered in              |  |  |
|----------------------------|---------------------------------------|---------------------|-------------------------|--|--|
| SWE30009                   | Software Testing and Reliability      | COS20007            | Aug/Sept only           |  |  |
| COS30047                   | Security Operation Centre*            | TNE30009            | Feb/Mar only            |  |  |
| COS30045                   | Data Visualisation                    | COS10009            | Aug/Sept only           |  |  |
| COS30020                   | Advanced Web Development              | COS10009 & COS10026 | Aug/Sept only           |  |  |
| TNE10005                   | Network Administration                | NIL                 | Feb/Mar only            |  |  |
| COS30018                   | Intelligent Systems                   | COS20007            | Feb/Mar only            |  |  |
| INF10024                   | Business Digitalisation               | NIL                 | Feb/Mar & Aug/Sept 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