COURSE PLANNER

Bachelor of Computer Science – Data Science
BA-CS

Intake: Aug/Sept 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 program.

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	Aug/Sept 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
MPU3272	Integrity and Anti-Corruption (Malaysian and International Students)	Nil
Semester 2	**Feb/Mar 2026**	
COS20007	Object-oriented Programming	COS10009
TNE10006	Networks & Switching	Nil
MGT10010	Ethics of Innovation	Nil
COS10022	Data Science Principles	Nil
MPU3192	Philosophy and Current Issues (Malaysian and International Students)	Nil
Winter Term	**June 2026**	
MPU3212	Bahasa Kebangsaan A (Malaysian students who do not have SPM Bahasa Melayu credit)	Nil

Year Two

Semester 1	Aug/Sept 2026	
Unit Code	Unit Name	Pre-requisites
COS20031	Database Design Project	COS10009 / COS10026
COS30045	Data Visualisation	COS10009
COS10082	Applied Analytics in Business	Nil
COS30019	Introduction to Artificial Intelligence	COS20007
MPU3182	Penghayatan Etika dan Peradaban *(Malaysian Students Only)*	Nil
MPU3142	Malay Language Communication 2 *(International Students Only)*	Nil
Semester 2	**Feb/Mar 2027**	
COS10004	Computer Systems	Co-req: COS10009
COS30049	Computing Technology Innovation Project	COS10009 / COS10026
COS20019	Cloud Computing Architecture	50cp
COS20083	Advanced Data Analytics	COS10022 & COS10009
MPU3412	Service Learning	Nil
Winter Term	**Jun/Jul 2027**	
ICT20016	- Completing Work-Integrated Learning Internship (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

Semester 1	Aug/Sept 2027	
Unit Code	Unit Name	Pre-requisites
COS40005	Computing Technology Project A	175cp
COS20028	Big Data Architecture and Application	COS10022 & COS20007
SWE30003	Software Architecture and Design	COS20007 & 150cp
Semester 2	**Feb/Mar 2028**	
COS40006	Computing Technology Project B	COS40005
SWE40006	Software Deployment and Evolution	COS20031 / SWE30003
COS30015	IT Security	COS10009 & COS10026 & TNE10006

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 Data Science 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

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 ltu@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 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 all the students pursuing Degree program (International and Malaysian) to complete 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