

SWINBURNE UNIVERSITY OF **TECHNOLOGY**

Bachelor of Science (Environmental Science)

BA-SCENV2

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	
BIO10001	Concepts of Biology	Nil
CHE10001	Chemistry 1	VCE 3 and 4 Chemistry or
		equivalent
PHY10001	Energy and Motion	Nil
STA10003	Foundation of Statistics	Nil
MPU3273	Integrity and Anti-Corruption	Nil
	(Malaysian and International Students)	INII
Winter Term	June 2025	
	Bahasa Kebangsaan A	
MPU3212	(Malaysian students who do not have SPM Bahasa	Nil
	Melayu credit)	
Elective	BUS30025, INB20009 or other elective	Nil
Optional	(Subject to unit availability)	
Elective	BUS30025, INB20009 or other elective	Nil
Optional	(Subject to unit availability)	
Semester 2	Aug/Sept 2025	
Unit Code	Unit Name	Pre-requisites
NPS10003	Sustainability Challenges in Science	Nil
MTH10010	Essential Mathematics	MTH00007 or MTH00004 or VCE
		Maths or equivalent
CHE10005	Consumer Chemistry	CHE10001 or CEE20005 or
		equivalent
PEH20004	Built and Sustainable Communities	Nil
MDI 12102	Philosophy and Current Issues	Niil
MPU3193	Philosophy and Current Issues (Malaysian and International Students)	Nil
		Nil
	(Malaysian and International Students) n January 2026 ECO10005, MKT10009 or other elective	Nil
Summer Teri	(Malaysian and International Students) n January 2026 ECO10005, MKT10009 or other elective (Subject to unit availability)	
Summer Terr	(Malaysian and International Students) n January 2026 ECO10005, MKT10009 or other elective	
Summer Terr Elective Optional	(Malaysian and International Students) n January 2026 ECO10005, MKT10009 or other elective (Subject to unit availability)	Nil

Year Two

31020002	The Microbial World	BIO10001		
NV30003	Environmental Management	100 credit points		
PEH20002	Food Science	CHE10001 or CEE20005 or		
		equivalent		
SOC10005	Environment and Society: Problems and	Nil		
	Solutions (Recommended. 2025 only)			
MPU3183	Penghayatan Etika dan Peradaban	Nil		
WII 05105	(Malaysian Students Only)	•••		
MPU3143	Malay Language Communication 2	Nil		
Winter Term	(International Students Only)			
Winter Term <u> </u> NPS20008		tivos		
or other electives	- Completing WIL as an exemption to 2 electives - Students need to complete at least 12 units to enrol			
Optional	- WIL placement can be taken in Year Three	s to eriror		
	ug/Sept 2026			
Unit Code	Unit Name	Pre-requisites		
NPS20011	Societal Challenges in Science	NPS10001 Introduction to e-		
		Science or NPS10003		
		Sustainability Challenges in		
		Science		
PEH20006	Water Science	CHE10001 or CEE20005 or		
		equivalent		
Elective	BCH20001, BIO10003, COS10009,	Please refer to Elective List		
	COS10022, MGT10009, MKT10009,			
	COM10007, or other elective			
Elective	BCH20001, BIO10003, COS10009,	Please refer to Elective List		
	COS10022, MGT10009, MKT10009,			
	COM10007, or other elective			
Summer Term	January 2027			
NPS20008	- Completing WIL as an exemption to 2 elect			
or other electives	- Students need to complete at least 12 units	s to enrol		
Optional	- WIL placement can be taken in Year Three			

Year Three

Semester 5 Feb/Mar 2027					
Unit Code	Unit Name	Pre-requisites			
NPS30004	Grand Challenges in Science	200 credit points			
ENV30001	Environmental Biology	CHE10001 or CEE20005 and BIO10001, and any of these: CHE10002, BIO20002, BCH20002			
Elective	BCH20002, BIO30010, BIO30009, BCH30003, COS10009, COS10022, COS20083 ACC10007, INF10024 or other elective	Please refer to Elective List			
Elective	BCH20002, BIO30010, BIO30009, BCH30003, COS10009, COS10022, COS20083 ACC10007, INF10024 or other elective	Please refer to Elective List			
Remarks: Student can complete 24 units of study at the end of Semester 5 if completed 4 units					

Remarks: Student can complete 24 units of study at the end of Semester 5 if completed 4 units from Winter Terms and Summer Terms.

Winter Term | July 2027 - Completing WIL as an exemption to 2 electives or other electives - Students need to complete at least 12 units to enrol - WIL placement can be taken in Year Three Semester 6 | Aug/Sept 2027 BIO30005 Microbes in the Environment Introduction to Tropical Ecology BIO20008 Please refer to Elective List (Recommended, 2026 only) COM10007 Professional Communication Practice Please refer to Elective List (Recommended) MDA10006 Innovation Cultures: Perspectives on Please refer to Elective List Science and Technology (*Recommended*)

Notes

To complete your study planner, please select either (as seen on Page 2 of this study planner):

- 1. One Second-Major (8 units) OR
- 2. 8 electives

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 24 units (300 credit points) comprising

8 Core Units

100 credit points

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

8 Major Units

100 credit points

A structured set of compulsory units in a field of study specific to your Course.

8 Second Major/Elective Units 100 credit points

A Second Major or a combination of Elective units. A Second Major is a set of 8 units

from the selected study area. An Elective is a standalone unit from any study area.

General Studies/Mata Pelajaran Umum

0 credit points

Compulsory units to complete as a prerequisite to graduate (see statement below)

Advisable to enrol in Year One Email ltu@swinburne.edu.my for queries

Work-Integrated Learning Placement (3 month) - Offer in Winter/Summer Term 25 credit points

An option for students and completing WIL placement is equivalent to two elective units exemption. Students need to complete at least 12 units if they want to enrol in WIL placement

WIL placement can be taken in Year

Email ltu@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

COURSE PLANNER

Elective Unit Listing (Full List)

Units	offered	in	Feb/Mar	

Unit Code Unit Name Pre-requisites SOC10005

Environment and Society: Problems and Solutions (New, Recommended. 2025

only)

Industrial Microbiology (2025 only) BIO20006 BIO20002 (pre or co-requisite) BIO30010 Natural Products (2026 only) 150 credit points (To be revised) BIO10001 and CHE10001 Introduction to Biochemistry BCH20002 BIO30009 Applications of Bioinformatics BCH20002 and BCH20001

BCH30003 Advanced Biochemistry BCH20002 and BCH20001 EEE80015 Renewable Energy

100 credit points & approval from Head of Department COS10009 Introduction to Programming Nil

Nil

Nil

Nil

Nil

Nil

COS10022 Introduction to Data Science Nil COS10009 and COS10022 COS20083 Advanced Data Analytics

ACC10007 Financial Information for Decision Nil

Making INF10024 **Business Digitalisation**

Unit offered in Winter Term (if available)

Unit Code Unit Name Pre-requisites BUS30025 Social Innovation Project Nil

Global and Digital Marketplaces

INB20009

Units offered in Aug/Sep Unit Code Unit Name Pre-requisites

BIO10003 Concepts of Biotechnology BCH20002 and BCH20001 BIO30004 Molecular Biotechnology BIO20008 Introduction to Tropical Ecology (2026 87.5 credit points

only) BCH20001 Biochemistry of Genes and Proteins CHE10001 or CEE20005 and BCH20002

Introduction to Programming COS10009 Nil COS10022 Introduction to Data Science Nil COS30045 Data Visualisation COS10009 MGT10009 Contemporary Management Principles Nil

MKT10009 Marketing and the Consumer Nil Experience

COM10007 Professional Communication Practice

(Recommended)

MDA10006 Innovation Cultures: Perspectives on

Science and Technology (Recommended)

Units offered in Summer Term (if available)

ECO10005 Economics for Business Decision Making Nil MKT10009 Marketing and the Consumer Nil

Experience

Work Integrated Learning Placement

NPS20008: Work Integrated Learning Placement - Science

* An option for students and completing WIL placement is equivalent to two elective units exemption.

^{*} Students need to complete at least 12 units if they want to enrol in WIL placement

^{*} WIL placement can be taken in Year Three