



**UNSW**  
SYDNEY

# Bachelor of Science (Single Degree)

UNSW TAFE Pathways | Program Code: 3970

## Program and Course Terminology

Terminology	Definition
<b>Credit Transfer</b>	<a href="#">Credit transfer</a> is also known as 'advanced standing' or recognition for prior learning (RPL), where students can apply for previous study from another institution to be applied as credit to a student's current degree at UNSW.
<b>Disciplinary Component</b>	Students must complete 96 UOC (16 courses) to satisfy the Bachelor of Science (Single degree) Disciplinary Component.
<b>Science Major</b>	Students must complete at least one Science major as part of their program – refer to the Appendix for full list of Science majors.
<b>Science Electives</b>	Students taking the Bachelor of Science as a stand-alone program are required to take an additional 12 UOC of Science elective courses in addition to the minimum disciplinary component requirements. Students taking a second major or minor may not be required to take these courses where their chosen specialisation is more than 108 UOC (subject to any credit transfers).
<b>Free Electives</b>	Students can take up to a maximum of 24 UOC (4 courses) in Free Elective courses (subject to any credit transfers).
<b>General Education</b>	Students must complete 12 UOC (2 courses) in General Education courses. Any course defined as a Science course cannot be taken as General Education (subject to any credit transfers).
<b>Overall Program UOC</b>	Students must complete a 144 UOC (32 courses) across Core, Free Electives and General Education courses to fulfil program requirements (subject to any credit transfers).

Students who have completed a Diploma or Advanced Diploma qualification at TAFE can articulate into the Bachelor of Science (BSc) at UNSW with generalised credit transfer (or Recognition of Prior Learning (RPL)) mapped to the Free/Science electives and General Education block of the BSc program.

Students who have completed a **Diploma** (AQF Level 5) will be offered credit transfer\* of 36 UOC towards the BSc. Credit will be given for the following courses:

1. Free Electives (24 UOC)
2. General Education (12 UOC)

Students who have completed an **Advanced Diploma** (AQF Level 6) will be offered credit transfer\* of 48 UOC towards the BSc. Credit will be given for the following courses:

1. Science Electives (12 UOC)
2. Free Electives (24 UOC)
3. General Education (12 UOC)

Once credit has been applied, students will note that some study terms will present a lighter load of courses due to the limited offering of most courses in the BSc.

*\*Refer to Assumed Knowledge requirements on following pages.*

### **Study Plans – developed on a case-by-case basis**

Given the variety and timing of courses within the different majors of the Bachelor of Science (including pre-requisites specific to the majors), the study plan for each TAFE Pathway applicant will be drafted on a case-by-case basis with the Faculty/School representative upon receiving the TAFE pathway application. The study plan for each major's full study load (without credit transfers) is available at the following link: [BSc Handbook \(as on 10 June 2023, to be updated as per faculty updates\)](#). This can be referred to by TAFE pathway applicants while making a UNSW application with the explicit understanding that a customised study plan will be worked out with the respective Faculty/School on receiving an application.

## Assumed Knowledge

### Mathematics

Most BSc majors specify Assumed Knowledge of mathematics upon entry into the program. These can broadly be divided into two categories:

Category 1: Life Sciences and other majors (refer to Appendix for full list of majors).

A minimum expected background in mathematics equivalent to 'HSC Mathematics Advanced' is needed to successfully undertake compulsory mathematics courses in Category One majors. HSC Mathematics Advanced knowledge can be demonstrated through the following options, prior to entry at UNSW:

Option 1: HSC Advanced Mathematics

Option 2: [TAFE Essential Mathematics for Higher Education](#)

There is no direct equivalent offered at UNSW.

Category 2: Physical sciences and mathematics majors (refer to Appendix for full list of majors).

A minimum expected background in mathematics equivalent to 'HSC Mathematics Extension 1' is needed to successfully undertake Mathematics 1A, which is a pre-requisite in Category 2 majors. For this, HSC Mathematics Extension 1 knowledge can be demonstrated or undertaken through the following options:

Option 1\*: HSC Extension 1 (demonstrated in UAC application)

Option 2\*: [MATH1011 \(Fundamental of Mathematics\)](#) (undertaken on UNSW enrolment and credit transfer (RPL) reduced accordingly)\*\*

Option 3\*: [UNSW Maths Bridging Course](#) (undertaken on UNSW enrolment and not opting to undertake Maths1011)

*\* All Category 2 options assume pre-existing knowledge of HSC Advanced Mathematics, which can be obtained through HSC Advanced Mathematics, or [TAFE Essential Mathematics for Higher Education](#) (TAFE Essentials). There is no direct equivalent offered at UNSW.*

*\*\*MATH1011 is equivalent to HSC Extension 1 mathematics and runs over a term. It has a restricted offering, and the enrolments structure/ permissions need to be worked out in consultation with the School of Maths and Stats for TAFE pathway students wishing to pursue BSc.*

### HSC Physics

Physics 1A is required for the Physics, Material Sciences, and Chemistry majors. A minimum expected background in Physics equivalent to HSC Physics is needed to successfully undertake Physics 1A. HSC Physics knowledge can be demonstrated or undertaken through the following options:

Option 1: HSC Physics (demonstrated in UAC application)

Option 2: [PHYS1111 \(Fundamental of Physics\)](#) (undertaken on UNSW enrolment and credit transfer (RPL) reduced accordingly)

Option 3: [UNSW Physics Bridging Course](#) (undertaken on UNSW enrolment and not opting to undertake PHYS1111)

### HSC Chemistry

Chemistry 1A is required for some majors in BSc. A minimum expected background in Chemistry equivalent to Year 11 HSC Chemistry is needed to successfully undertake Chemistry 1A. Year 11 HSC Chemistry knowledge can be demonstrated or undertaken through the following options:

Option 1: Year 11 HSC Chemistry (demonstrated in UAC application)

Option 2: [CHEM1001 \(Introductory Chemistry\)](#) (undertaken on UNSW enrolment and credit transfer (RPL) reduced accordingly)

Note: [UNSW Chemistry Bridging Course](#) is offered before the start of Term 1 each year, but this is not sufficient for a student with no prior study in Chemistry to be prepared for Chemistry 1A.

### **Transfer to other majors after enrolment**

The BSc provides students with the flexibility to transfer majors during their degree. In the case of TAFE Pathway students wanting to transfer between majors, they will need to demonstrate or undertake knowledge of Mathematics, Physics and Chemistry as outlined above.

## Attachment

Category 1: Life sciences and other majors		Category 2: Physical sciences and mathematics majors	
CODE	Major	CODE	Major
ANATA1	Anatomy	BINFB1	Bioinformatics
BIOCC1	Genetics	CLIME1	Climate Systems Science
BIOCM1	Molecular and Cell Biology	MATHM1	Mathematics
BIOSM1	Ecology and Conservation	MATHN1	Physical Oceanography
BIOSO1	Biology & Biodiversity	MATHT1	Statistics
BIOTA1	Biotechnology	MATSB1	Materials Science
CHEMA1	Chemistry	PHYSL1	Physics
FOODH1	Food Science		
GEOGG1	Geography		
GEOLS1	Earth Science		
MICRB1	Microbiology		
MICRJ1	Immunology		
MSCIM1	Marine and Coastal Science		
NEURS1	Neuroscience		
PATHA1	Pathology		
PHARA1	Pharmacology		
PHSLA1	Physiology		
PSYCA1	Psychology		
VISNA1	Vision Science		