

## Bachelor of Environmental Science (BENV) - BEnvSc

QTAC code (Australian and New Zealand applicants): Toowoomba campus: 906441; External: 907375

CRICOS code (International applicants): 108984B

	On-campus~	External
<b>Start:</b>	Semester 1 (February) Semester 2 (July)	Semester 1 (February) Semester 2 (July)
<b>Campus:</b>	Toowoomba	-
<b>Fees:</b>	Commonwealth supported place International full fee paying place	Commonwealth supported place International full fee paying place
<b>Residential school:</b>	Mandatory	Mandatory
<b>Standard duration:</b>	3 years full-time, 6 years part-time	
<b>Program articulation:</b>	From : <a href="#">Diploma of Science</a>	

### Notes:

In 2023 the program follows the Semester calendar. The [Academic Calendar and Important Dates](#) webpage will allow you to view and download a copy of the important dates for the Semester calendar.

### Footnotes

~ Not all courses are available in on-campus mode

## Contact us

Future Australian and New Zealand students	Future International students	Current students
<a href="#">Ask a question</a> Freecall (within Australia): 1800 269 500 Phone (from outside Australia): +61 7 4631 5315 Email: <a href="mailto:study@usq.edu.au">study@usq.edu.au</a>	<a href="#">Ask a question</a> Phone: +61 7 4631 5543 Email: <a href="mailto:international@usq.edu.au">international@usq.edu.au</a>	<a href="#">Ask a question</a> Freecall (within Australia): 1800 007 252 Phone (from outside Australia): +61 7 4631 2285 Email <a href="mailto:usq.support@usq.edu.au">usq.support@usq.edu.au</a>

## Program aims

The Bachelor of Environmental Science aims to provide detailed knowledge of major environmental issues, human impacts and their key environmental drivers, and apply this knowledge towards more sustainable environmental and resource management. The program provides students with in-depth knowledge and understanding and practical/technological skills within four majors (climate science, ecology and conservation, water science, and wildlife and pest management) in order to operate as competent professionals in a wide range of environmental science careers.

## Program Rules

Students are required to:

- Satisfactorily complete 24 credit points (24 mandatory courses) as listed in the standard progression to graduate from the program.  
At least four units will be at Level 3. .
- Satisfactorily complete all courses within 9 years.
- Maintain satisfactory academic achievement throughout the duration of the program, consistent with the UniSQ [Student Academic Progress Procedure](#).

- Meet all mandatory residential school requirements where present in courses.

## Program objectives

On completion of this program, students should be able to:

- apply a broad and coherent body of theoretical and applied knowledge in the environmental sciences, with in-depth knowledge in one or more specialist disciplines.
- apply a range of cognitive, technical and practical skills reflecting the underlying principles of one or more environmental science disciplines, to collect, analyse, interpret and present environmental science data using appropriate experimental, computational, statistical and technological approaches.
- exhibit well developed scientific literacy and oral, written and digital communication skills to explain environmental sciences issues and scientific results to a range of audiences.
- work independently and collaboratively to critically and creatively analyse issues and develop appropriate understanding and solutions to complex environmental problems across a range of cultural, institutional, national and global contexts.
- display ethical, professional and cultural awareness, including those of Indigenous knowledge systems and practises, in a wide diversity of professional applications.

## Australian Qualifications Framework

The Australian Qualifications Framework (AQF) is a single national, comprehensive system of qualifications offered by higher education institutions (including universities), vocational education and training institutions and secondary schools. Each AQF qualification has a set of descriptors which define the type and complexity of knowledge, skills and application of knowledge and skills that a graduate who has been awarded that qualification has attained, and the typical volume of learning associated with that qualification type.

This program is at AQF Qualification Level 07. Graduates at this level will have broad and coherent knowledge and skills for professional work and/or further learning.

The full set of levels criteria and qualification type descriptors can be found by visiting [www.aqf.edu.au](http://www.aqf.edu.au).

## Program Information Set

View UniSQ's admission criteria, student profiles and a summary of all offers made under [Course Admission Information Set](#) via the QTAC website.

## Admission requirements

To be eligible for admission, applicants must satisfy the following requirements:

- Have achieved a minimum Australian Tertiary Admission Rank (ATAR) of **65.6**, or equivalent qualification.<sup>^</sup>
- English Language Proficiency requirements for Category 2.
- Subject Pre-requisite: General Mathematics (Units 3 & 4, C) or equivalent.

Applicants are advised to also address the following:

- Assumed knowledge expectations: English.
- Recommended Prior Study: Mathematical Methods and one of Biology, Chemistry or Physics (Units 3 & 4, C) or equivalent.

If students do not have the recommended Mathematical Methods level for entry then they will be required to undertake [MAT1000 Mathematics Fundamentals](#) as an elective.

All students are required to satisfy the applicable [English language requirements](#).

If students do not meet the English language requirements they may apply to study a University-approved [English language program](#). On successful completion of the English language program, students may be admitted to an award program.

^ These are determined by the University for specific programs each Semester. The 2023 ATAR and tertiary entrance ranks are based on agreed QTAC schedules which assess formal study at Year 12 or [equivalent level](#), tertiary, preparatory, professional or vocational qualifications or work experience, as detailed in the QTAC Assessment of Qualifications Manual and QTAC Assessor Guidelines.

Adjustment factors may help you get into the program of your choice by increasing your entrance rank. The additional points don't apply to all applicants or all programs. Please read the information about UniSQ's [Adjustment Factors](#) carefully to find out what you may be eligible for.

## Program fees

### Commonwealth supported place

A Commonwealth supported place is where the Australian Government makes a contribution towards the cost of a students' higher education and students pay a [student contribution amount](#), which varies depending on the courses undertaken. Students are able to calculate the fees for a particular course via the [Course Fee Schedules](#).

Commonwealth Supported students may be eligible to defer their fees through a Government loan called [HECS-HELP](#).

### International full fee paying place

International students pay full fees. Full fees vary depending on the courses that are taken and whether they are studied on-campus, external or online. Students are able to calculate the fees for a particular course via the [Course Fee Schedules](#).

## Program structure

The program consists of 24 units comprised of:

- 8 core courses;
- 1 x 8-unit Major;

And either:

- 8 x Elective units; or
- 1 x 8-unit Second Major; or
- 2 x 4-unit Discipline Minors; or
- 1 x 4-unit Discipline Minor and 1 x 4-unit University Minor; or
- 1 x 4-unit Discipline Minor and 4 units of Electives.

At least 4 courses in the program must be at Level 3.

## Required time limits

Students have a maximum of 9 years to complete this program.

## Core courses

The courses that comprise the core studies program are shown in the following table:

Course Name and Code	Semester(s) Offered			
	Toowoomba	Springfield	External	Online
<a href="#">REN1201 Environmental Studies</a> <sup>+</sup>	1	1		1
<a href="#">CLI1110 Weather and Climate</a>	1	1		1
<a href="#">SCI1001 Succeeding in Science</a>	1			1

<a href="#">CMS1100 Communicating in the Sciences</a>	1			2
<a href="#">STA1003 Fundamental Statistics</a> §	1,2	2		1,2,3
<a href="#">MAT1100 Foundation Mathematics</a>	2	2		2
<a href="#">IDK2203 Indigenous Environmental Perspectives and Knowledge</a>	2			2
<a href="#">SCI3302 Work-Integrated-Learning</a>	1,2,3		1,2,3	

#### Footnotes

+ The Springfield on-campus offer is not available in 2023.

§ Unavailable online in S3 2023

## Major studies

The following 8-unit majors are available in the Bachelor of Environmental Science:

### Climate Science

Course Name and Code	Semester(s) Offered			
	Toowoomba	Springfield	External	Online
<b>Major Courses</b>				
<a href="#">CSC1401 Foundation Programming</a> £	1,2,3	1,2		1,2,3
<a href="#">MAT1102 Algebra and Calculus I</a>	1			1
<a href="#">MAT2100 Algebra and Calculus II</a>	2			2
<a href="#">CLI2201 Climate Change and Variability</a>				2
<a href="#">STA2301 Distribution Theory</a>	1			1
<a href="#">CLI3301 Climate and Environment Risk Assessment</a>				1
<a href="#">CLI3302 Adaptation to Climate Change</a>				2
<a href="#">STA3301 Statistical Models</a> >	2			2

#### Footnotes

£ In Semester 3, 2023 this course will be delivered as a Transition (9 week) semester, commencing on 13 November 2023 and concluding on 12 January 2024

> Unavailable Semester 2, 2023 Toowoomba On-campus

### Ecology and Conservation

Course Name and Code	Semester(s) Offered			
	Toowoomba	Springfield	External	Online
<b>Major Courses</b>				
<a href="#">ENV2105 Applied Chemistry and Microbiology</a>	1			1
<a href="#">REN2200 Ecology for Sustainability</a>	1			1
<a href="#">REN2201 Ecological Methods</a> +	2		2	
<a href="#">BIO2100 The Australian Biota</a> #	1		1	
<a href="#">REN3301 Biodiversity and Conservation</a>	2			2
<a href="#">REN3302 Sustainable Resource Use</a>	2			2
<a href="#">REN3103 Applied Terrestrial Ecology</a> +	1		1	
<a href="#">REN3104 Applied Freshwater Ecology</a> +	1		1	

#### Footnotes

- + Mandatory residential school (ONC students and EXT students attend Residential School)  
# Highly recommended residential school (ONC students and EXT students attend Residential School)

## Water Science

Course Name and Code	Semester(s) Offered			
	Toowoomba	Springfield	External	Online
<b>Major Courses</b>				
<a href="#">WAT1101 Introduction to Water Science</a> <sup>#†</sup>	1		1	
<a href="#">MAT1102 Algebra and Calculus I</a>	1			1
<a href="#">MAT2100 Algebra and Calculus II</a>	2			2
<a href="#">REN2200 Ecology for Sustainability</a>	1			1
<a href="#">WAT2202 Catchment and Water Resources Management</a> <sup>#@</sup>	2		2	
<a href="#">ENV3105 Hydrology</a>	2	2		2
<a href="#">WAT3101 Hydrological Modelling and Simulation</a> <sup>^</sup>	1			1
<a href="#">REN3104 Applied Freshwater Ecology</a> <sup>+</sup>	1		1	

#### Footnotes

- # Highly recommended residential school (ONC students and EXT students attend Residential School)  
† Unavailable in 2023  
@ This course is not available in 2023  
^ This course will be offered in 2024  
+ Mandatory residential school (ONC students and EXT students attend Residential School)

## Wildlife and Pest Management

Course Name and Code	Semester(s) Offered			
	Toowoomba	Springfield	External	Online
<b>Major Courses</b>				
<a href="#">AGR1101 Animal Health, Welfare and Behaviour</a> <sup>#</sup>	1		1	
<a href="#">WLF1201 Field Skills for Wildlife, Game and Pest Management</a> <sup>*</sup>			2	
<a href="#">WLF2101 Management of Wildlife</a> <sup>#</sup>	1		1	
<a href="#">BIO2100 The Australian Biota</a> <sup>#</sup>	1		1	
<a href="#">WLF2201 Vertebrate Pests and Biosecurity</a> <sup>#</sup>	2		2	
<a href="#">REN2201 Ecological Methods</a> <sup>+</sup>	2		2	
<a href="#">WLF3101 Principles of Wildlife Management &amp; Sustainable Use</a> <sup>@</sup>				1
<a href="#">AGR3302 Sensors and Technology in Animal Production</a>	2		2	

#### Footnotes

- # Highly recommended residential school (ONC students and EXT students attend Residential School)  
\* Mandatory residential school  
+ Mandatory residential school (ONC students and EXT students attend Residential School)

@ This course will be offered in 2024

## Minor Studies

Discipline Minor studies in Environmental Sciences are designed to enable students to widen their knowledge and perspectives, or to complement their choice of major.

Students may choose any combination of up to two Discipline Minors listed below or [University Minors](#) or 4-8 units of general electives instead:

- [Agricultural Studies](#)
- [Applied Data Analysis](#)
- [Biodiversity](#)
- [Climatology](#)
- [Geographic Information Systems](#)
- [Indigenous Studies](#)
- [Journalism](#)
- [Urban and Regional Planning](#)
- [Water Resources](#)
- [Wildlife Studies](#)

Students can replace any completed course(s) in a listed minor with a general elective(s). Students may consult the Program Director for a recommendation.

Students should be aware that some courses may have residential school requirements and enrolment requirements (such as pre-requisites) that must be satisfied for any course selection.

## Electives/Approved courses

Elective courses enable students to further increase their knowledge and widen their perspectives. Students can choose up to 8 electives which may be any UniSQ course. Choice of an elective will depend on the availability of the course(s), timetabling constraints, any specified pre-requisites and quotas. Students may consult the Program Director for a recommendation.

## IT requirements

For information technology requirements please refer to the [minimum computing standards](#).

## Residential schools

The attendance requirement of residential schools within this degree is indicated by the following letters: R = Recommended; HR = Highly Recommended; M = Mandatory. To find out more about [residential schools](#), visit the [Residential School Schedule](#) to view specific dates for your degree, or visit the [Policy and Procedure Library](#).

### Ecology and Conservation Major

- [BIO2100 The Australian Biota](#)
- [REN2201 Ecological Methods](#)
- [REN3103 Applied Terrestrial Ecology](#)
- [REN3104 Applied Freshwater Ecology](#)

### Water Science Major

- [REN3104 Applied Freshwater Ecology](#)
- [WAT1101 Introduction to Water Science](#)
- [WAT2202 Catchment and Water Resources Management](#)

### Wildlife and Pest Management Major

- [BIO2100 The Australian Biota](#)
- [REN2201 Ecological Methods](#)

- [WLF1201 Field Skills for Wildlife, Game and Pest Management](#)
- [WLF2101 Management of Wildlife](#)
- [WLF2201 Vertebrate Pests and Biosecurity](#)
- [AGR1101 Animal Health, Welfare and Behaviour](#)
- [AGR3302 Sensors and Technology in Animal Production](#)

## Exit points

Students who, for whatever reason, are unable to complete the Bachelor of Environmental Science and who satisfy all of the requirements may exit with a [DPSC Diploma of Science](#).

## Credit

Exemptions/credit will be assessed based on the [UniSQ Credit and Exemption Procedure](#).

## Enrolment

### Progression

Students are advised to consult with student support [usq.support@usq.edu.au](mailto:usq.support@usq.edu.au) in situations where their progression is affected either by failure in pre-requisite courses, or where they choose a part-time study pattern.

## Recommended enrolment pattern - Climate Science Major - commencing in Semester 1

Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)		
	Year	Sem	Year	Sem	Year	Sem	
Year 1							
REN1201 Environmental Studies <sup>+</sup>	1	1			1	1	Enrolment is not permitted in <a href="#">REN1201</a> if <a href="#">REN8101</a> has been previously completed.
CLI1110 Weather and Climate	1	1			1	1	
SCI1001 Succeeding in Science	1	1			1	1	
CSC1401 Foundation Programming <sup>£</sup>	1	1,2,3			1	1,2,3	
CMS1100 Communicating in the Sciences	1	1			1	1,2	
STA1003 Fundamental Statistics <sup>§</sup>	1	1,2			1	1,2,3	Enrolment is not permitted in <a href="#">STA1003</a> if <a href="#">STA2300</a> or <a href="#">STA8170</a> or <a href="#">STA6200</a> or <a href="#">STA1004</a> has been previously completed. Students enrolled in the BACT, or undertaking the Accounting Major in the BBCM, are not eligible for enrolment.
MAT1100 Foundation Mathematics	1	2			1	2	Enrolment is not permitted in <a href="#">MAT1100</a> if <a href="#">ENM1500</a> or <a href="#">MAT2100</a> or <a href="#">MAT1102</a> or <a href="#">ENM1600</a> or <a href="#">ENM2600</a> has been previously completed
Second Major or Minor or Elective	1	2			1	2	
Year 2							
Second Major or Minor or Elective (recommended PHY1104 Physics 1)	2	1			2	1	
MAT1102 Algebra and Calculus I	2	1			2	1	
Second Major or Minor or Elective (recommended ENV2105 Applied Chemistry and Microbiology)	2	1			2	1	
Second Major or Minor or Elective	2	1			2	1	
CLI2201 Climate Change and Variability					2	2	
MAT2100 Algebra and Calculus II	2	2			2	2	Pre-requisite: <a href="#">MAT1102</a> or <a href="#">MAT1502</a> or <a href="#">ENM1600</a> or Students must be enrolled in



Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)		
	Year	Sem	Year	Sem	Year	Sem	
							the following program: MSCN or MEPR or BSED
Second Major or Minor or Elective (recommended WAT2202 Catchment and Water Resources Management) @*	2	2	2	2			
IDK2203 Indigenous Environmental Perspectives and Knowledge	2	2			2	2	
Year 3							
CLI3301 Climate and Environment Risk Assessment					3	1	
STA2301 Distribution Theory	3	1			3	1	Pre-requisite: (STA2300 or STA1003 or e equivalent) and (MAT1102 or ENM1600)
Second Major or Minor or Elective	3	1			3	1	
Choose one of the following courses:							
SCI3302 Work-Integrated-Learning #	3	1,2,3	3	1,2,3			Pre-requisite: Completion of 2nd year (or 2 years full time study in a relevant area)
OR							
Second Major or Minor or Elective	3	1			3	1	
CLI3302 Adaptation to Climate Change					3	2	
Second Major or Minor or Elective (recommended REN3302 Sustainable Resource Use)	3	2			3	2	
STA3301 Statistical Models >	3	2			3	2	Pre-requisite: STA3300 or approval of examiner or Students must have completed STA8170 or STA6200 and be enrolled in one of the following Programs: GCSC or GDSI or MSCN or MADS or MSCR or DPHD.
Choose one of the following courses:							
SCI3302 Work-Integrated-Learning #	3	1,2,3	3	1,2,3			Pre-requisite: Completion of 2nd year (or 2 years full time study in a relevant area)
Second Major or Minor or Elective	3	2			3	2	

#### Footnotes

- + The Springfield on-campus offer is not available in 2023.  
£ In Semester 3, 2023 this course will be delivered as a Transition (9 week) semester, commencing on 13 November 2023 and concluding on 12 January 2024  
§ Unavailable online in S3 2023  
@ This course is not available in 2023  
\* WAT2202 Catchment and Water Resources Management has a highly recommended residential school for on-campus and external students  
# SCI3302 Work-Integrated-Learning is a core course and must be completed  
> Unavailable Semester 2, 2023 Toowoomba On-campus

## Recommended enrolment pattern - Climate Science Major - commencing in Semester 2

Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)		
	Year	Sem	Year	Sem	Year	Sem	
Year 1							
CMS1100 Communicating in the Sciences	1	1			1	1,2	
STA1003 Fundamental Statistics §	1	1,2			1	1,2,3	Enrolment is not permitted in STA1003 if STA2300 or STA8170 or STA6200 or STA1004 has been previously completed.



Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)		
	Year	Sem	Year	Sem	Year	Sem	
							Students enrolled in the BACT, or undertaking the Accounting Major in the BBCM, are not eligible for enrolment.
MAT1100 Foundation Mathematics	1	2			1	2	Enrolment is not permitted in MAT1100 if ENM1500 or MAT2100 or MAT1102 or ENM1600 or ENM2600 has been previously completed
Second Major or Minor or Elective	1	2			1	2	
REN1201 Environmental Studies <sup>+</sup>	1	1			1	1	Enrolment is not permitted in REN1201 if REN8101 has been previously completed.
CLI1110 Weather and Climate	1	1			1	1	
SCI1001 Succeeding in Science	1	1			1	1	
CSC1401 Foundation Programming <sup>£</sup>	1	1,2,3			1	1,2,3	
Year 2							
Second Major or Minor or Elective (recommended WAT2202 Catchment and Water Resources Management) <sup>@*</sup>	2	2	2	2			
CLI2201 Climate Change and Variability					2	2	
IDK2203 Indigenous Environmental Perspectives and Knowledge	2	2			2	2	
STA3301 Statistical Models <sup>&gt;</sup>	2	2			2	2	Pre-requisite: STA3300 or approval of examiner or Students must have completed STA8170 or STA6200 and be enrolled in one of the following Programs: GCSC or GDSI or MSCN or MADS or MSCR or DPHD.
Second Major or Minor or Elective (recommended PHY1104 Physics 1)	2	1			2	1	
MAT1102 Algebra and Calculus I	2	1			2	1	
Second Major or Minor or Elective (recommended ENV2105 Applied Chemistry and Microbiology)	2	1			2	1	
Second Major or Minor or Elective	2	1			2	1	
Year 3							
CLI3302 Adaptation to Climate Change					3	2	
Second Major or Minor or Elective (recommended REN3302 Sustainable Resource Use)	3	2			3	2	
MAT2100 Algebra and Calculus II	3	2			3	2	Pre-requisite: MAT1102 or MAT1502 or ENM1600 or Students must be enrolled in the following program: MSCN or MEPR or BSED
Choose one of the following courses:							
SCI3302 Work-Integrated-Learning <sup>#</sup>	3	1,2,3	3	1,2,3			Pre-requisite: Completion of 2nd year (or 2 years full time study in a relevant area)
OR							
Second Major or Minor or Elective	3	2			3	2	
CLI3301 Climate and Environment Risk Assessment					3	1	
STA2301 Distribution Theory	3	1			3	1	Pre-requisite: (STA2300 or STA1003 or equivalent) and (MAT1102 or ENM1600)
Second Major or Minor or Elective	3	1			3	1	

Course	Year of program and semester in which course is normally studied						Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)		
	Year	Sem	Year	Sem	Year	Sem	
Choose one of the following courses:							
SCI3302 Work-Integrated-Learning #	3	1,2,3	3	1,2,3			Pre-requisite: Completion of 2nd year (or 2 years full time study in a relevant area)
OR							
Second Major or Minor or Elective	3	1			3	1	

#### Footnotes

- § Unavailable online in S3 2023  
+ The Springfield on-campus offer is not available in 2023.  
£ In Semester 3, 2023 this course will be delivered as a Transition (9 week) semester, commencing on 13 November 2023 and concluding on 12 January 2024  
@ This course is not available in 2023  
\* WAT2202 Catchment and Water Resources Management has a highly recommended residential school for on-campus and external students  
> Unavailable Semester 2, 2023 Toowoomba On-campus  
# [SCI3302 Work-Integrated-Learning](#) is a core course and must be completed

### Recommended enrolment pattern - Ecology and Conservation Major - commencing in Semester 1

Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)			
	Year	Sem	Year	Sem	Year	Sem		
Year 1								
REN1201 Environmental Studies <sup>++</sup>	1	1			1	1		Enrolment is not permitted in <a href="#">REN1201</a> if <a href="#">REN8101</a> has been previously completed.
CLI1110 Weather and Climate	1	1			1	1		
SCI1001 Succeeding in Science	1	1			1	1		
Second Major or Minor or Elective (recommended BIO1101 Biology 1) <sup>^</sup>	1	1	1	1			HR	
CMS1100 Communicating in the Sciences	1	1			1	1,2		
STA1003 Fundamental Statistics <sup>§</sup>	1	1,2			1	1,2,3		Enrolment is not permitted in <a href="#">STA1003</a> if <a href="#">STA2300</a> or <a href="#">S TA8170</a> or <a href="#">STA6200</a> or <a href="#">STA1004</a> has been previously completed. Students enrolled in the BACT, or under taking the Accounting Major in the BBCM, are not eligible for enrolment.
MAT1100 Foundation Mathematics	1	2			1	2		Enrolment is not permitted in <a href="#">MAT1100</a> if <a href="#">ENM1500</a> or <a href="#">MAT2100</a> or <a href="#">MAT1102</a> or <a href="#">ENM1600</a> or <a href="#">ENM2600</a> has been previously completed
Second Major or Minor or Elective	1	2			1	2		
Year 2								
REN2200 Ecology for Sustainability	2	1			2	1		Enrolment is not permitted in <a href="#">REN2200</a> if <a href="#">REN8202</a> has been previously completed.
ENV2105 Applied Chemistry and Microbiology	2	1			2	1		
BIO2100 The Australian Biota <sup>+</sup>	2	1	2	1			HR	

Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)			
	Year	Sem	Year	Sem	Year	Sem		
Second Major or Minor or Elective	2	1			2	1		
Second Major or Minor or Elective (recommended BIO2103 Biology 2) <sup>\$</sup>	2	2	2	2			HR	
Second Major or Minor or Elective (recommended BIO2219 Genetics)	2	2			2	2		
IDK2203 Indigenous Environmental Perspectives and Knowledge	2	2			2	2		
REN2201 Ecological Methods <sup>*</sup>	2	2	2	2			M	Pre-requisite: <a href="#">STA1003</a>
Year 3								
Choose one of the following courses:								
<a href="#">SCI3302 Work-Integrated-Learning</a> <sup>#</sup>	3	1,2,3	3	1,2,3				Pre-requisite: Completion of 2nd year (or 2 years full time study in a relevant area)
OR								
Second Major or Minor or Elective	3	1			3	1		
<a href="#">REN3103 Applied Terrestrial Ecology</a> <sup>*</sup>	3	1	3	1			M	Pre-requisite: <a href="#">STA1003</a> and ( <a href="#">REN2200</a> or <a href="#">REN2201</a> )
<a href="#">REN3104 Applied Freshwater Ecology</a> <sup>*</sup>	3	1	3	1			M	Pre-requisite: <a href="#">STA1003</a> and ( <a href="#">REN2200</a> or <a href="#">REN2201</a> )
Second Major or Minor or Elective	3	1			3	1		
Choose one of the following courses:								
<a href="#">SCI3302 Work-Integrated-Learning</a> <sup>#</sup>	3	1,2,3	3	1,2,3				Pre-requisite: Completion of 2nd year (or 2 years full time study in a relevant area)
OR								
Second Major or Minor or Elective	3	2			3	2		
<a href="#">REN3301 Biodiversity and Conservation</a>	3	2			3	2		
<a href="#">REN3302 Sustainable Resource Use</a>	3	2			3	2		
Second Major or Minor or Elective (recommended BIO3318 Plant-Microbe Interactions) <sup>**</sup>	3	2	3	2			HR	

#### Footnotes

- ++ The Springfield on-campus offer is not available in 2023.  
<sup>^</sup> BIO1101 Biology 1 has a highly recommended residential school for external students  
<sup>\$</sup> Unavailable online in S3 2023  
<sup>+</sup> Highly recommended residential school for on-campus and external students  
<sup>\$</sup> BIO2103 Biology 2 has a highly recommended residential school for on-campus and external students  
<sup>\*</sup> Mandatory residential school for on-campus and external students  
<sup>#</sup> SCI3302 Work-Integrated-Learning is a core course and must be completed  
<sup>\*\*</sup> BIO3318 Plant Microbe Interactions has a highly recommended residential school for on-campus and external students

## Recommended enrolment pattern - Ecology and Conservation Major - commencing in Semester 2

Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)			
	Year	Sem	Year	Sem	Year	Sem		
Year 1								
CMS1100 Communicating in the Sciences	1	1			1	1,2		

Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)			
	Year	Sem	Year	Sem	Year	Sem		
STA1003 Fundamental Statistics §	1	1,2			1	1,2,3		Enrolment is not permitted in STA1003 if STA2300 or STA8170 or STA6200 or STA1004 has been previously completed. Students enrolled in the BACT, or undertaking the Accounting Major in the BBCM, are not eligible for enrolment.
MAT1100 Foundation Mathematics	1	2			1	2		Enrolment is not permitted in MAT1100 if ENM1500 or MAT2100 or MAT1102 or ENM1600 or ENM2600 has been previously completed
Second Major or Minor or Elective	1	2			1	2		
REN1201 Environmental Studies ++	1	1			1	1		Enrolment is not permitted in REN1201 if REN8101 has been previously completed.
CLI1110 Weather and Climate	1	1			1	1		
SCI1001 Succeeding in Science	1	1			1	1		
Second Major or Minor or Elective (recommended BIO1101 Biology 1) ^	1	1	1	1			HR	
Year 2								
Second Major or Minor or Elective (recommended BIO2103 Biology 2) §	2	2	2	2			HR	
Second Major or Minor or Elective (recommended BIO2219 Genetics)	2	2			2	2		
IDK2203 Indigenous Environmental Perspectives and Knowledge	2	2			2	2		
Second Major or Minor or Elective (recommend BIO3318 Plant Microbe Interactions) **	2	2	2	2			HR	
ENV2105 Applied Chemistry and Microbiology	2	1			2	1		
BIO2100 The Australian Biota +	2	1	2	1			HR	
REN2200 Ecology for Sustainability	2	1			2	1		Enrolment is not permitted in REN2200 if REN8202 has been previously completed.
Second Major or Minor or Elective	2	1			2	1		
Year 3								
Choose one of the following courses:								
SCI3302 Work-Integrated-Learning #	3	1,2,3	3	1,2,3				Pre-requisite: Completion of 2nd year (or 2 years full time study in a relevant area)
OR								
Second Major or Minor or Elective	3	2			3	2		
REN3301 Biodiversity and Conservation	3	2			3	2		
REN3302 Sustainable Resource Use	3	2			3	2		
REN2201 Ecological Methods *	3	2	3	2			M	Pre-requisite: STA1003

Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)			
	Year	Sem	Year	Sem	Year	Sem		
Choose one of the following courses:								
<a href="#">SCI3302 Work-Integrated-Learning</a> <sup>#</sup>	3	1,2,3	3	1,2,3				Pre-requisite: Completion of 2nd year (or 2 years full time study in a relevant area)
OR								
Second Major or Minor or Elective	3	1			3	1		
<a href="#">REN3103 Applied Terrestrial Ecology</a> <sup>*</sup>	3	1	3	1			M	Pre-requisite: <a href="#">STA1003</a> and ( <a href="#">REN2200</a> or <a href="#">REN2201</a> )
<a href="#">REN3104 Applied Freshwater Ecology</a> <sup>*</sup>	3	1	3	1			M	Pre-requisite: <a href="#">STA1003</a> and ( <a href="#">REN2200</a> or <a href="#">REN2201</a> )
Second Major or Minor or Elective	3	1			3	1		

#### Footnotes

- § Unavailable online in S3 2023  
 ++ The Springfield on-campus offer is not available in 2023.  
 ^ [BIO1101 Biology 1](#) has a highly recommended residential school for external students  
 \$ [BIO2103 Biology 2](#) has a highly recommended residential school for on-campus and external students  
 \*\* [BIO3318 Plant Microbe Interactions](#) has a highly recommended residential school for on-campus and external students  
 + Highly recommended residential school for on-campus and external students  
 # [SCI3302 Work-Integrated-Learning](#) is a core course and must be completed  
 \* Mandatory residential school for on-campus and external students

## Recommended enrolment pattern - Water Science Major - commencing in Semester 1

Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)			
	Year	Sem	Year	Sem	Year	Sem		
Year 1								
REN1201 Environmental Studies <sup>++</sup>	1	1			1	1		Enrolment is not permitted in <a href="#">REN1201</a> if <a href="#">REN8101</a> has been previously completed.
CLI1110 Weather and Climate	1	1			1	1		
SCI1001 Succeeding in Science	1	1			1	1		
WAT1101 Introduction to Water Science <sup>* †</sup>	1	1	1	1			HR	
CMS1100 Communicating in the Sciences	1	1			1	1,2		
STA1003 Fundamental Statistics <sup>§</sup>	1	1,2			1	1,2,3		Enrolment is not permitted in <a href="#">STA1003</a> if STA2300 or S TA8170 or <a href="#">STA6200</a> or <a href="#">STA1004</a> has been previously completed. Students enrolled in the BACT, or under taking the Accounting Major in the BBCM, are not eligible for enrolment.
MAT1100 Foundation Mathematics	1	2			1	2		Enrolment is not permitted in <a href="#">MAT1100</a> if <a href="#">ENM1500</a> or <a href="#">MAT2100</a> or <a href="#">MAT1102</a> or <a href="#">ENM1600</a> or <a href="#">ENM2600</a> has been previously completed
Second Major or Minor or Elective	1	2			1	2		

Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)			
	Year	Sem	Year	Sem	Year	Sem		
Year 2								
REN2200 Ecology for Sustainability	2	1			2	1		Enrolment is not permitted in <a href="#">REN2200</a> if <a href="#">REN8202</a> has been previously completed
Second Major or Minor or Elective (recommend ENV2105 Applied Chemistry and Microbiology)	2	1			2	1		
MAT1102 Algebra and Calculus I	2	1			2	1		
Second Major or Minor or Elective (recommend ENV2201 Land Studies)	2	1			2	1		
Second Major or Minor or Elective (recommended CLI2201 Climate Change and Variability)	2	2			2	2		
IDK2203 Indigenous Environmental Perspectives and Knowledge	2	2			2	2		
MAT2100 Algebra and Calculus II	2	2			2	2		Pre-requisite: <a href="#">MAT1102</a> or <a href="#">MAT1502</a> or <a href="#">ENM1600</a> or S tudents must be enrolled in the following program: MScN or MEPR or BSED
WAT2202 Catchment and Water Resources Management *@	2	2	2	2			HR	
Year 3								
Choose one of the following courses:								
SCI3302 Work-Integrated-Learning #	3	1,2,3	3	1,2,3				Pre-requisite: Completion of 2nd year (or 2 years full time study in a relevant area)
OR								
Second Major or Minor or Elective	3	1			3	1		
REN3104 Applied Freshwater Ecology +	3	1	3	1			M	Pre-requisite: <a href="#">STA1003</a> and ( <a href="#">REN2200</a> or <a href="#">REN2201</a> )
WAT3101 Hydrological Modelling and Simulation ^^	3	1			3	1		
Second Major or Minor or Elective	3	1			3	1		
Second Major or Minor or Elective (recommend REN3302 Sustainable Resource Use)	3	2			3	2		
ENV3105 Hydrology	3	2			3	2		
Second Major or Minor or Elective	3	2			3	2		
Choose one of the following courses:								
SCI3302 Work-Integrated-Learning #	3	1,2,3	3	1,2,3				Pre-requisite: Completion of 2nd year (or 2 years full time study in a relevant area)
OR								
Second Major or Minor or Elective	3	2			3	2		

#### Footnotes

- ++ The Springfield on-campus offer is not available in 2023.  
 \* Highly recommended residential school for on-campus and external students  
 † Unavailable in 2023  
 § Unavailable online in S3 2023  
 @ This course is not available in 2023  
 # [SCI3302 Work-Integrated-Learning](#) is a core course and must be completed  
 + Mandatory residential school for on-campus and external students  
 ^^ This course will be offered in 2024

## Recommended enrolment pattern - Water Science Major - commencing in Semester 2

Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)			
	Year	Sem	Year	Sem	Year	Sem		
Year 1								
CMS1100 Communicating in the Sciences	1	1			1	1,2		
STA1003 Fundamental Statistics §	1	1,2			1	1,2,3		Enrolment is not permitted in STA1003 if STA2300 or STA8170 or STA6200 or STA1004 has been previously completed. Students enrolled in the BACT, or undertaking the Accounting Major in the BBCM, are not eligible for enrolment.
MAT1100 Foundation Mathematics	1	2			1	2		Enrolment is not permitted in MAT1100 if ENM1500 or MAT2100 or MAT1102 or ENM1600 or ENM2600 has been previously completed
Second Major or Minor or Elective	1	2			1	2		
REN1201 Environmental Studies ++	1	1			1	1		Enrolment is not permitted in REN1201 if REN8101 has been previously completed.
CLI1110 Weather and Climate	1	1			1	1		
SCI1001 Succeeding in Science	1	1			1	1		
WAT1101 Introduction to Water Science * †	1	1	1	1			HR	
Year 2								
Second Major or Minor or Elective (recommended CLI2201 Climate Change and Variability)	2	2			2	2		
WAT2202 Catchment and Water Resources Management *@	2	2	2	2			HR	
IDK2203 Indigenous Environmental Perspectives and Knowledge	2	2			2	2		
Second Major or Minor or Elective	2	2			2	2		
REN2200 Ecology for Sustainability	2	1			2	1		Enrolment is not permitted in REN2200 if REN8202 has been previously completed.
Second Major or Minor or Elective (recommend ENV2201 Land Studies)	2	1			2	1		
MAT1102 Algebra and Calculus I	2	1			2	1		
Second Major or Minor or Elective (recommend ENV2105 Applied Chemistry and Microbiology)	2	1			2	1		
Year 3								
Second Major or Minor or Elective (recommend REN3302 Sustainable Resource Use)	3	2			3	2		
MAT2100 Algebra and Calculus II	3	2			3	2		Pre-requisite: MAT1102 or MAT1502 or ENM1600 or Students must be enrolled in the following program: MSCN or MEPR or BSED
ENV3105 Hydrology	3	2			3	2		



Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)			
	Year	Sem	Year	Sem	Year	Sem		
Choose one of the following courses:								
<a href="#">SCI3302 Work-Integrated-Learning</a> <sup>#</sup>	3	1,2,3	3	1,2,3				Pre-requisite: Completion of 2nd year (or 2 years full time study in a relevant area)
OR								
Second Major or Minor or Elective	3	2			3	2		
Choose one of the following courses:								
<a href="#">SCI3302 Work-Integrated-Learning</a> <sup>#</sup>	3	1,2,3	3	1,2,3				Pre-requisite: Completion of 2nd year (or 2 years full time study in a relevant area)
OR								
Second Major or Minor or Elective	3	1			3	1		
<a href="#">REN3104 Applied Freshwater Ecology</a> <sup>+</sup>	3	1	3	1			M	Pre-requisite: <a href="#">STA1003</a> and ( <a href="#">REN2200</a> or <a href="#">REN2201</a> )
<a href="#">WAT3101 Hydrological Modelling and Simulation</a> <sup>^^</sup>	3	1			3	1		
Second Major or Minor or Elective	3	1			3	1		

#### Footnotes

- § Unavailable online in S3 2023  
 ++ The Springfield on-campus offer is not available in 2023.  
 \* Highly recommended residential school for on-campus and external students  
 † Unavailable in 2023  
 @ This course is not available in 2023  
 # [SCI3302 Work-Integrated-Learning](#) is a core course and must be completed  
 + Mandatory residential school for on-campus and external students  
 ^^ This course will be offered in 2024

## Recommended enrolment pattern - Wildlife and Pest Management Major - commencing in Semester 1

Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)			
	Year	Sem	Year	Sem	Year	Sem		
Year 1								
AGR1101 Animal Health, Welfare and Behaviour *	1	1	1	1			HR	
REN1201 Environmental Studies ++	1	1			1	1		Enrolment is not permitted in REN1201 if REN8101 has been previously completed.
SCI1001 Succeeding in Science	1	1			1	1		
WLF2101 Management of Wildlife *	1	1	1	1			HR	
Second Major or Minor or Elective (recommend BIO2103 Biology 2) ^	1	2	1	2			HR	
CMS1100 Communicating in the Sciences	1	1			1	1,2		
MAT1100 Foundation Mathematics	1	2			1	2		Enrolment is not permitted in MAT1100 if ENM1500 or MAT2100 or MAT1102 or ENM1600 or ENM2600 has been previously completed
WLF1201 Field Skills for Wildlife, Game and Pest Management			1	2			M	

Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)			
	Year	Sem	Year	Sem	Year	Sem		
Year 2								
Second Major or Minor or Elective (recommended REN2200 Ecology for Sustainability)	2	1			2	1		
STA1003 Fundamental Statistics §	2	1,2			2	1,2,3		Enrolment is not permitted in STA1003 if STA2300 or STA8170 or STA6200 or STA1004 has been previously completed. Students enrolled in the BACT, or under taking the Accounting Major in the BBCM, are not eligible for enrolment.
BIO2100 The Australian Biota *	2	1	2	1			HR	
CLI1110 Weather and Climate	2	1			2	1		
IDK2203 Indigenous Environmental Perspectives and Knowledge	2	2			2	2		
Second Major or Minor or Elective (recommended BIO2219 Genetics)	2	2			2	2		
REN2201 Ecological Methods +	2	2	2	2			M	Pre-requisite: STA1003
WLF2201 Vertebrate Pests and Biosecurity *	2	2	2	2			HR	
Year 3								
Choose one of the following courses:								
SCI3302 Work-Integrated-Learning #	3	1,2,3	3	1,2,3				Pre-requisite: Completion of 2nd year (or 2 years full time study in a relevant area)
OR								
Second Major or Minor or Elective	3	1			3	1		
WLF3101 Principles of Wildlife Management & Sustainable Use					3	1		
Second Major or Minor or Elective	3	1			3	1		
Second Major or Minor or Elective	3	1			3	1		
Choose one of the following courses:								
SCI3302 Work-Integrated-Learning #	3	1,2,3	3	1,2,3				Pre-requisite: Completion of 2nd year (or 2 years full time study in a relevant area)
OR								
Second Major or Minor or Elective	3	2			3	2		
Second Major or Minor or Elective (recommended WLF3201 Captive Wildlife Management) ** §	3	2	3	2			HR	
Second Major or Minor or Elective (recommended REN3301 Biodiversity and Conservation)	3	2			3	2		
AGR3302 Sensors and Technology in Animal Production	3	2	3	2			HR	

#### Footnotes

- \* Highly recommended residential school (ONC students and EXT students attend Residential School)
- ++ The Springfield on-campus offer is not available in 2023.
- ^ [BIO2103 Biology 2](#) has a highly recommended residential school for on-campus and external students
- § Unavailable online in S3 2023
- + Mandatory residential school for on-campus and external students
- # [SCI3302 Work-Integrated-Learning](#) is a core course and must be completed
- \*\* [WLF3201 Captive Wildlife Management](#) has a highly recommended residential school for on-campus and external students

\$ WLF3201 Captive Wildlife Management will commence in 2024

## Recommended enrolment pattern - Wildlife and Pest Management Major - commencing in Semester 2

Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)			
	Year	Sem	Year	Sem	Year	Sem		
Year 1								
Second Major or Minor or Elective (recommend BIO2103 Biology 2) ^	1	2	1	2			HR	
CMS1100 Communicating in the Sciences	1	1			1	1,2		
MAT1100 Foundation Mathematics	1	2			1	2		Enrolment is not permitted in MAT1100 if ENM1500 or MAT2100 or MAT1102 or ENM1600 or ENM2600 has been previously completed
WLF1201 Field Skills for Wildlife, Game and Pest Management			1	2			M	
AGR1101 Animal Health, Welfare and Behaviour *	1	1	1	1			HR	
REN1201 Environmental Studies ++	1	1			1	1		Enrolment is not permitted in REN1201 if REN8101 has been previously completed.
SCI1001 Succeeding in Science	1	1			1	1		
WLF2101 Management of Wildlife *	1	1	1	1			HR	
Year 2								
IDK2203 Indigenous Environmental Perspectives and Knowledge	2	2			2	2		
Second Major or Minor or Elective (recommended BIO2219 Genetics)	2	2			2	2		
REN2201 Ecological Methods +	2	2	2	2			M	Pre-requisite: STA1003
WLF2201 Vertebrate Pests and Biosecurity *	2	2	2	2			HR	
Second Major or Minor or Elective (recommended REN2200 Ecology for Sustainability)	2	1			2	1		
STA1003 Fundamental Statistics §	2	1,2			2	1,2,3		Enrolment is not permitted in STA1003 if STA2300 or STA8170 or STA6200 or STA1004 has been previously completed. Students enrolled in the BACT, or under taking the Accounting Major in the BBCM, are not eligible for enrolment.
BIO2100 The Australian Biota *	2	1	2	1			HR	
CLI1110 Weather and Climate	2	1			2	1		
Year 3								
Choose one of the following courses:								
SCI3302 Work-Integrated-Learning #	3	1,2,3	3	1,2,3				Pre-requisite: Completion of 2nd year (or 2 years full time study in a relevant area)
OR								
Second Major or Minor or Elective	3	2			3	2		

Course	Year of program and semester in which course is normally studied						Residential school	Enrolment requirements
	On-campus (ONC)		External (EXT)		Online (ONL)			
	Year	Sem	Year	Sem	Year	Sem		
Second Major or Minor or Elective (recommended WLF3201 Captive Wildlife Management) ** \$	3	2	3	2			HR	
Second Major or Minor or Elective (recommended REN3301 Biodiversity and Conservation)	3	2			3	2		
<a href="#">AGR3302 Sensors and Technology in Animal Production</a>	3	2	3	2			HR	
Choose one of the following courses:								
<a href="#">SCI3302 Work-Integrated-Learning</a> #	3	1	3	1				Pre-requisite: Completion of 2nd year (or 2 years full time study in a relevant area)
OR								
Second Major or Minor or Elective	3	1			3	1		
WLF3101 Principles of Wildlife Management & Sustainable Use					3	1		
Second Major or Minor or Elective	3	1			3	1		
Second Major or Minor or Elective	3	1			3	1		

#### Footnotes

- ^ [BIO2103 Biology 2](#) has a highly recommended residential school for on-campus and external students
- \* Highly recommended residential school (ONC students and EXT students attend Residential School)
- ++ The Springfield on-campus offer is not available in 2023.
- + Mandatory residential school for on-campus and external students
- \$ Unavailable online in S3 2023
- # [SCI3302 Work-Integrated-Learning](#) is a core course and must be completed
- \*\* WLF3201 Captive Wildlife Management has a highly recommended residential school for on-campus and external students
- \$ WLF3201 Captive Wildlife Management will commence in 2024