

# UTS: SCIENCE

## BACHELOR OF SCIENCE

### WHY THE BACHELOR OF SCIENCE?

We have restructured our Bachelor of Science (BSc) to provide greater flexibility, allowing you to choose your major field of study after first year, when you have experienced a range of disciplines. You will have to choose your general area of interest by choosing one of three Foundation streams, namely Mathematical, Physical, or Life and Environmental Sciences in first year.

However at the end of first year you will have a range of possible major study areas to choose from (shown below) depending on which Foundation you chose. If you take a specified major you will graduate with an award identified by that major (shown below). However if you choose not to select a specific major, but instead select a range of second and third year subjects to tailor your study according to your interests you will graduate with a BSc award.

<b>Foundation Stream</b>	<b>Award</b>
Mathematical Sciences	Bachelor of Science in Mathematics Bachelor of Science in Statistics
Physical Sciences	Bachelor of Science in Applied Chemistry Bachelor of Science in Applied Physics Bachelor of Science in Nanotechnology
Life and Environmental Sciences	Bachelor of Science in Marine Biology Bachelor of Science in Environmental Forensics Bachelor of Science in Environmental Biology Bachelor of Science in Urban Ecology Bachelor of Science in Biotechnology Bachelor of Science in Biomedical Science Bachelor of Science in Medical Science

All study programs contain 24 credit points (typically 4 subjects) of free electives, which can be Science subjects or submajors in your area of science specialised study, or in a related science area (e.g. a Nanotechnology submajor in your Applied Physics degree). Alternatively, you could take subjects or a submajor from another faculty, for example a business or communication submajor.

### HOW TO APPLY

If you think you know already which area you want to focus in you can select the UAC code for the relevant BSc major - you can still change your mind at the end of first year within the choices available from your foundation stream.

However if you are unclear of your preferred specialization you can select the code for the BSc (Flexible). Some major programs within the BSc are identical to those of separate named degrees (eg BSc in Medical Science and B Medical Science) however the entry cutoffs may be quite different and you may wish to consider preferencing both courses.

The entry cutoffs for different majors within the BSc may also be different and you may also wish to preference both the BSc (Flexible) and your preferred BSc specialization.

<b>UAC Code</b>	<b>Course</b>
607001	BSc (Flexible)
607003	BSc (Mathematics)
607003	BSc (Statistics)
607005	BSc (Chemistry)
607007	BSc (Nanotechnology)
607009	BSc (Physics)
607011	BSc (Environmental Biology)
607011	BSc (Environmental Forensics)
607011	BSc (Marine Biology)
607013	BSc (Urban Ecology)
607015	BSc (Biotechnology)
607015	BSc (Biomedical Science)
607015	BSc (Medical Science)

What you will learn and your career options will depend on the major or subject choices you make. An outline of one of the major programs are provided overpage.

### HONOURS

The Bachelor of Science (Honours) is available to eligible students with an additional one year of full time study.

### DIPLOMA IN SCIENTIFIC PRACTICE

The Diploma in Scientific Practice, a period of industrial training is available with an additional year of full-time study. It is not offered to international students.

### COMBINED DEGREES

There are also combined degree programs in all specialisations (except Urban Ecology) with:

- Laws
- Business
- Engineering
- International Studies

# UTS: ENVIRONMENTAL BIOLOGY

## BACHELOR OF SCIENCE IN ENVIRONMENTAL BIOLOGY

### WHAT WILL I LEARN?

This major focuses on the base components of natural systems, how these systems work, and how they can be helped to recover from the effects of environmental changes, development and pollution. This requires a thorough understanding of the way living organisms function in terrestrial and aquatic environments, and acquisition of skills to detect and assess detrimental effects on their function and the environment. Students learn these concepts and skills through a dynamic combination of theory, field and laboratory experiences.

### CAREER OPTIONS

As a graduate of this course, career options wait for you with major employers such as National Parks and Wildlife, state environmental protection authorities, and other state departments, such as Agriculture, Land & Water Conservation. Our graduates are also employed by local councils as environmental officers, in resource industries and consulting firms; they are teachers at schools and at TAFE, and research officers in CSIRO and universities. Many of them continue their training by undertaking an Honours year or postgraduate studies (Master of Science or PhD).

### PROFESSIONAL RECOGNITION

This course has been designed so that graduates will meet the conditions required for membership with the Australian Institute of Biology Inc

### FULL TIME PROGRAM

#### AUTUMN SEMESTER

Statistical Design and Analysis	6cp
Chemistry 1	6cp
Cells Biology & Genetics	6cp
The Biosphere	6cp

#### SPRING SEMESTER

Human Anatomy & Physiology	6cp
Chemistry 2	6cp
Biocomplexity	6cp
Physical Aspects of Nature	6cp

#### YEAR 2

##### AUTUMN SEMESTER

Ecology	6cp
Experimental Design & Sampling	6cp
Geological Processes	6cp
Elective	6cp

##### SPRING SEMESTER

Animal Behaviour & Physiology	6cp
Plant Physiology & Ecophysiology	6cp
Electives	12cp

#### YEAR 3

##### AUTUMN SEMESTER

GIS & Remote Sensing	6cp
Aquatic Ecology	6cp
Wildlife Ecology	6cp
Elective	6cp

##### SPRING SEMESTER

Environmental Protection & Management	6cp
Stream & Lake Assessment	6cp
Advances in Ecology	6cp

*Any one of the following:*

Semi Arid Ecology	6cp
Forest & Mountain Ecology	6cp

### HONOURS

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### COURSE CODES...

UTS course code: C10242

UAC code: 607011

Duration: 3 years full time

Location: City Campus

Assumed Knowledge: English, Mathematics (2 Unit) and any two units of science.

### NEED TO KNOW MORE??

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