

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.

Foundation Stream	Award
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.

UAC Code	Course
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: URBAN ECOLOGY

BACHELOR OF SCIENCE IN URBAN ECOLOGY

WHAT WILL I LEARN?

This major provides you with the skills to address environmental issues in urban ecosystems through interdisciplinary studies involving natural and built environments. Offered by the Faculty of Science and the Faculty of Design, Architecture and Building, the course focuses on the plants, animals and micro-organisms of terrestrial and aquatic ecosystems in natural and urban areas, and the interactions of these living organisms with the non-living components of ecosystems. The course includes theory, laboratory sessions, fieldwork and projects.

CAREER OPTIONS

You could follow a career as a biological scientist, ecologist or environmental manager in private enterprise or with local, state and commonwealth agencies. Such agencies include those managing parks, reserves and bushland, national parks and wildlife, environment protection, water and catchments. Career opportunities are also available as an environmental and landscape consultant, in botanic gardens and museums, as a manager of commercial open space areas, with the Australian Quarantine Inspection Service or as an education officer. You may continue your training by undertaking an Honours year or postgraduate studies (MSc and PhD).

In all of the environmental sciences majors, you will have a wide choice of career options with either the government or the private sector. You could follow a career as a biological scientist, ecologist, environmental manager, education officer, environmental officers, research officers, marine biologist, landscape consultant in botanic gardens and museums, manager of commercial open space,

environmental consultants and many more.

You could work in environmental protection, natural resource management, environmental policy management, monitoring, planning and assessment with a number of agencies, e.g. Australian Quarantine, National Parks and Wildlife, state environmental protection authorities, and other state departments, such as Agriculture, Land & Water Conservation, CSIRO, TAFE, schools and universities.

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
Built Environmental Design	6cp

SPRING SEMESTER

Landscape Design & Plant Culture	6cp
Plant Physiology & Ecophysiology	6cp
Planning & Design process	6cp
Elective	6cp

YEAR 3

AUTUMN SEMESTER

GIS & Remote Sensing	6cp
Aquatic Ecology	6cp
Management of Plants in the Landscape	6cp
Elective	6cp

SPRING SEMESTER

Environmental protection & Management	6cp
Urban Ecology Project	6cp
Electives	12cps

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COURSE CODES...

UTS course code: C10242

UAC code: 607013

Duration: 3 years full time

Location: City Campus

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

NEED TO KNOW MORE??

Course Director

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Faculty of Science

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