Bachelor of Environmental Science

This program is concerned with the evaluation of all aspects of the environment.

This program focuses on the atmosphere (air), hydrosphere (oceans, rivers and lakes), biosphere (plants, animals and micro-organisms) and the lithosphere (soil).

You’ll learn in detail about the processes that occur in both natural and degraded environments. You can choose to complete a minor in either environmental biology or environmental chemistry.

There is also the opportunity to choose to specialise in a second minor area of study or broaden your knowledge by selecting courses from areas including geosciences or geospatial science.

In this program you’ll:
- gain considerable hands-on experience with equipment, both in the laboratory and in the field. This is done in small groups to give each student equal opportunity
- take part in field trips during second and third years (up to four field trips per semester)
- be given the opportunity to work on collaborative projects with industry. This generally involves working in small teams.

Considerable emphasis is placed on enabling you to settle into this program and providing additional academic help, where needed.

Industry connections
In second and third year regular field trips are a feature of this program. They involve teamwork and are sometimes carried out in association with government agencies, environmental agencies and consultancies.

All students also engage with industry in their final-year project. There is an opportunity to undertake a team research project in Vietnam.

Career outlook
The training and the experiences provided by this program are modelled on the type of work likely to be required after graduation. This ensures graduates are highly employable.

Graduates may find employment in environmental consultancies, government agencies, resource management, research and education, and the mining/manufacturing industry.

Typical tasks graduates perform include:
- sample collection and analysis
- waste management
- ongoing monitoring and assessment
- environmental impact assessment
- site remediation
- policy development
- cleaner production
- environmental education and training
- environmental auditing.

Work may involve report writing, laboratory work, field work, research or a combination of these.

Graduates of the program are now in senior positions in several areas, including the Environmental Protection Agency (EPA), Department of Environment, Land, Water and Planning (DELWP), the Commonwealth Scientific and Industrial and Research Organisation (CSIRO), catchment management authorities and agricultural and research agencies.

Professional recognition
All graduates will be eligible for membership of the Environment Institute of Australia and New Zealand.

International opportunities
You may take one or more semesters at an overseas institution through the Education Abroad program at more than 120 partner universities.

Past students have studied in places such as Denmark (Technical University of Denmark), Canada (Concordia), Sweden (Lund University), Holland (Delft University of Technology) and the United States (Buffalo State University).

Pathways
RMIT graduates of the Diploma of Conservation and Land Management may be eligible to apply for exemptions of up to one year.

An Honours year is available.
Program structure

Year 1
You’ll study fundamental chemistry, biology and physical energetics related to the environment. Your studies will also include the processes involved in the development of the Earth, mathematics, scientific communication and an introduction to geospatial science.

Year 2
In second year, you will study the processes that occur in the hydrosphere, biosphere and lithosphere. You’ll also take part in several excursions each semester.
You will also start to study courses from your chosen minor of either environmental biology or environmental chemistry. There’s also the opportunity to select courses from your second minor area of study.

Year 3
You will continue with your minor area of study and further explore processes occurring in the atmosphere.
A week-long field trip in first semester will help you learn how to work effectively in teams on a set project. This project investigates the health of a local river and lake.
The Science Project course in the second semester gives you the opportunity to work in a team on a project of your choice, generally with an industry partner.
The Professional Environmental Scientist course will prepare you to work in the environment industry.

Environmental Biology Minor elective examples
- Plant Structure and Function
- Animal Diversity
- Plant Diversity
- Animal Structure and Function
- Marine Biology
- Environmental Biotechnology
- Ecotoxicology

Environmental Chemistry Minor elective examples
- Environmental Chemistry 2A
- Environmental Chemistry 2B
- Environmental Chemistry 3A
- Environmental Chemistry 3B

Entrance requirements
Successful completion of an Australian Year 12 senior secondary certificate of education or equivalent.

Prerequisites
Current Year 12 prerequisites units 3 and 4 – a study score of at least 20 in one of Mathematics (any); and a study score of at least 25 in any English (except EAL) or at least 30 in English (EAL).

Additional information
Non-Year 12 applicants may submit additional information if they would like it to be considered. For semester 1 intake, this can be completed through the VTAC Personal Statement online. For semester 2 intake, this can be completed through the personal statement in the Apply Direct application.