2019 Undergraduate Environment

Cloud Campus | Melbourne | Geelong | Warrnambool

Environmental engineering
Environmental management and sustainability
Environmental science
Fisheries and aquaculture
Marine and freshwater biology
Wildlife and conservation biology
If you’re interested in sustainability, the wellbeing of our planet and the future of its flora and fauna, one of our specialised environment courses could be for you.

Environment at Deakin

Get your hands dirty
All of Deakin’s environment courses have a focus on practical experience and offer hands-on learning experiences from year one, ensuring you graduate skilled and work-ready. Depending on your course, you may learn skills such as measuring the health of freshwater environments, coastal planning, surveying wildlife populations, conducting sustainability assessments and studying seals and penguins.

Students have the opportunity to undertake work experience in a range of settings, including community environment parks and sustainability centres, urban parks, or in businesses, where students analyse waste management programs and develop waste management strategies and environmental improvement programs.

Find out more and see students’ experiences on the ‘Get into the Wild@Deakin’ blog: deakin-environment.tumblr.com.

Valuable links with industry
Our staff have close links with industry and relationships with organisations such as the Department of Environment, Land, Water and Planning (DELWP), Parks Victoria and the Department of Primary Industries to ensure our courses are up-to-date with industry trends.

Environment courses at Deakin have a core professional placement unit, with students previously completing placements in a range of high-profile organisations, including Zoos Victoria, Parks Victoria, Department of Environment, Land, Water and Planning, Biosis – Environmental Consulting, Australian Institute of Marine Science, as well as local, state and federal government.

Be a part of a thriving research culture
Deakin supports one of the world’s most prestigious environmental and marine science research programs. Our ecologists are helping to protect Australia’s vulnerable flora and fauna from disease, rapid development and climate change. Many of our undergraduate students go on to undertake research degrees at Deakin. Two key pieces of research currently being conducted involve long-term conservation efforts showing signs of recovery in global sea turtle populations and finding solutions for sustainability in land systems considering cross-cutting issues such as climate change, food security, nature conservation, water resources, energy, land degradation and ecosystem services. Visit deakin.edu.au/life-environmental-sciences/research for information.
Experience leading-edge facilities and equipment
Your learning is enhanced by a range of state-of-the-art facilities and equipment, such as a Geographic Information Systems (GIS) lab, wildlife tracking technology, aquaculture facilities, infrared motion sensing wildlife cameras, high-tech research labs, research vessels and remotely operated underwater vehicles. Deakin is also a significant partner at the Queenscliff Marine Research Centre, providing students with access to an extensive flow-through system and labs, as well as a variety of nearby marine and coastal ecosystems.

Secure your place in the future of work
The hands-on experience gained in Deakin’s environment courses, combined with the theoretical knowledge learned, provides graduates with a mix of skills highly valued by employers. Our graduates have found exciting and diverse opportunities to work in the public, private and not-for-profit sectors in a wide range of fields, including, but not limited to, wildlife conservation and management, environmental management and sustainability, fisheries and aquaculture, marine biology, agriculture and natural resources management.

Get work ready – we are the #1 university for skills development
Ranked the number one university for skills development in Victoria*, Deakin’s course curriculum integrates real-world expertise with practical skills to give our students a competitive edge.

* 2016 Student Experience Survey

Experience marine life first-hand
Marine researchers have developed Deakin’s purpose-built research vessel Yolla – which houses one of the most advanced sonar systems in the world – and have created a detailed continuous map of Victoria’s sea floor habitats. This data is playing a key role in supporting fishery and conservation management of the state’s marine environments. Deakin environment students get to participate in a range of practical activities, such as identifying marine plants and animals using the images generated by remotely controlled vehicles on the sea floor.

Travel the world
Deakin offers various overseas programs, including trimester abroad, short-term partner programs, faculty-led study programs, overseas internships and international volunteering opportunities. Deakin environment students have studied in nearly every continent in the world. Each year, students have the opportunity to enrol in the Global Environmental Placement, which provides options to work with turtles in Costa Rica, lions or sharks in South Africa, dolphins in Tanzania, elephants in Sri Lanka, lion fish in Thailand, as well as many other options.

deakin.edu.au/students/faculties/sebe/international-study-tours

deakin.edu.au/sebe/global

Join the Peer Support Network Program
The Faculty of Science, Engineering and Built Environment offers a Peer Support Network Program as part of its commitment to providing new students with the best possible transition into university life. By joining the program, first-year students receive support and guidance from more senior students in their course, helping them to become familiar with the support services and facilities available, while gaining useful tips about how to make the most of their time while studying at Deakin.

deakin.edu.au/sebe/students/peer-support-network
Disciplines

At Deakin we talk about disciplines, also known as study areas. You might be interested in a particular discipline, but uncertain about the course that’s right for you. Read through these discipline descriptions and, if they interest you, go to the relevant course in the following pages to find out more about the course, what you’ll study, work experience opportunities and the types of careers it may lead to. You can also visit deakin.edu.au for detailed course information, including a description of the units within each degree.

Environmental engineering
Learn how to develop practical engineering applications to protect our environment. This rapidly growing field of expertise will lead to a range of areas, including energy, water, construction and waste management.
See Bachelor of Environmental Engineering (Honours), page 8.

Environmental management and sustainability
Environmental management and sustainability focuses on finding solutions to the world’s most pressing environmental problems. Using a multidisciplinary approach, you’ll have the opportunity to influence policy and planning across a range of environmental areas, education and change.
See...
Bachelor of Environmental Science (Environmental Management and Sustainability), page 6
Bachelor of Environmental Science (Honours), page 12.

Environmental science
Play a vital role in creating a sustainable future for the earth. Our courses in environmental science have a strong focus on fieldwork and practical experiences. We have diverse study areas including environmental management, sustainability, wildlife and conservation, marine health and ecosystems. Gain experience through innovative, practical learning from day one. You’ll get to take part in field trips, use our excellent facilities and equipment and have direct access to the environment you’ll work in.
See...
Bachelor of Environmental Science (Environmental Management and Sustainability), page 6
Bachelor of Environmental Science (Marine Biology), page 8
Bachelor of Environmental Science (Wildlife and Conservation Biology), page 7
Bachelor of Environmental Science (Honours), page 12.

Fisheries and aquaculture
Gain comprehensive training in fisheries resource management, aquaculture management and fisheries biology. Studying fisheries and aquaculture opens up field trip opportunities, professional practice activities and hands-on skills that help make you work-ready when you graduate. Our location on Victoria’s coast, including a world-class, fully recirculating marine and freshwater aquaculture system at Warrnambool, and access to an extensive flow-through system at the QueenSLR! Marine Research Centre, provides you with a distinct learning experience. Our expert staff in fish nutrition and physiology have built strong industry links with world leaders in fish food production and also with the Atlantic salmon industry in Tasmania, allowing our students to learn the latest research.
See...
Bachelor of Science, page 10
Bachelor of Science (Honours), page 10.

Freshwater biology
Freshwater biology is the study of freshwater ecosystems and the relationships between freshwater organisms and their physical and chemical environment. This major provides students with an understanding of current management issues for rivers, lakes and wetlands, together with the knowledge and skills to manage freshwater ecosystems and resources. For example, the complex social, economic and ecological issues associated with environmental flow allocations. These skills and knowledge are provided during fieldwork opportunities, including site visits with local catchment managers, and via industry placements.
See...
Bachelor of Science, page 10
Bachelor of Science (Honours), page 10.

Marine biology
Study how marine organisms interact with living and non-living environments. Discover the relationships between organisms and their physical and chemistry environments, and how marine and freshwater ecosystems function. You will learn about these interactions together with the remarkably rich and unique biological diversity of Australian marine environments in units such as Blue Planet – Water and Life, Marine Botany, Marine Invertebrates, Diversity of Fishes and Marine and Coastal Ecosystems. Learn about the importance of human interactions and management in units such as Human Impacts-Pollution, Environmental Planning-Catchments to Coasts and Water Quality and Ecological Health.
Each year, students can choose to participate in a full-island count (a full island count) of newborn Australian fur seal pups at the Kanorewa Island field site, part of long-term monitoring to assess the productivity of the Bass Strait ecosystem.
See...
Bachelor of Environmental Science (Marine Biology), page 8
Bachelor of Environmental Science (Honours), page 12.

Wildlife and conservation biology
Learn both theoretical and practical expertise in subjects from biodiversity and wildlife ecology through to landscape habitat and park management. Graduate with the skills to professionally contribute to the study and management of wildlife populations in Australia and overseas.
The first of its kind to be offered in Victoria, this course features field-based experiences and regular practical classes, as well as a professional work placement. The hands-on focus will give you the useful and real world experience to graduate with a work-ready resume.
See...
Bachelor of Environmental Science (Wildlife and Conservation Biology), page 7
Bachelor of Environmental Science (Honours), page 12.
Bachelor of Environmental Science (Environmental Management and Sustainability)

Develop the skills and knowledge to enable you to manage the interaction between people and the environment, at the same time meeting society’s needs for clean water, fresh air and healthy soils through the sustainable use of natural resources, environments and ecosystem services.

Design your own career direction in environmental management by choosing elective units in areas such as wildlife management, coastal and marine management, environmental sustainability, natural resources management, environmental protection and environmental policy and planning.

Careers

Diverse career opportunities include environmental planning, environmental policy, sustainability, environmental protection, climate change adaptation and mitigation, industry-based environmental management, waste management, environmental education, catchment management, water resource management, land rehabilitation, pollution control, environmental science, wildlife management, conservation and coastal and park management.

Work experience

Professional Practice is a core unit that allows you to complete a placement for a minimum of two weeks (at least 80 hours) within a relevant, course-related organisation. A number of elective units also offer you the opportunity to gain extensive practical experience, including undertaking a Global Environment Placement, Global Science Placement, Industry Based Learning, Career Placement or a STEM Placement.

Course structure

24 credit points, including 15 core units and nine elective units. An honours year is available for high-achieving students upon completion of this degree.

deaun.edu.au/study-at-deakin/find-a-course/environmental-management-and-sustainability

I travelled to Costa Rica as part of my course to conduct sea turtle conservation research. We transported hatched turtle eggs to a hatchery we had built to preserve declining populations. The impact of tourism on turtle birthing rates were monitored and recorded. It was nothing short of an incredible experience and I’m very grateful to have been provided with the opportunity.

Jason Prasad
Bachelor of Environmental Science (Environmental Management and Sustainability) student

Hands-on learning

First-year wildlife and conservation biology students have the opportunity to visit Cape Conran and, working with Deakin staff and our industry partners in the DELWP Southern Ark team, students catch small mammals and learn the skills involved in correct handling, identifying, sexing and in many cases, micro-chipping of these animals. Other activities undertaken include GPS and GIS exercises, radio-tracking, camera trapping and bird surveys.

Bachelor of Environmental Science (Wildlife and Conservation Biology)

Deakin’s wildlife and conservation biology course combines theoretical and practical expertise in a range of discipline areas, such as biodiversity, wildlife ecology, landscape and vegetation management, conservation, animal biology and park management.

Get out of the classroom and into nature; learn skills such as handling native animals, measuring the health of freshwater environments, coastal planning, surveying wildlife populations or conducting sustainability assessments.

Careers

Graduate ready to take up challenging roles such as wildlife officer, conservation officer, wildlife manager, park ranger, project officer, research scientist, wildlife biologist, conservation biologist or landscape ecologist.

Work experience

Professional Practice is a core unit that allows you to complete a placement for a minimum of two weeks (at least 80 hours) within a relevant, course-related organisation. A number of elective units also offer you the opportunity to gain extensive practical experience, including undertaking a Global Environment Placement, Global Science Placement, Industry Based learning, Career Placement or a STEM Placement.

Course structure

24 credit points – 17 core units and seven elective units. An honours year is available for high-achieving students upon completion of this degree.

deaun.edu.au/study-at-deakin/find-a-course/wildlife-and-conservation-biology
Our marine biology program provides a unique opportunity to study temperate marine biology in a marine environment that has some of the highest biodiversity in Australia. The course has a strong ecological focus, linking biological and oceanographic processes in the study of marine environments.

Conduct fieldwork and learn in natural marine environments on the Victorian coast. Access world-class facilities and equipment such as a geographic information systems lab (GIS), infrared sensing wildlife cameras and remote-operated underwater research vehicles. The course experience is facilitated by labs that are within close proximity to the coast at both the Warrnambool and Geelong Waurn Ponds Campuses. For example, the Warrnambool Campus is situated within a few kilometres of a Southern Right Whale Nursery at Logan's Beach and penguin colony at Middle Island (also home to the movie ‘Oddball’). The Geelong Waurn Ponds Campus is situated within 30 minutes of the famous Bells Beach and the Queenscliff Marine Research Centre is directly on the water of Swan Bay and just a few short minutes boat ride to the spectacular Pope’s Eye in Port Phillip Bay.

Diverse career opportunities include marine biology tour guide, fishery officer, marine biology consultant, laboratory technician, local government environmental officer, aquaculture manager and sustainability project officer, as well as moving into research or pursuing postgraduate study.

Work experience

Professional Practice is a core unit that gives you the chance to undertake a placement for a minimum of two weeks (at least 80 hours) within a course-related organisation. A number of elective units also offer you the opportunity to gain extensive practical experience, including undertaking a Global Environment Placement, Global Science Placement, Industry Based Learning, Career Placement or a STEM Placement.

Course structure

24 credit points of study – 21 core units and three elective units. An honours year is available for high-achieving students upon completion of this degree.

deeakin.edu.au/study-at-deakin/find-a-course/marine-biology

Bachelor of Environmental Engineering (Honours)

Develop a breadth of knowledge across the environmental engineering discipline and the technical skills to develop sustainable engineering solutions to the challenges faced within this field. In particular, learn the fundamentals of environmental engineering and the natural and physical sciences involved in the discipline, including geography, chemistry, mathematics, environmental science and analysis, marine ecosystems, fluid mechanics, hydrology and hydraulics, waste management, environmental infrastructure, protection, planning and more.

Work experience

You’ll gain industry experience by completing at least 60 days of practical work experience in an engineering workplace, developing and enhancing your understanding of the environmental engineering profession, possible career outcomes and the opportunity to establish valuable professional networks.

Careers

Graduates will be in high demand for employment with engineering firms, land developers, government agencies, consulting firms, and well prepared for careers that address global issues such as climate change, environmental sustainability, waste disposal, recycling, public health, air and water pollution.

Course structure

32 credit points – 31 core units and one elective unit.

deeakin.edu.au/study-at-deakin/find-a-course/environmental-engineering

Marine science research boost

Australian marine science research has received a boost under a new agreement for Deakin to establish a formal presence at the Victorian Government’s Queenscliff Marine Research Centre. The new agreement strengthens capacity for research in this region, with Deakin’s commitment to growing our strong research in marine science across southern Australia, and Victoria in particular, reflecting the importance of our world’s marine resources now and for future generations.
Bachelor of Science

Deakin’s Bachelor of Science is a flexible degree that allows you to explore a diverse range of science-related study areas and specialise in at least one area of interest as you progress through the course. If you’re interested in the environment, you may wish to consider undertaking at least one of the following majors in the Bachelor of Science.

Environmental science
This discipline area focuses on the technical science aspects of environmental science and aims to provide an even balance between environmental studies on the geosphere, hydrosphere, atmosphere and biosphere.

Freshwater biology
Freshwater biology is the study of freshwater ecosystems and the relationships between freshwater organisms and their physical and chemical environment. Focus on understanding and managing rivers, lakes and wetlands, and develop the knowledge and skills to manage freshwater ecosystems and resources, while participating in fieldwork opportunities and industry placements.

Fisheries and aquaculture
The fisheries and aquaculture discipline area looks at fisheries and aquaculture from a global perspective, including topics such as fish markets, nutrition and farm certification processes, the history of Australian fisheries, fisheries methods and impacts of fishing.

Honours in science
The Bachelor of Science (Honours) provides you with a deep understanding of your chosen discipline through research exploration. Choose further studies in biology, chemistry or mathematics.

deakin.edu.au/course/bachelor-science-honours

Global Science and Technology Program

The Global Science and Technology Program at Deakin is designed to add an international experience to your degree, supporting you to develop new skills and a broader world view while studying overseas. Successful applicants will be offered a monetary scholarship to assist with travel costs and will be required to participate in the Deakin Global Citizenship Program.

How to apply
The program is open to current Year 12 students. You apply via a two-stage process. First, add the Global Science and Technology Program to your list of course preferences through VTAC, followed by your undergraduate course of interest as a lower preference. Second, complete the Global Science and Technology Program Supplementary application form, which is available on Deakin’s website.

To see where past students have gone, visit deakin.edu.au/sebe/global.

Research snapshot

Our ecologists are helping to protect Australia’s vulnerable flora and fauna from disease, rapid development and climate change. In the agricultural sphere, a team of experts is focusing on solving productivity problems. In consultation with farmers, scientists are developing sophisticated lab-on-a-chip technology to optimise livestock health.

Water management advice is also being provided to farmers and rural planners both here in Australia and overseas. Through every project and program, our research is driving outcomes that provide solutions to global environmental and sustainability issues.

Find out more at deakin.edu.au/life-environmental-sciences/research.
In my honours year I contributed to the Grampians Long Term Small Mammal Project that has been spanning almost a decade now. My research in the Grampians National Park involved working directly with Parks Victoria and contributing to fire management and biodiversity goals for the region. And our research has helped monitor endangered species that also reside in the park. It has been really fantastic to contribute to overall knowledge and practical management of the environment after four years of study.

Cara Penton
Bachelor of Environmental Science (Wildlife and Conservation Biology) graduate and Global Science and Technology Program participant

Honours in environment

The Bachelor of Environmental Science (Honours) provides you with exposure to a range of possible career paths and a deep understanding of your chosen discipline through research exploration in areas such as environmental management and sustainability; ecological risk assessment, wildlife and conservation biology; behaviour, ecology, evolution, and ecophysiology; marine and freshwater biology; and fisheries and aquaculture.

The coursework component of the honours program provides you with essential theoretical knowledge underpinning robust research, while the research project develops the practical skills necessary to investigate an area of interest through research exploration.

You’ll have the support and supervision of our experienced staff throughout your honours program, and will graduate with skills that provide you with a competitive edge in the job market and an ideal pathway to further study and research.

Courses

Applying to Deakin

How do I apply?

Applying for your undergraduate degree at Deakin couldn’t be easier. Most applications are straightforward and easy to complete. Follow these steps to make the process as simple as possible. Visit deakin.edu.au/courses/how-to-apply.

Find your course

Browse from the hundreds of exciting undergraduate courses we have on offer at deakin.edu.au. Undergraduate courses at Deakin generally begin in March, and some courses also have intakes in July and November.

Once you find the course you’re after, make sure you understand the entry requirements, application methods and application dates.

Understand the entry and documentation requirements

Make sure you understand the entry requirements for your chosen course by reading the course page carefully (online at deakin.edu.au/course or in this booklet). For recent secondary education applicants, in addition to the listed ATAR, some courses may require you to have studied a prerequisite subject/s, while others may also require you to provide extra materials, such as a portfolio or personal statement.

Selection requirements for non-Year 12 applicants may include personal statement, entrance tests as specified, e.g. STAT (Special Tertiary Admissions Test), or the non-academic assessment (for all applicants to teaching courses), supplementary information form, audition, interview or folio presentation.

What type of applicant am I?

Recent secondary education applicant

• Current Year 12 student
• Completed Year 12 in 2017 or 2016
• Interstate Year 12 student
• New Zealand school leaver
• International Baccalaureate (IB) student
• Gap-year student

Non-Year 12 applicant

• Applicants with higher education study
• Applicants with VET study
• Applicants with work and life experience

For more information on admission requirements and the type of applicant you are, visit deakin.edu.au/courses/how-to-apply. You can also call us on 1800 693 888 to discuss your options.

Gather supporting documents

When applying direct to Deakin as a non-Year 12, it’s important to attach any requested supporting documentation, which may include a CV, academic transcripts, STAT results or a personal statement, otherwise your application may be delayed. We recommend gathering all this documentation before you commence the application process to ensure you can complete it in one sitting.

Apply

Depending on your course, our flexible trimester system means you may be able to start in Trimester 1 (March), 2 (July) or 3 (November).

If you’re a recent secondary education applicant, applications for Trimester 1 should be made through VTAC (vtac.edu.au).

If you are a non-Year 12 applying for Trimester 1 for one Deakin course only, you may apply direct to Deakin.

If you are a non-Year 12 applicant for Trimester 1, you may apply direct to Deakin.

Applications for Trimester 2 or 3 should be made via the applicant portal at applicantportal.deakin.edu.au.

Contact us

There are many different ways you can get into an undergraduate course at Deakin. No matter your ATAR or education history, we’re here to help you find your pathway to Deakin. Give us a call on 1800 693 888 to discuss your options or email myfuture@deakin.edu.au.

You can also try our Pathway Finder tool and explore the options that may be available to you at deakin.edu.au/courses/entry-pathways/pathway-finder.
Gain credit towards your degree

With Credit for Prior Learning (CPL), your previous work or study experience may make you eligible for credit towards your Deakin degree. It can reduce the number of units you need to study, allowing you to complete your course earlier and often more affordably. Find out more at deakin.edu.au/courses/entry-pathways/credit-for-prior-learning.

#1 careers service in Victoria

Our Graduate Employment division is dedicated to preparing you for the jobs and careers of the future. Through DeakinTALENT’s programs and services you can research different career options, hone your interview skills, as well as look for casual work while you study or find a graduate job. Visit blogs.deakin.edu.au/deakintalent.
Contact us

Need to contact Deakin?
We have staff at each of our campuses who are more than happy to answer your general queries.

Prospective student enquiries
Domestic students
1800 693 888
myfuture@deakin.edu.au

International students
+61 3 9627 4877
study@deakin.edu.au

Social media at Deakin
- facebook.com/DeakinUniversity
- twitter.com/Deakin
- twitter.com/DeakinSEBE
- instagram.com/DeakinUniversity
- Search Deakin University

Other useful websites
www.vtac.edu.au
www.studyassist.gov.au
www.myfuture.edu.au
www.youth.gov.au
www.youthcentral.vic.gov.au

Inspiration for life, learning and career
Visit this.deakin.edu.au to uncover unique stories about Deakin and explore different perspectives on study, careers, research and culture.

Deakin Hallmarks are prestigious University awards that recognise students’ outstanding achievement, at course level, of capabilities that are key to employment success.
Find out more at deakin.edu.au/hallmarks, including how Hallmarks are awarded.
WARRNAMBOOL
5 August 2018
9.00 am–3.00 pm
Princes Highway,
Warrnambool Victoria

GEELONG WAURN PONDS
19 August 2018
9.00 am–3.00 pm
75 Pigdons Road,
Wauern Ponds Victoria

GEELONG WATERFRONT
19 August 2018
9.00 am–3.00 pm
1 Gheringhap Street,
Geelong Victoria

MELBOURNE BURWOOD
26 August 2018
9.00 am–3.00 pm
221 Burwood Highway,
Burwood Victoria

1800 MYFUTURE (1800 693 888)
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Environment
openday.deakin.edu.au