Environmental Science (Freshwater Biology and Management)

About this area of study

Environmental Science leads to a broad range of career options and is a growing industry. While there are increasing numbers of environmental jobs, the competition is fierce, and so volunteer work, particularly in the environment is looked upon strongly. Environmental careers are often multi-disciplinarily, but students studying environmental science benefit from having a science background and a strong interest in the environment.

The Bachelor of Environmental Science (Freshwater Biology and Management) is a course of study designed to provide theoretical and practical expertise in a range of biological, ecological and environmental processes and issues in the freshwater environment. The Bachelor of Environmental Science (Freshwater Biology and Management) is designed to enable graduates to contribute in a professional capacity to the study and management of waterways in Australia and overseas. The objectives and general philosophy of the course are to provide knowledge, understanding and skills in the interdisciplinary study of the interactions of freshwater organisms with their living and non-living environments; the influence of biotic, physical and chemical processes on the dynamics of freshwater ecosystems; consideration of the impacts of humans on, and management of, the freshwater environment and its resources. This unique course is delivered in a novel way to ensure that students are provided with an undergraduate experience that is exciting and provides marketable skills. The course includes hands-on work, field-based practical experiences, and training in high demand professional skills in a variety of freshwater habitats in western Victoria.

As a graduate of this course you may find employment in the areas of conservation and environmental analysis; environmental assessment; management of surface waters; wastewater treatment. An increasing number of graduates are actively engaged in research. Positions obtained include research scientist, environmental consultant, aquatic scientist, chemical instrumentation sales and applications, water treatment chemist, limnologist, industrial chemist, fisheries manager and environmental scientist.

Key skills that Environmental Science (Freshwater Biology and Management) graduates demonstrate include

- Analytical proficiency
- Investigation and research techniques
- Problem-solving strategies
- Technical skills
- General interpersonal skills
- Teamwork

Courses offered by Deakin University include

- Bachelor of Environmental Science (Freshwater Biology and Management)
- Bachelor of Environmental Science (Environmental Management)
- Bachelor of Environmental Science (Marine Biology)
- Bachelor of Environmental Science (Wildlife and Conservation Biology)

Labour market information

Grads online has information regarding graduate salaries and where graduates go after completing their course www.gradsonline.com.au

Job Outlook has information about the labour market outlook http://joboutlook.gov.au

Related occupations

- Freshwater biologists and manager
- Aquaculture farmer
- Environmental scientist
- Hydrographer
- Natural resource manager
- Fisheries officers
- Park ranger

An industry career profile, salary and other employment information can be obtained from the My Future website www.myfuture.edu.au

Descriptions of occupations can be found at The Job Guide www.jobguide.thegoodguides.com.au

Employers

Department of Agriculture, Fisheries and Forestry www.daff.gov.au

Commonwealth Scientific and Industrial Research Organisation (CSIRO) www.csiro.au

Department of Primary Industries www.dpi.vic.gov.au

Department of Sustainability and Environment www.dse.vic.gov.au

Local government Victoria www.localgovernment.vic.gov.au

Earthwatch Institute www.earthwatch.org/australia

Environment Protection Authority www.epa.vic.gov.au

KMH Environmental www.kmh.com.au

Melbourne Aquarium www.melbourneaquarium.com.au

Parks Victoria www.parkweb.vic.gov.au

Phillip Island Nature Parks Australia www.penguins.org.au

Greencorp www.greencorp.com

Melbourne Water www.melbournewater.com.au

For specific employment opportunities visit the following sites

Deakin University Jobshop www.deakin.edu.au/jobshop

Environmental Jobs Network www.environmentaljobs.com.au

Envirojobs www.envirojobs.com.au

Science Alert www.sciencealert.com.au

New Scientist Jobs www.newscientistjobs.com/jobs

Graduate Opportunities www.graduateopportunities.com

Uni Grad www.unigrad.com.au

Seek www.seek.com.au

My Career www.mycareer.com.au

Career One www.careerone.com.au

Professional associations

The Environment Institute of Australia and NZ www.eianz.org

Reef and Rainforest Research Centre www.reef.crc.org.au

Environment Victoria Inc. www.environmentvictoria.org.au

Keep Australia Beautiful Victoria www.kabv.org.au

Australian Conservation Foundation (ACF) www.acfonline.org.au

Water Services Association of Australia (WSSA) www.wsaa.asn.au

Irrigation Australia www.irrigation.org.au

Australian Water Association www.awa.asn.au

National Water Commission www.nwc.gov.au