Biology

About this area of study

Biological science students examine the anatomy, physiology and biochemistry of humans, animals, plants and other living organisms to better understand how living organisms function and interact with each other and the environment. They often will perform the following tasks: study the genetic, chemical, physical and structural composition of cells, tissues and organisms, identify cellular and developmental events that ensure continuity of life, determine the influence of internal and external environments on processes in animals (including humans), plants and other organisms, study organisms in controlled environments to gain an understanding of their survival and growth in real environments, examine the way mixed communities and ecosystems function in relation to their environment and the different organisms found in them, predict the way humans and other influences will affect the structure and interactions in natural ecosystems, apply their knowledge and findings from research to maximise the long-term economic, social, environmental and recreational return from living resources, write scientific reports on research, investigations and more general information for scientific, managerial, political and general audiences, provide advice to managers, politicians, primary producers, health care workers and the general public.

As a graduate of Deakin University's Bachelor of Science you may find work in government institutions in roles such as quality assurance, occupational health and safety, research, planning, management or marketing; in science related industries, working in pharmaceutical production or pharmaceutical sales; in biomedical science areas such as research or hospital and laboratory science; in quality assurance in analytical and diagnostic laboratories; in the food industry in quality control; in environment and natural resources, in teaching, information technology, mathematics or in science journalism to name a few.

Biological scientists are employed in a vast range of areas including those within the general health and medical industry (hospital scientists, analytical and diagnostic laboratory scientists and research scientists), food and agriculture-based industries, animal health, quarantine, wildlife biology, environmental consulting, museums, herbaria and the emerging biotechnology industries.

Key skills that Biology graduates demonstrate include

- Research and analytical abilities
- Written and oral communication skills
- An excellent eye for detail
- Chemical handling
- Mathematical skills

Courses offered by Deakin University include

- Bachelor of Science (biology major)

- Bachelor of Biological Science

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

- Agricultural Scientist
- Aquaculture Technician
- Biochemist
- Botanist
- Consultant Physician
- Environmental Scientist
- Marine Biologist
- Physical Science Technical Officer
- Tissue Culture Technician
- Zoologist

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

Gallay Medical and Scientific Pty Ltd www.gallay.com.au

Melbourne Pathology www.mps.com.au

Australian Tissue Engineering Centre www.australiantissueengineering.com

Walter and Eliza Hall Institute of Medical Research www.wehi.edu.au

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

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

Bionomics Limited www.bionomics.com.au

CSL www.csl.com.au

Invitrogen www.invitrogen.com

GlaxoSmithKline www.gsk.com.au

Forensic Services www.police.tas.gov.au/policing_services/forensic_services

Australian National University Research School of Biology http://biology.anu.edu.au

For employment opportunities visit the following sites

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

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 Association of Professional Engineers, Scientists & Managers, Australia www.apesma.asn.au

Australasian Association of Clinical Biochemists www.aacb.asn.au

Australian Society for Biochemistry and Molecular Biology www.asbmb.org.au

AusBiotech Ltd www.ausbiotech.org

BioMelbourne Network www.biomelbourne.org