

SCIENCE

BACHELOR OF SCIENCE

3 B G Course code: S320

Additional admission requirements: VCE units 3 and 4 – a study score of at least 20 in English (any), mathematics (any) and in one of biology, chemistry or physics.

Science is a practical discipline where teamwork, critical thinking and problem solving are crucial to finding creative solutions to everyday problems. Deakin's Bachelor of Science allows you to start with a broad program then specialise as you progress through the course, developing your interests and career aspirations. Science at Deakin is not just about laboratory work, but prepares you for a range of real-life settings in which today's science graduates work.

You will gain experience through practical programs undertaken in modern teaching laboratories. Deakin's Bachelor of Science also offers you the opportunity to undertake Industry Based Learning which can be credited towards your degree.

Students who have completed a Bachelor of Science degree with a good academic record may apply to undertake an honours year.

CAREER OPPORTUNITIES

As a graduate, you may find work in government institutions in roles such as quality assurance, occupational health and safety, management, or marketing; in science related industries, working in pharmaceutical production or pharmaceutical sales; in the food industry in quality control; in ecology and natural resources or in teaching.

COURSE STRUCTURE

The program includes core Science Skills and Professional Practice units. Deakin's Bachelor of Science can be taken as a single degree course or as a combined degree with Arts, Commerce, Engineering, Law and Teaching (Secondary).

MAJOR SEQUENCES

- » Biology **B G**
- » Biotechnology **G**
- » Chemistry **B G**
- » Earth Science **B**
- » Environmental Science **B**
- » Forensic Biology **G**
- » Information Technology **B G**
- » Mathematical Modelling **B G**
- » Multimedia Technology **B**
- » Nanotechnology **G**
- » Psychology **B G**
- » Zoology **G**

BACHELOR OF BIOLOGICAL SCIENCE

3 B Course code: S321

Additional admission requirements: VCE units 3 and 4 – a study score of at least 20 in English (any), mathematics (any) and in one of biology, chemistry or physics.

Deakin's Biological Science degree provides you with a wide range of units in biology including animal and plant biology genetics, physiology and evolution. You will learn in a modern teaching environment and gain hands-on experience by participating in laboratory and project work and by undertaking the three-unit professional pathways sequence.

Students who have completed a Bachelor of Biological Science with a good academic record may apply to undertake an honours year.

CAREER OPPORTUNITIES

Graduates are equipped for a career as a laboratory technician or research assistant, in medical research in a university or other scientific organisation, in management or occupational health positions, in animal health, agriculture, environmental consulting firms, food industries, biotechnology, science journalism, education, or pharmaceutical and medical sales.

COURSE STRUCTURE

Level 1

Semester 1

- SBB111 Cells, Genes and Diversity (B, G)
- SBC131 Principles of Chemistry (B, G)
- SQE136 History of Life (B)
- SQA101 Ecology and the Environment (B, G, W)
- SBS010 Laboratory Safety Induction Program (B, G)*

Semester 2

- SBB132 Biology: Form and Function (B, G)
- SBB114 Essential Skills for Biology (B)

Two units from:

- SBC152 Chemistry of Life (B, G)
- SQA102 The Physical Environment (B, G, W)
- SBB110 Human Heredity (B, G)

Level 2

Semester 1

- SBB203 Plant Biology (B)
- SBB204 Animal Biology (B, G)
- SBB206 Molecular Cell Biology (B)
- plus one elective unit

Semester 2

- SBB2xx Applications of Biology
- SBB2xx Population of Genetics
- SBB234 Microbiology (B, G)
- plus one elective unit

Level 3

Semester 1

- SBB370 Evolution (B, X)

Semester 2

- SBB3xx Professional Practice in Biology (Semester 1 or 2)

Wholly online unit:

Student to choose from one of the following to complete their wholly online unit requirement:

- SQA201 Society and Environment (online)
- SBB315 Comparative Animal Physiology (online)
- SBC312 Toxicology (online)
- HBS300 Ethics: Frameworks and Decisions (online)

Students may tailor their choice of units to obtain a major in Evolutionary Biology or Cell and Molecular Biology.

EVOLUTIONARY BIOLOGY MAJOR:

Students can use their elective units to obtain an Evolutionary Biology major by completing the following four units in addition to their core unit requirements:

- SBB205 Vertebrate Structure, Function and Evolution (B)
- SQB237 Biogeography (B)
- SBB3xx Palaeo-biology
- SBB3xx Bio-informatics and Molecular Evolution

CELL AND MOLECULAR BIOLOGY MAJOR:

Students can use their elective units to obtain a Cell and Molecular Biology Major by completing the following three units in addition to their core unit requirements:

- SBB212 Biochemistry (B, G)
- SBB339 Human Genetics (B)
- SBB344 Developmental Biology (B)

* SBS010 is a compulsory 0 credit point unit.

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KEY

- 3** Course duration
- G** Geelong Campus at Waurn Ponds
- F** Geelong Waterfront Campus
- B** Melbourne Campus at Burwood
- W** Warrnambool Campus
- X** Off campus

BACHELOR OF BIOMEDICAL SCIENCE

3 B G Course code: S323

Additional admission requirements: VCE units 3 and 4 – a study score of at least 20 in English (any), mathematics (any) and in one of biology, chemistry or physics.

Biomedical Science concerns the molecular and cellular basis of normal human biology and disease processes. The Bachelor of Biomedical Science is a vibrant, relevant and topical program delivered through a partnership between the Faculty of Science and Technology and the Faculty of Health, Medicine, Nursing and Behavioural Sciences.

This multidisciplinary approach enables students to learn about their chosen fields of study from both scientific and health perspectives.

CAREER OPPORTUNITIES

As a graduate you will be able to enter a vast range of health-related industries including areas such as medical research, genetic engineering, the pharmaceutical industry, pharmaceutical/medical sales, and laboratory technology. You can also advance to honours or postgraduate studies, either in more specialised areas of biomedical science (which will enhance your professional development as a scientist), or in other disciplines (which will complement your scientific training and broaden your career opportunities).

COURSE STRUCTURE

Level 1

Semester 1

SBB111 Cells, Genes and Diversity (B, G)
HBS109 Human Structure and Function (B, G, W, X)
HBS107 Understanding Health (B, G, W, X)
SBC131 Principles of Chemistry (B, G)
SBS010 Laboratory Safety Induction Program (B, G)*

Semester 2

SBB110 Human Heredity (B, G)
HBS110 Health Behaviour (B, S, W, X)
SBB141 Introduction to Biomedical Science (B, G)
SBC152 Chemistry of Life (B, G)

Level 2

Semester 1

SBB211 Physiology A (B)
SBB212 Biochemistry (B, G)
plus two elective units

Semester 2

SBB221 Anatomy and Physiology (B)
SBB222 Biochemical Metabolism (B, G)
plus two elective units

Level 3

Semester 1

SBB346 Molecular Basis of Disease (B)
SBB334 Medical Microbiology and Immunology (B)
plus one elective unit

Semester 2

See website for unit details www.deakin.edu.au.

BACHELOR OF FORENSIC SCIENCE

4 G Course code: S324

Additional admission requirements: VCE units 3 and 4 – a study score of at least 25 in English (any), mathematics (any) and in one of biology, chemistry or physics.

A Forensic Science degree is a great way to start a career in science and also opens new doors into fields such as risk analysis, insurance investigation and forensic science.

It combines studies in Biology, Chemistry, Forensic Science, Statistical Analysis, Biochemical and Chemical Analysis and Molecular Biology.

You will have access to a forensic crime scene room and a complete suite of forensic testing equipment.

This course features extensive industry contacts through visiting lecturers and site visits.

CAREER OPPORTUNITIES

Career opportunities exist working in forensics, insurance investigation, risk analysis, research science, government institutions and within chemical, food and pharmaceutical industries.

COURSE STRUCTURE

Level 1

SBB111 Cells, Genes and Diversity
SBB132 Biology: Form and Function
SBC131 Principles of Chemistry
SBC152 Chemistry of Life
SBF111 Fundamentals of Forensic Science
SBS010 Laboratory Safety Induction Program*
SIT191 Introduction to Statistics
plus two elective units

Level 2

SBB212 Biochemistry
SBB213 Genetics
SBB203 Molecular Interactions and Catalysis
SBC211 Introduction to Spectroscopic Principles
SBB232 Principles of Physiology
SBC214 Organic Chemistry
SBC229 Introduction to Separation Science
SBF208 Forensic Biology 1

Level 3

SBB321 Molecular Biology Techniques
SBC311 Chemical Hazards
SBC312 Toxicology
SBC313 Spectroscopy
SBC316 Analytical Chemistry
SBF313 Forensic Analysis and Interpretation
plus two elective units

Level 4

Honours stream

Students must maintain a 65 per cent average or greater to be eligible to undertake the Honours stream. The award of Honours is contingent on the appropriate completion of a 4 credit point research thesis. Students who do not maintain a 65 per cent average or greater exit with a Bachelor of Science majoring in Forensic Science.

SBF415 Advanced Topics in Forensic Science A
SBF416 Honours Research Thesis A
SBF419 Advanced Topics in Forensic Science B
SBF420 Honours Research Thesis B

* SBS010 is a compulsory 0 credit point unit.



According to Claire, working in the Leukaemia Research Lab was one of the greatest privileges that an undergraduate student could enjoy. Within days of starting her course she simply asked if she could work in the lab. Her initiative paid off because she gained invaluable hands-on research experience as well as interacting with PhD and honours students. Also, she received a research scholarship to investigate the CIS gene and the project received accreditation as a unit of work in her final year.

CLAIRE ETHERIDGE
BACHELOR OF SCIENCE (BIOMEDICAL SCIENCE)
*Now Bachelor of Biomedical Science.

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BACHELOR OF COMMERCE/BACHELOR OF SCIENCE

4 **B** **6** Course code: D321

Additional admission requirements: VCE units 3 and 4 – a study score of at least 20 in English (any), mathematics (any) and in one of biology, chemistry or physics.

Deakin's combined course in Commerce and Science enables you to combine disciplines for a unique qualification. You may combine commerce studies in areas such as accounting, economics, management, business information systems or marketing with a relevant science stream, for example: biology, biotechnology, chemistry, earth science, environmental science, forensic biology, information technology, mathematical modelling, multimedia technology, nanotechnology, psychology or zoology.

COURSE STRUCTURE

You will complete 32 credit points in total—16 credit points of units from the Bachelor of Commerce and 16 credit points of units from the Bachelor of Science.

Please see individual degrees in this Guide or go to www.deakin.edu.au.

BACHELOR OF ARTS/BACHELOR OF SCIENCE

4 **B** **6** Course code: D311

Additional admission requirements: VCE units 3 and 4 – a study score of at least 25 in English (any) and 20 in mathematics (any) and in one of biology, chemistry or physics.

This combined course enables students to pursue studies in a variety of contemporary themes such as the body, the environment, science policy and practice, and others. Students may combine major sequences such as Public Relations/Chemistry, Philosophy/Mathematics, Sociology/Biology, Environmental Science/Journalism.

COURSE STRUCTURE

You will complete 32 credit points in total—16 credit points of units from the Bachelor of Arts and 16 credit points of units from the Bachelor of Science.

For further information please see individual degrees in this Guide or go to www.deakin.edu.au.

SEE ALSO

Bachelor of Engineering/Bachelor of Science, p.62
Bachelor of Teaching (Science)/Bachelor of Science, p.89
Bachelor of Science/Bachelor of Laws, p.74
Graduate Certificate of Arts and Sciences, p.47

MORE INFORMATION ON SCIENCE

[Deakin Science + Environment brochure](#)

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www.deakin.edu.au/scitech/les

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