UNDERGRADUATE SCIENCE

DEAKIN UNIVERSITY AUSTRALIA Worldly

2014

Melbourne | Geelong | Warrnambool | Off campus

BIOLOGICAL SCIENCE
BIOMEDICAL SCIENCE
ENGINEERING SCIENCE
FOOD AND NUTRITION
FORENSIC SCIENCE
SCIENCE
ZOOLOGY AND ANIMAL SCIENCE

JAIMIE McGLASHAN
Bachelor of Science, see page 14.

EXPLORE THE WORLD OF SCIENCE AT DEAKIN

Whether you want to learn how to interpret a crime scene, understand and treat diseases or pursue your interest in the biology of animals, Deakin's courses in science have something for you.

Deakin's science courses provide you with a range of skills that are highly sought-after by employers. You can gain specialist knowledge and practical skills, as well as the ability to think critically and solve problems, learn independently and be an effective team member.

You will also enjoy the advantage of small class sizes and personal contact with research-active staff.

As a graduate of a Deakin science course you may find career opportunities in an exciting range of areas, including the general health and medical industry, pharmaceuticals, food and agriculture, forensics, government and research.

This booklet will outline the range of courses we offer in science, key features of our courses and career opportunities you can gain from completing a degree at Deakin.

Choosing a university course is an important decision – and we are here to help. We encourage you to gather as much information as possible to help you make an informed decision about which course is best for you.

If you need more information, please contact us on 1300 DEGREE (1300 334 733), email enquire@deakin.edu.au or visit **deakin.edu.au**.

We look forward to seeing you at Deakin!

The Deakin team

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Using this booklet

This booklet provides you with detailed information about Deakin's undergraduate courses in science (for domestic students), including study areas, career opportunities, course overviews and course structures. It is designed to be read in conjunction with the *2014 Undergraduate Course Guide*, which gives an overview of all Deakin's undergraduate courses, study options, support services and campuses.

Deakin University also produces course guides specifically for international students. To request a copy phone Deakin International on +61 3 9627 4877 or email deakin-international@deakin.edu.au.

Applying to Deakin is easy

You can apply for most of Deakin's undergraduate courses (bachelor's degrees) commencing in Trimester 1 through the Victorian Tertiary Admissions Centre (VTAC). We also offer courses commencing at other times of the year, for example Trimester 2 (commencing in August) and Trimester 3 (commencing in November), that require a direct application to Deakin. Whether you are a current Year 12, TAFE, private provider or mature-age student, currently studying at another university, in the workforce, taking a gap year or a graduate, visit **www.vtac.edu.au** or **deakin.edu.au/study-at-deakin** for details.

Find out more

If you need more information, please phone 1300 DEGREE (1300 334 733), email enquire@deakin.edu.au or visit **deakin.edu.au**.

You can also connect with us on social media, order other publications and visit us. Turn to page 32 for more information.

SCIENCE AT DEAKIN

You can study a general or specialist degree – the choice is yours

At Deakin you can take a broad approach to your science studies or give them a more specific focus.

For a broad approach, our Bachelor of Science gives you the opportunity to pursue general studies in science, plus at least one science major sequence in an area of interest, with the possibility of a second major sequence.

Our biomedical science course is a vibrant, relevant and topical program with a multidisciplinary approach that enables you to learn about your chosen fields of study from both scientific and health perspectives.

Our forensic science course aims to provide you with the skills and techniques essential to this field, including the examination and presentation of scientific evidence.

In our biological science course you will study a wide range of units in biology, including animal and plant biology, genetics, physiology and evolution, as well as gain relevant and wide ranging practical experience in both the laboratory and the field.

The zoology and animal science course aims to provide you with an understanding of the form and function of different animals and how they are adapted to their environment. You will gain a broad understanding of the current field of zoology, including the diversity, ecology, behaviour, physiology, genetics and evolutionary biology of animals. There is an emphasis on practical and field-based studies to provide hands-on experience in the biology and ecology of a range of animals.

Science at Deakin is also available as combined courses, with arts, commerce, engineering, information systems, law and teaching (science). These courses enable you to complete two degrees in a shorter timeframe than it would take to complete the degrees separately and offer a broad range of career opportunities. Similarly, our forensic science course can be combined with criminology.

Undertake hands-on learning

As a Deakin science student, you will gain experience through innovative practical programs, including professional practice units, which have been designed to enable you to develop the skills employers highly value, and prepare you for the real-life settings in which today's science graduates work.

Our Work-Integrated Learning (WIL) Program can enable you to incorporate a full or part-time industry placement as part of your degree.

The WIL placements are designed as elective units and are credited towards your degree. Some placements also come with an industry-funded scholarship. For more information, including how Deakin students apply, please visit **deakin.edu.au/sebe/students/wil**.

Learn in first-class facilities

You will learn in a modern teaching environment and gain hands-on experience by participating in laboratory, field and project work. As well as access to first-class infrastructure and facilities, you will also enjoy the advantage of small class sizes and personal contact with our research-active staff.

At the Geelong Waurn Ponds Campus, Deakin's Geelong Technology Precinct provides the integral link between technological innovation and advanced performance outcomes, through integrating high-level research capabilities with specialised research equipment and industrial scale infrastructure. The precinct focuses on Deakin's core research capabilities in materials, biotechnology, chemistry and environmental engineering, ecology and evolutionary biology, along with regional strengths in manufacturing and agri-processing.

Our courses are aimed at getting you a career

We aim to produce high-calibre, problem-solving graduates who are job-ready.

Science at Deakin opens the door to a range of careers that are stimulating, challenging and rewarding. Whether you want to interpret a crime scene, understand a disease or pursue your interest in the biology of animals, a Deakin science degree equips you with a broad skill base and a strong understanding of your chosen field.

We have industry links

Input from industry representatives ensures our courses remain relevant and produce graduates who are equipped to meet the emerging challenges and opportunities of the workplace. For example, our forensic science course has extensive links with local and Australian forensic organisations, and features guest lecturers and site visits in collaboration with leading forensic organisations.

Our lecturers and research make a difference

Our teaching and research staff are experts in their respective fields, with broad international links and experiences.

The Melbourne Burwood Campus has research programs in neurobiology, human genetics, cancer biology, plant biology and cell biology, environmental sciences, palaebiology, physiology, science education, nutrition and exercise sciences. At the Geelong Waurn Ponds Campus there are research programs in biotechnology, chemistry, forensic science and integrative ecology. The biomedical science program has research programs in allergy, bioinformatics, neurobiology and physiology, and close links with the Deakin graduate-entry Medical School, biomedical research laboratories, and cutting-edge research being conducted at the Geelong Technology Precinct.

Much of Deakin's research in science is conducted in partnership with government departments, industry and leading international scientists, and is funded by nationally and internationally competitive granting agencies.

Experience the world while you study

Give your degree a competitive edge with a Deakin Study Abroad Program. Our Study Abroad and Exchange Office offers various programs including exchange, study abroad, short-term study programs, study tours and international volunteering opportunities, which allow you to study overseas for a few weeks, a trimester or a year as part of your Deakin degree.

For more information on study abroad, please visit **deakin.edu.au/current-students/student-exchange/exchange**.

We have flexible study options

Genuine flexibility is a key feature of our courses. You can study most courses full time or part time, and choose specialist areas as you progress through your course to tailor your degree to match your career goals. Deakin's use of technology in course delivery, our trimester system and deferment option enhance our flexible approach to education, ensuring your study fits in with your work and lifestyle commitments. For more information, please visit **deakin.edu.au/online-offcampus**.

We offer a range of scholarships

Deakin University offers scholarships for academic excellence, access and equity, accommodation and Aboriginal and Torres Strait Islanders, ensuring higher education is accessible for all members of the community.

Scholarships in the Faculty of Science, Engineering and Built Environment for science students include the Dean's Scholars Program, which aims to recognise, reward and nurture high-achieving students who have recently completed Year 12 and who have been admitted through VTAC.

For more information on scholarships, please visit **deakin.edu.au/scholarships**.

Study honours

Honours is a specialised year of study that allows you to draw together the theory and practical skills gained in previous undergraduate studies, and develop an in-depth knowledge of your particular discipline through research, additional coursework and training in research techniques.

Honours can offer you a competitive edge in the job market along with providing a pathway into a higher degree – many honours students go on to complete a PhD or other advanced qualifications.

For more information on honours degrees, please visit **deakin.edu.au/honours**.

GLOBAL SCIENCE AND TECHNOLOGY PROGRAM

In 2013, the Faculty of Science, Engineering and Built Environment introduced a new program designed to help Science, Engineering and Built Environment students realise their dreams of international study.

The Global Science and Technology Program aims to recognise, reward and support high-achieving Science, Engineering and Built Environment students who would like to conduct part of their studies overseas to help them develop new skills and a broader world view.

Successful applicants will be offered a $3000 scholarship to assist with travel costs and will be required to participate in the Deakin Global Citizenship Program.

For more information, please visit **deakin.edu.au/sebe/global**.

AN ELITE ATHLETE FRIENDLY UNIVERSITY

As a member of the Elite Athlete Friendly University (EAFU) Network, Deakin is dedicated to supporting elite athletes in their quest to achieve academic success alongside the demands of training and competition.

We enable recognised elite athlete students to negotiate assessment deadlines, lecture and tutorial attendance and study loads to integrate with sporting commitments. Student athletes may also be able to take several leaves of absence in order to meet sporting commitments and extend the length of time normally allowed to complete a course.

For more information, please visit **deakin.edu.au/future-students/why-deakin/eafu**.

WHERE DO OUR GRADUATES GO?

Our innovative practical programs have been designed to prepare you for real-life settings, and enable you to develop the skills that are highly valued by employers.

Graduates of our science courses have the opportunity to work in a wide range of fields, including agriculture, biotechnology, the general health and medical industry, pharmaceuticals, animal health, forensics, food technology and education.

They have the potential to be involved with scientific developments that hold the key to the future, with new breakthroughs being discovered every day.

Recent Deakin science graduates have been employed by a range of organisations including, but not limited to, the following:

- Baker Institute
- Bayer CropScience
- Burnet Institute
- ChemGenex Pharmaceuticals
- CSIRO Livestock Industries
- CSIRO Plant Industries
- CSL
- Department of Education
- Department of Primary Industries
- Department of Sustainability and Environment
- Food Science Australia
- Geelong Hospital
- Geoscience Australia
- GlaxoSmithKline
- Howard Florey Institute
- Mayne Pharma
- Melbourne Pathology
- Merck Sharp and Dohme Australia
- Monsanto Australia
- Municipal Association of Australia
- Nufarm Australia
- Parks Victoria
- Peter MacCallum Cancer Centre
- Tasmanian Alkaloids
- Victoria Police.

COURSES AND ATARS

	Melbourne Burwood Campus Clearly-in ATAR 2013	Geelong campuses Clearly-in ATAR 2013	Warrnambool Campus Clearly-in ATAR 2013	Page
Bachelor of ...				
Biological Science | S321 *For information on major sequences available, please refer to page 6.*	69.55			6
Biomedical Science | S323 *For information on major sequences available, please refer to page 8.*	78.15	73.15		7
Engineering Science – Medical Technology | S302		N/A		9
Engineering Science – Sports Technology | S302		N/A		10
Food and Nutrition | H315	74.50			11
Forensic Science | S324		57.55		12
Science | S320 *For information on major sequences available, please refer to page 14.*	62.60	54.90		14
Zoology and Animal Science | S369		67.95		17
Global Science and Technology Program	80.00*	80.00*		18
Science and Technology (Dean's Scholars Program in science)	90.00*	90.00*		18
Associate Degree of Arts, Business and Sciences | A200		R/C	R/C	19
Combined courses				
Bachelor of ... / Bachelor of ...				
Arts/Science | D311	62.80	59.70		20
Commerce/Science | D321	70.80	N/A		21
Engineering/Science | D372		63.20		22
Forensic Science/Criminology | D329		66.75		23
Information Systems/Science I D369	N/A			24
Science/Laws | D331	91.25	N/A		25
Teaching (Science)/Science | D351	62.10			26

Geelong campuses = Geelong Waurn Ponds Campus and Geelong Waterfront Campus.
N/A = Not available or not applicable. The course is offered at this campus. Where no ATAR is available it may mean that other admission requirements apply. Please refer to the course entry for more information.
R/C = A range of criteria are used for selection.
* Minimum ATAR.
If a clearly-in ATAR is not listed it means that the course is not available at that campus.
For more information on ATARs please visit deakin.edu.au/future-students/year12.

COURSES

BACHELOR OF BIOLOGICAL SCIENCE 3 B

DEAKIN CODE	ATAR	INDICATIVE FIRST YEAR FEE
S321	B 69.55	$8350 (CSP)[1]
YEAR 12 PREREQUISITES		**NON-YEAR 12 REQUIREMENTS**
VCE units 3 and 4 – a study score of at least 25 in English (ESL) or 20 in any other English.		VTAC Personal History online.

Deakin's Bachelor of Biological Science 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 professional practice.

The course has a first year of foundation units followed by a second year focusing on biodiversity and organismal biology. Using elective units from second and third year, you can pursue a particular interest in biology either by selecting one of the planned major sequences, or by tailoring your degree with elective units chosen from a range of second and third-year biology units or units from any other faculty within the University.

An honours year is available for high-achieving students upon completion of this degree.

Career opportunities

You may find employment in a 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.

Work-Integrated Learning

As part of the course you are required to complete a professional practice unit, which involves a placement for a minimum of two weeks within a relevant, course-related organisation.

Course structure

You must complete 24 credit points of study, including 15 credit points of core units and 9 elective units.

Level 1
SLE010 Laboratory and Fieldwork Safety Induction Program (0-credit-point safety unit)
SLE103 Ecology and the Environment
SLE111 Cells and Genes
SLE115 Essential Skills in Bioscience
SLE132 Biology: Form and Function
SLE133 Chemistry in Our World#
SLE136 History of Life

Plus one unit from:
SEP122 Physics for the Life Sciences
SLE102 Physical Geography
SLE155 Chemistry for Professional Sciences#
plus one elective unit

Students who have not completed Year 12 Chemistry or equivalent may choose to undertake SLE133 Chemistry in Our World. Students who have completed Year 12 Chemistry or equivalent may choose to undertake SLE155 Chemistry for Professional Sciences.

Level 2
SLE203 Plant Biology
SLE204 Animal Biology
SLE206 Molecular Cell Biology
SLE234 Microbiology
SLE251 Research Methods and Data Analysis
SLE254 Genetics
plus two elective units

Level 3
SLE370 Evolution

Plus one unit from:
SLE314 Research Project
SLE352 Community Science Project
SLE390 Professional Practice in Bioscience
plus six elective units

Major sequences

You may tailor your choice of units to study a major sequence such as cell and molecular biology or zoology.

CELL AND MOLECULAR BIOLOGY B

The cell and molecular biology major sequence is designed to provide a focused understanding of advanced molecular cell biology, microbiology and human molecular genetics. This sequence will also prepare you to focus and acquire theoretical and practical skills in molecular biology.

SLE111 Cells and Genes*
SLE155 Chemistry for the Professional Sciences
SLE206 Molecular Cell Biology*
SLE212 Biochemistry
SLE222 Biochemical Metabolism
SLE234 Microbiology*
SLE321 Molecular Biology Techniques
SLE339 Genetics of Disease

ZOOLOGY B G

Study the biology of animals from several aspects ranging from an understanding of how animals function, to their evolution and their relationship with the environment.

SLE111 Cells and Genes*
SLE132 Biology: Form and Function*
SLE204 Animal Diversity*
SLE205 Vertebrate Structure, Function and Evolution
SLE237 Biogeography
SLE360 Australian Invertebrates
SLE395 Palaeobiology

Plus unit one from:
SLE307 Behavioural Ecology
SLE350 Marine Wildlife

* Core units in the degree.

Course duration in years 3
Melbourne Burwood Campus B
Geelong Waterfront Campus F
Geelong Waurn Ponds Campus G
Warrnambool Campus W
Off campus X

BACHELOR OF BIOMEDICAL SCIENCE 3 B G

DEAKIN CODE	ATAR	INDICATIVE FIRST YEAR FEE
S323	B 78.15 G 73.15	$8320 (CSP)[1]
YEAR 12 PREREQUISITES		**NON-YEAR 12 REQUIREMENTS**
VCE units 3 and 4 – a study score of at least 25 in English (ESL) or 20 in any other English.		VTAC Personal History online.

Deakin's Bachelor of Biomedical Science covers the science underpinning medical applications, from basic biology to specific disease processes. You will gain the theoretical foundation and scientific skills to expand and apply your knowledge of human biology and health, with an emphasis on causes, diagnosis and treatment of disease at the molecular, cellular and system levels. It is a vibrant, relevant and topical program that provides a flexible, innovative and comprehensive course. Our multidisciplinary approach, and a number of elective units at all levels, enables you to learn about your chosen fields of study from both scientific and health perspectives.

An honours year is available for high-achieving students upon completion of this degree.

Career opportunities

As a graduate you will be able to enter a range of health-related industries including areas such as medical research, genetic engineering, the pharmaceutical industry, pharmaceutical/medical sales and laboratory technology. You could also advance to honours or postgraduate studies, either in more specialised areas of medicine or 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).

Work-Integrated Learning

As part of the course you are required to complete a professional practice unit, which involves a placement for a minimum of two weeks within a relevant, course-related organisation.

Course structure

You must complete 24 credit points of study.

Core units

Level 1
SLE010 Laboratory and Fieldwork Safety Induction Program (0-credit-point safety unit)
SLE111 Cells and Genes
SLE115 Essential Skills in Bioscience
SLE133 Chemistry in Our World*
SLE155 Chemistry for Professional Sciences
plus three level 1 restricted elective units and one elective unit

* Students who have completed Year 12 Chemistry or equivalent may choose to replace SLE133 Chemistry in Our World with an elective unit.

Level 2
SLE211 Principles of Physiology
SLE212 Biochemistry
SLE221 Anatomy and Physiology
SLE222 Biochemical Metabolism
SLE234 Microbiology
SLE254 Genetics
plus two elective units

> Continued on next page ...

STEWART CARMICHAEL

BACHELOR OF BIOMEDICAL SCIENCE
MELBOURNE BURWOOD CAMPUS

'I've always had an interest in the body and disease, and biomedical science is an interesting way to explore how that works from a few angles.

Without a doubt the most enjoyable and rewarding thing I did was exchange. I went to Purdue University in Indiana and it really did change my life. It's a university of more than 40 000 people, in a small town surrounded by corn. It couldn't be much more different than university in Australia. As well as meeting a lot of Americans it was great to be part of a really close group of exchange students from all over the world. I had a lot of experiences I'll never forget, and made some great friends.

The thing that has impressed me most about Deakin is how accessible the lecturers and other academic staff are. They are often in their offices and have always been happy to talk in person and respond to their emails.'

COURSES

Level 3
HMM301 Principles of Pharmacology
HMM304 Therapeutic Development
SLE334 Medical Microbiology and Immunology
plus two or three elective units

Plus one unit from:
HMM302 Innovations in Medical Biotechnology
SLE323 Advanced Topics in Biomedical Science

Plus one unit from:
HMM305 Cell and Tissue Engineering
SLE339 Genetics of Disease
SLE346 Molecular Basis of Disease

Professional Practice
Select one unit from:
HMM306 Professional Practice in Medical Biotechnology
SLE314 Research Project
SLE390 Professional Practice in Bioscience

Level 1 restricted elective units
HBS107 Understanding Health
HBS108 Health Information and Data
HBS109 Human Structure and Function
HBS110 Health Behaviour
HMM101 Introduction to Medical Biotechnology
HMM102 Principles of Gene and Genomic Technology
HMM103 Cell Technology
HMM104 Immunology and Haematology
HSE102 Functional Human Anatomy#
HSN101 Food: Nutrition, Culture and Innovation
SEP101 Engineering Physics
SEP122 Physics for the Life Sciences
SLE103 Ecology and the Environment
SLE132 Biology: Form and Function

Must be enrolled in or have previously successfully completed HSE010 Exercise and Sport Laboratory Safety (0-credit-point safety unit).

Major sequences

Recommended major sequences for Bachelor of Biomedical Science students include:

CELL AND MOLECULAR BIOLOGY B

The cell and molecular biology major sequence is designed to provide a focused understanding of advanced molecular cell biology, microbiology and human molecular genetics. This sequence will also prepare you to focus and acquire theoretical and practical skills in molecular biology.

CHEMISTRY G

An introduction to the synthesis, separation, detection and measurement of chemical substances, their properties and reactions.

ENVIRONMENTAL HEALTH B

With a focus on healthy environments and healthy people, this major is recommended for students interested in working in public health policy, environmental health and related areas.

INFECTION AND IMMUNITY G

The infection and immunity major sequence builds on the core skills of genetics, microbiology and immunology. It is an advanced and integrated course that will provide you with a deeper understanding of host-pathogen interactions as well as the public health and clinical epidemiological burdens of infectious diseases.

MEDICAL BIOTECHNOLOGY G

Medical biotechnology uses cells and cell materials to produce pharmaceutical and diagnostic products that help treat and prevent human diseases. The major sequence in medical biotechnology will provide you with a sound understanding of the core sciences underpinning biotechnology for medical advancement.

For more information on these major sequences, including details of units available, please visit **deakin.edu.au/courses**.

BACHELOR OF ENGINEERING SCIENCE – MEDICAL TECHNOLOGY 3 G

DEAKIN CODE	ATAR	INDICATIVE FIRST YEAR FEE
S302	G N/A	$8370 (CSP)[1]
YEAR 12 PREREQUISITES		**NON-YEAR 12 REQUIREMENTS**
VCE units 3 and 4 – a study score of at least 25 in English (ESL) or 20 in any other English.		VTAC Personal History online.

The Bachelor of Engineering Science – Medical Technology is designed to develop technology-focused scientists capable of creating engineering solutions to medical problems. The course provides you with the theoretical foundation, technical skills and expertise needed to plan and design medical and physiological instrumentation, prosthetics and other health care devices. The course is designed for technically-minded students who are not interested in traditional engineering programs. The subjects are mostly prescribed, with engineering and science subjects studied at each level. As a graduate you will have the opportunity to undertake further studies in honours (research) and PhD programs.

Career opportunities

Graduates of this course can expect to gain employment in areas including medical research, medical instrumentation, prosthetics and in health organisations.

Work-Integrated Learning

You have the opportunity to take part in industry-based learning, internships and a final-year project to help you gain workplace experience and develop valuable networks.

Science students at Deakin learn in a modern teaching environment.

Course structure

You must complete 24 credit points of study. Elective units may be taken from across the University.

Level 1
HBS109 Human Structure and Function
SED102 Engineering Graphics and CAD
SEE010 Safety Induction Program (0-credit-point safety unit)
SEE103 Electrical Systems
SEP122 Physics for the Life Sciences
SIT190 Introductory Mathematical Methods
SLE010 Laboratory and Fieldwork Safety Induction Program (0-credit-point safety unit)
SLE111 Cells and Genes
SLE133 Chemistry In Our World^
or
SLE155 Chemistry for the Professional Sciences^
plus one elective unit

^ Students who have not completed Year 12 Chemistry or equivalent may choose to undertake SLE133 Chemistry in Our World in Trimester 1. Students who have completed Year 12 Chemistry or equivalent may choose to undertake SLE155 Chemistry for the Professional Sciences in Trimester 2.

Level 2
HSE010 Exercise and Sport Laboratory Safety (0-credit-point safety unit)
HSE202 Biomechanics
SEE202 Digital Electronics
SEE215 Microcontroller Principles
SEP101 Engineering Physics
SLE211 Principles of Physiology
SLE221 Anatomy and Physiology
SLE251 Research Methods and Data Analysis
plus one elective unit

Level 3
SEE320 Microcontroller System Design
SEE321 Electro-Mechanical Systems
SEJ344 Technology Project
SLE234 Microbiology
SLE335 Industrial Applications of Science
plus three elective units

N/A Refer to page 5.

COURSES

BACHELOR OF ENGINEERING SCIENCE – SPORTS TECHNOLOGY 3 G

DEAKIN CODE	ATAR	INDICATIVE FIRST YEAR FEE
S302	G N/A	$8370 (CSP)[1]
YEAR 12 PREREQUISITES		**NON-YEAR 12 REQUIREMENTS**
VCE units 3 and 4 – a study score of at least 25 in English (ESL) or 20 in any other English.		VTAC Personal History online.

The Bachelor of Engineering Science – Sports Technology is designed to develop technology-focused scientists capable of creating engineering solutions to sport-related problems. The course provides you with the theoretical foundation, technical skills and expertise needed to design and develop sports equipment, instrumentation and other sports-related products. The course is designed for technically-minded students who are not interested in traditional engineering programs. The subjects are mostly prescribed, with engineering, physiology, and exercise and sport science subjects studied at each level. You will specialise in your choice of mechanical or electrical engineering studies. As a graduate you will have the opportunity to undertake further studies in honours (research) and PhD programs.

Career opportunities

Graduates of this course can expect to gain employment in a wide range of industries and organisations, such as equipment manufacturers, professional sports associations and research institutions.

Work-Integrated Learning

You have the opportunity to take part in industry-based learning, internships and a final-year project to help you gain workplace experience and develop valuable networks.

Course structure

You must complete 24 credit points of study. Elective units may be taken from across the University.

SPORTS TECHNOLOGY – ELECTRICAL MAJOR SEQUENCE

Career opportunities

Graduates may be employed as electronic control systems scientists or robotics scientists, and work in areas including human performance monitoring and control system design.

Level 1
HBS109 Human Structure and Function
SED102 Engineering Graphics and CAD
SEE010 Safety Induction Program (0-credit-point safety unit)
SEE103 Electrical Systems
SEP122 Physics for the Life Sciences
SIT190 Introductory Mathematical Methods
SLE010 Laboratory and Fieldwork Safety Induction Program (0-credit-point safety unit)
SLE111 Cells and Genes
SLE133 Chemistry In Our World^
or
SLE155 Chemistry for the Professional Sciences^
plus one elective unit

^ Students who have not completed Year 12 Chemistry or equivalent may choose to undertake SLE133 Chemistry in Our World in Trimester 1. Students who have completed Year 12 Chemistry or equivalent may choose to undertake SLE155 Chemistry for the Professional Sciences in Trimester 2.

Level 2
HSE010 Exercise and Sport Laboratory Safety (0-credit-point safety unit)
HSE201 Exercise Physiology
HSE202 Biomechanics
SEE202 Digital Electronics
SEE206 Measurement and Instrumentation
SEE215 Microcontroller Principles
SEM111 Engineering Materials 1
SLE251 Research Methods and Data Analysis
plus one elective unit

Level 3
HSE304 Physiology of Sport Performance
HSE311 Applied Sports Science 1
HSE314 Applied Sports Science 2
HSE323 Clinical and Sport Biomechanics
SEE320 Microcontroller System Design
SEJ344 Technology Project
plus two elective units

SPORTS TECHNOLOGY – MECHANICAL MAJOR SEQUENCE

Career opportunities

Graduates may find career opportunities as sports equipment designers, in support roles in engineering organisations, and in Occupational Health and Safety (OH&S) roles.

Level 1
HBS109 Human Structure and Function
SED102 Engineering Graphics and CAD
SEE010 Safety Induction Program (0-credit-point safety unit)
SEE103 Electrical Systems
SEP122 Physics for the Life Sciences
SIT190 Introductory Mathematical Methods
SLE010 Laboratory and Fieldwork Safety Induction Program (0-credit-point safety unit)
SLE111 Cells and Genes
SLE133 Chemistry In Our World^
or
SLE155 Chemistry for the Professional Sciences^
plus one elective unit

^ Students who have not completed Year 12 Chemistry or equivalent may choose to undertake SLE133 Chemistry in Our World in Trimester 1. Students who have completed Year 12 Chemistry or equivalent may choose to undertake SLE155 Chemistry for the Professional Sciences in Trimester 2.

Level 2
HSE010 Exercise and Sport Laboratory Safety (0-credit-point safety unit)
HSE201 Exercise Physiology
HSE202 Biomechanics
SED202 Engineering Design and CAD
SEE206 Measurement and Instrumentation
SEM111 Engineering Materials 1
SEP101 Engineering Physics
SLE251 Research Methods and Data Analysis
plus one elective unit

Level 3
HSE304 Physiology of Sport Performance
HSE311 Applied Sports Science 1
HSE314 Applied Sports Science 2
HSE323 Clinical and Sport Biomechanics
SEJ344 Technology Project
SEM223 Engineering Mechanics
plus two elective units

N/A Refer to page 5.

BACHELOR OF FOOD AND NUTRITION 3 B

DEAKIN CODE	ATAR	INDICATIVE FIRST YEAR FEE
H315	B 74.50	$8370 (CSP)[1]
YEAR 12 PREREQUISITES		**NON-YEAR 12 REQUIREMENTS**
VCE units 3 and 4 – a study score of at least 30 in English (ESL) or 25 in any other English.		VTAC Personal History online. Some applicants only: STAT Multiple Choice.

This comprehensive course addresses all aspects of human nutrition and food science, with a strong emphasis on consumer health. Elective study in complementary areas such as health promotion, psychology, physical activity and health or exercise science, adds diversity to your degree and may be chosen from any area of the University (subject to availability and timetabling). If you are interested in a career in the food industry it is recommended that you undertake the food science major sequence. You may also choose to undertake an industry placement elective.

This course provides an opportunity to complete the prerequisites for the Master of Dietetics.

An honours year is available upon completion of this degree.

Professional recognition

Enrolled students and graduates can apply for membership of the Nutrition Society of Australia (NSA). If you choose to undertake the food science major sequence, you may also be eligible for membership of the Australian Institute of Food Science and Technology (AIFST).

Career opportunities

After successfully completing this course, you will be well prepared for careers requiring knowledge of nutrition, health, food analysis, sensory analysis, product development, food safety and food manufacture. If you complete the food science major sequence you will be well suited to careers in the food industry where your knowledge of nutrition and food composition will facilitate the creation and marketing of food products that help to improve health. You may also gain employment in diverse areas including food policy, food regulation, consumer education and awareness campaigns, private practice, nutrition counselling and community nutrition.

For more information and to click through to unit descriptions, please visit **deakin.edu.au/courses**.

Work-Integrated Learning

If you are interested in the possibility of enhancing your employment prospects by consolidating your knowledge and skills through realistic field experience, you are encouraged to consider undertaking an industry placement. You can do this by choosing to complete HSN311 Food and Nutrition Practicum as an elective unit in your final year.

Course structure

You must complete 24 credit points of study, including 16 core units, one compulsory unit (worth 0 credit points) and 8 elective units.

Level 1
HSN010 Food and Nutrition Laboratory Safety (0-credit-point safety unit)
HBS107 Understanding Health
HBS109 Human Structure and Function
HSN101 Food: Nutrition, Culture and Innovation
HSN103 Food: The Environment and Consumers
HSN104 The Science of Food
HSN106 Food Fundamentals
SLE133 Chemistry In Our World^
or
SLE155 Chemistry for the Professional Sciences^
plus one elective unit

^ Students who have not completed Year 12 Chemistry or equivalent may choose to undertake SLE133 Chemistry in Our World. Students who have completed Year 12 Chemistry or equivalent may choose to undertake SLE155 Chemistry for Professional Sciences.

Level 2
HSN201 Principles of Nutrition
HSN202 Lifespan Nutrition
HSN209 Food Security and Safety
HSN210 Nutrition and Food Promotion
plus four elective units

Level 3
HSN301 Diet and Disease
HSN302 Population Nutrition
HSN305 Assessing Food Intake and Activity
HSN309 Food Policy and Regulation
HSN313 Sensory Evaluation of Foods
plus three elective units

Elective units
HSN204 Food Microbiology and HACCP
HSN206 Food Analysis and Quality Assurance
HSN212 Functional Foods and Biotechnology
HSN213 Current Controversies in Food and Nutrition
HSN307 Sports Nutrition: Theory and Practice
HSN308 Food, Nutrition and Society
HSN311 Food and Nutrition Practicum
HSN315 Food Manufacturing and Process Innovation
HSN320 Trends in Product Development
HSN360 International Perspectives in Food and Nutrition

COURSES

BACHELOR OF FORENSIC SCIENCE 3 G

DEAKIN CODE	ATAR	INDICATIVE FIRST YEAR FEE
S324	G 57.55	$7750 (CSP)[1]
YEAR 12 PREREQUISITES		**NON-YEAR 12 REQUIREMENTS**
VCE units 3 and 4 – a study score of at least 25 in English (ESL) or 20 in any other English, and a study score of at least 20 in mathematics (any).		VTAC Personal History online.

Deakin's Bachelor of Forensic Science aims to provide formal training in the skills and techniques essential to modern forensic science, including the examination and presentation of scientific evidence.

The course combines studies in biology, chemistry, biochemical and chemical analysis, statistical analysis and molecular biology. You will also undertake studies in criminology, including the examination and interpretation of evidence.

The course has extensive industry links with local and Australian forensic organisations, and features guest lecturers and site visits in collaboration with leading forensic organisations.

An honours year is available for high-achieving students upon completion of this degree.

Career opportunities

Graduates of this course may find career opportunities in areas such as forensics, insurance investigation, risk analysis, research science, in government institutions and within chemical, food and pharmaceutical industries.

Work-Integrated Learning

Deakin's Bachelor of Forensic Science offers the opportunity to undertake an industry-based learning placement or an internship.

Course structure

You must complete 24 credit points of study, including 13 core units and a major sequence in either forensic chemistry or forensic biology. You may use up to eight of your remaining electives on units offered outside the faculty in areas such as criminology, for example.

Core units

Level 1

ASL111 Understanding Criminal Justice
ASL113 Understanding Crime
SIT191 Introduction to Statistics
SLE010 Laboratory and Fieldwork Safety Induction Program (0-credit-point safety unit)
SLE111 Cells and Genes
SLE112 Fundamentals of Forensic Science
SLE132 Biology: Form and Function
SLE133 Chemistry in our World#
SLE155 Chemistry for Professional Sciences

Students who have completed Year 12 Chemistry or equivalent may choose to replace SLE133 Chemistry in Our World with an elective unit.

Level 2

SLE208 Forensic Biology
SLE212 Biochemistry
SLE210 Chemistry the Enabling Science
SLE213 Introduction to Spectroscopic Principles

Level 3

SLE313 Forensic Analysis and Interpretation

Deakin's science courses give you the opportunity to gain practical experience through our Work-Integrated Learning Program. Each course-related industry placement is credited towards your degree.

Course duration in years 3
Melbourne Burwood Campus B
Geelong Waterfront Campus F
Geelong Waurn Ponds Campus G
Warrnambool Campus W
Off campus X

Major sequences

FORENSIC BIOLOGY

The forensic biology major sequence aims to provide you with the specific biological skills that are very important in the forensic science workplace. These biological-based skills complement the generic forensic science attributes developed in the core units of the course. Study in this area may lead to a career based on entomology, human anatomy and DNA-based forensic science.

Level 1
SLE111 Cells and Genes*
SLE132 Biology: Form and Function*

Level 2
SLE211 Principles of Physiology
SLE212 Biochemistry*
SLE221 Anatomy and Physiology
SLE254 Genetics

Level 3
SLE313 Forensic Analysis and Interpretation*
SLE321 Molecular Biology Techniques

* Core units in the degree.

FORENSIC CHEMISTRY

The forensic chemistry major sequence aims to provide you with the specific chemistry skills that are very important in the forensic science workplace. These chemically-based skills complement the generic forensic science attributes developed in the core units of the course. Study in this area may lead to a career based on toxicology, drug detection and chemical detection.

Level 1
SLE155 Chemistry for Professional Sciences*

Level 2
SLE210 Chemistry the Enabling Science
SLE212 Biochemistry*
SLE213 Introduction to Spectroscopic Principles*
SLE214 Organic Chemistry
SLE229 Introduction to Separation Science

Level 3
SLE316 Analytical Chemistry
SLE318 Synthetic and Medicinal Chemistry

* Core units in the degree.

For more information and to click through to unit descriptions, please visit **deakin.edu.au/courses**.

SHAELEE PEEL

BACHELOR OF FORENSIC SCIENCE
GEELONG WAURN PONDS CAMPUS

'I chose Deakin because it was the only place in Victoria to offer forensic science as an undergraduate degree. It's a great course, with fantastic lecturers, and I don't ever feel that I am just another face. The lecturers are very knowledgeable in the areas they teach, and I can see the relevance as to where it will be used in the workforce.

The most rewarding thing about my course would, without a doubt, be the placement I was able to complete with the Victoria Police Forensic Services Department. I made fantastic connections and good friends. I did a study on GSR (gunshot residue), which has aided the laboratories, and alongside the project I spent time with the various specialised areas of the forensic labs, which has been invaluable to my studies.

Deakin University was the best choice for me. It has helped me come out of my shell to become the best I can be to date, and I'm still growing. There is always room for improvement and Deakin knows that and helps facilitate it.'

COURSES

JAIMIE McGLASHAN

BACHELOR OF SCIENCE – MAJOR SEQUENCE
IN MATHEMATICAL MODELLING
GEELONG WAURN PONDS CAMPUS

'Maths has always fascinated me. I love the problem solving and challenges that come with studying maths. I'm beginning to understand how important maths is in everyday life, especially in the sciences and engineering. I chose to study this field because I want to learn to apply mathematics to real-life problems and hopefully one day research.

In 2012 I studied Trimester 1 on exchange at the University of Alaska, Trimester 2 at Deakin in Geelong, and two weeks of Trimester 3 in Chile as part of a study tour. Studying abroad is the by far the most exciting and beneficial part of my studies so far. Experiencing new cultures and discovering new places is, to me, more than anything you can learn in a class. It changes your perspectives and opens up so many opportunities.

What I enjoy most about uni and my course is the flexibility. I get a couple of electives so it's easy to participate in study tours and exchange programs. It's also good because you can pick a few classes from other faculties to learn a variety of things.'

» Read more about Jaimie's experience at deakin.is/jaimie-mcglashan.

BACHELOR OF SCIENCE 3 B G

DEAKIN CODE	ATAR	INDICATIVE FIRST YEAR FEE
S320	B 62.60 G 54.90	$7990 (CSP)[1]
YEAR 12 PREREQUISITES		**NON-YEAR 12 REQUIREMENTS**
VCE units 3 and 4 – a study score of at least 25 in English (ESL) or 20 in any other English.		VTAC Personal History online.

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.

An honours year is available for high-achieving students upon completion of this degree.

Career opportunities

Graduates of this course may find career opportunities in government institutions, in roles such as quality assurance, occupational health and safety, research, planning, management or marketing; science related industries, working in pharmaceutical production or pharmaceutical sales; biomedical science areas such as research or hospital and laboratory science; quality assurance in analytical and diagnostic laboratories; the food industry in quality control; environment and natural resources, teaching, information technology, mathematics or science journalism to name a few.

Work-Integrated Learning

As part of the course you are required to complete Professional Practice. This will allow you to gain valuable work experience, giving you the opportunity to apply and consolidate knowledge gained in your course, experience workplace culture and workplace practices, explore career options and develop a professional network. You may also have the opportunity to undertake industry-based learning, which can be credited towards your degree.

Course structure

You must complete 24 credit points of study, including seven core units and at least one 8-credit-point major sequence selected from the list below. At least 16 credit points must be science course-grouped units (which include all core units and units within the approved science major sequences). The remaining units can be taken as elective units from any area of the University.

- Biological chemistry B G
- Biology B G
- Chemistry G
- Environmental science B
- Mathematical modelling B G X
- Zoology G

Core units
Level 1
EES101 Communicating Science
SLE010 Laboratory and Fieldwork Safety Induction Program (0-credit-point safety unit)
SLE103 Ecology and the Environment
SLE111 Cells and Genes

Chemistry units
Select one unit from:
SLE133 Chemistry in Our World*
SLE155 Chemistry for Professional Sciences*

* Students who have not completed Year 12 Chemistry or equivalent may choose to undertake SLE133 Chemistry in Our World. Students who have completed Year 12 Chemistry or equivalent may choose to undertake SLE155 Chemistry for Professional Sciences.

Physics units
Select one unit from:
SEP101 Engineering Physics
SEP122 Physics for the Life Sciences

Quantitative skills
Levels 1 and 2
Select one unit from:
HPS201 Research Methods in Psychology A
SIT191 Introduction to Statistics
SIT194 Introduction to Mathematical Modelling
SLE251 Research Methods and Data Analysis

Professional Practice
Level 3
Select at least one unit from:
SLE314 Research Project
SLE335 Industrial Applications of Science
SLE352 Community Science Project
SLE390 Professional Practice in Bioscience
STP321 Industry-Based Learning – Science

Major sequences

BIOLOGICAL CHEMISTRY B G

The biological chemistry major sequence provides the fundamental language of chemistry and chemistry arithmetic for students wishing to understand the more chemically-oriented facets of modern biology.

Select eight units from the following (must include a minimum of 2 credit points at level 2 and a minimum of 2 credit points at level 3).

Level 1
SLE155 Chemistry for Professional Sciences

Level 2
SLE210 Chemistry the Enabling Science
SLE212 Biochemistry
SLE213 Introduction to Spectroscopic Principles
SLE214 Organic Chemistry
SLE222 Biochemical Metabolism
SLE235 Chemical Systems

Level 3
SLE311 Chemical Hazards
SLE312 Toxicology
SLE344 Chemistry Research Project

BIOLOGY B G

The biology major sequence is suitable for students who wish to obtain experience in a broad range of biological sub-disciplines. It offers the flexibility to choose units from disciplines ranging from human biology to ecology.

SLE111 Cells and Genes
SLE132 Biology: Form and Function

Plus 6 credit points of study from the following, including a minimum of 2 credit points at level 2 and a minimum of 2 credit points at level 3.

Level 1
SLE136 History of Life

Level 2
SLE203 Plant Biology
SLE204 Animal Diversity
SLE205 Vertebrate Structure, Function and Evolution
SLE206 Molecular Cell Biology
SLE208 Forensic Biology
SLE220 Wildlife Ecology
SLE211 Principles of Physiology
SLE212 Biochemistry
SLE221 Anatomy and Physiology
SLE222 Biochemical Metabolism
SLE224 Animal Behaviour
SLE234 Microbiology
SLE237 Biogeography
SLE254 Genetics

Level 3
SLE307 Behavioural Ecology
SLE309 Wildlife Conservation
SLE310 Ecology of Pest Plants and Animals
SLE312 Toxicology
SLE315 Comparative Animal Physiology
SLE317 Australian Vegetation and its Management
SLE321 Molecular Biology Techniques
SLE322 Landscape Ecology
SLE331 Cellular Physiology
SLE334 Medical Microbiology and Immunology
SLE339 Genetics of Disease
SLE346 Molecular Basis of Disease
SLE350 Marine Wildlife
SLE370 Evolution
SLE372 Evolutionary Ecology
SLE395 Palaeobiology
SLE397 Sensory Neurobiology and Behaviour

Note: Not all units are available on all campuses. For more information, please refer to deakin.edu.au/courses.

> Continued on next page ...

COURSES

CHEMISTRY G

An introduction to the synthesis, separation, detection and measurement of chemical substances, their properties and reactions.

Level 1
SLE155 Chemistry for Professional Sciences

Level 2
SLE210 Chemistry the Enabling Science
SLE213 Introduction to Spectroscopic Principles
SLE214 Organic Chemistry
SLE229 Introduction to Separation Science

Levels 2 and 3
Select at least three units from the following, of which at least two must be at level 3:
SLE212 Biochemistry
SLE235 Chemical Systems
SLE311 Chemical Hazards**
SLE312 Toxicology**
SLE316 Analytical Chemistry
SLE318 Synthetic and Medicinal Chemistry

** You can only choose one of SLE311 or SLE312.

ENVIRONMENTAL SCIENCE B

This major sequence 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.

Level 1
SLE102 Physical Geography
SLE103 Ecology and the Environment

Level 2
SLE202 Landscape Evolution
SHD301 Creating Sustainable Futures

Plus one unit from:
SLE231 Hydrology and Water Resources Management
SLE237 Biogeography

Level 3
Select one unit from:
SLE317 Australian Vegetation and its Management
SLE322 Landscape Ecology

Elective units
Select two restricted elective units from the following, including at least one unit at level 2 or level 3:

Level 1
SLE101 Techniques in Environmental Science
SLE151 Biodiversity: A Global Perspective

Level 2
SLE203 Plant Biology
SLE204 Animal Diversity
SLE220 Wildlife Ecology
SLE231 Hydrology and Water Resources Management
SLE237 Biogeography
SLE239 Introduction to Geographic Information Systems

Level 3
SLE317 Australian Vegetation and its Management
SLE322 Landscape Ecology
SLE342 Risks to Healthy Environments

MATHEMATICAL MODELLING B G X

Studies in mathematics provides you with a strong critical knowledge base and develops powers of analysis, logical thinking and problem solving, as well as a high level of numerical ability.

Level 1
SIT192 Discrete Mathematics
SIT194 Introduction to Mathematical Modelling

Level 2
SIT281 Cryptography
SIT291 Mathematical Methods for Information Modelling
SIT292 Linear Algebra and Applications to Data Communications

Level 3
SIT392 Public-Key Cryptography
SIT396 Complex Analysis
SIT399 Advanced Topics in Mathematics

ZOOLOGY G

Study the biology of animals from several aspects ranging from an understanding of how animals function, to their evolution and their relationship with the environment.

Level 1
SLE111 Cells and Genes
SLE132 Biology: Form and Function

Level 2
SLE204 Animal Diversity
SLE205 Vertebrate Structure, Function and Evolution
SLE254 Genetics

Level 3
SLE315 Comparative Animal Physiology
SLE370 Evolution
SLE397 Sensory Neurobiology and Behaviour

For more information and to click through to unit descriptions, please visit **deakin.edu.au/courses**.

BACHELOR OF ZOOLOGY AND ANIMAL SCIENCE 3 G

DEAKIN CODE	ATAR	INDICATIVE FIRST YEAR FEE
S369	G 67.95	$8130 (CSP)[1]
YEAR 12 PREREQUISITES		**NON-YEAR 12 REQUIREMENTS**
VCE units 3 and 4 – a study score of at least 25 in English (ESL) or 20 in any other English.		VTAC Personal History online.

Deakin's Bachelor of Zoology and Animal Science provides a broad understanding of the current field of zoology and is suitable for students with an interest in the biology of animals.

You will learn about the diversity, ecology, behaviour, physiology, genetics and evolutionary biology of animals, complemented by a number of practical and field-based learning experiences. The course also examines the potential effects environmental change may have on the evolution, disease and physiology of animals and how they adapt to a changing environment. The course has a strong focus on Australian fauna and its unique importance to the global environment, and is underpinned by the latest research in zoology.

An honours year is available for high-achieving students upon completion of this degree.

Career opportunities

Graduates may find employment opportunities in a range of areas including government environmental monitoring, private and environmental consulting, museums, school and university education, primary industries, quarantine and wildlife biology. Successful completion of the course may also lead to opportunities for further study including postgraduate research training both in Australia and overseas. The course may also be a potential pathway to veterinary science courses (subject to specific entry requirements).

Work-Integrated Learning

You will have the opportunity to complete a professional practice unit, which involves a placement for a minimum of two weeks within a relevant, course-related organisation.

Course structure

You must complete 24 credit points of study, including 16 credit points of core units and 8 credit points of elective units.

Level 1
SEP122 Physics for the Life Sciences
SLE010 Laboratory and Fieldwork Safety Induction Program (0-credit-point safety unit)
SLE102 Physical Geography
SLE103 Ecology and the Environment
SLE111 Cells and Genes
SLE132 Biology: Form and Function
SLE133 Chemistry In Our World^
or
SLE155 Chemistry for the Professional Sciences^
plus two elective units

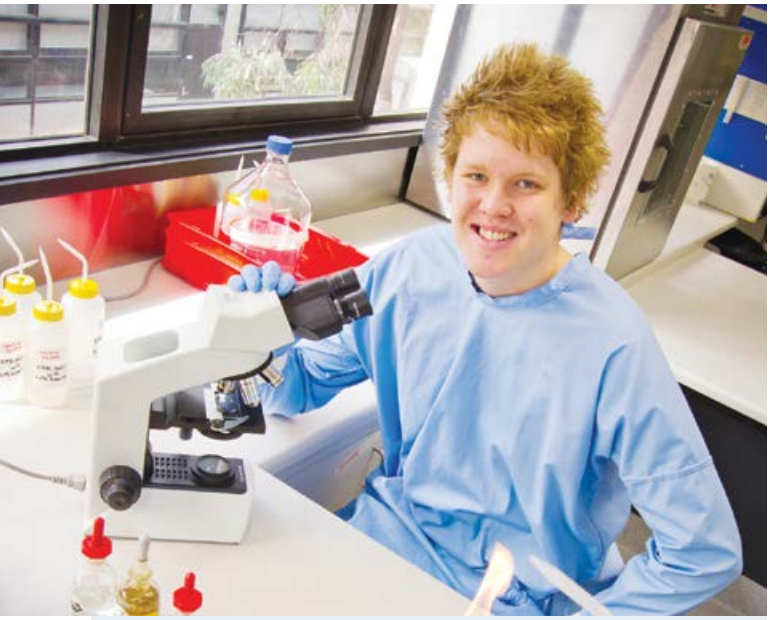
^ Students who have not completed Year 12 Chemistry or equivalent may choose to undertake SLE133 Chemistry in Our World. Students who have completed Year 12 Chemistry or equivalent may choose to undertake SLE155 Chemistry for Professional Sciences.

Level 2
SLE204 Animal Diversity
SLE205 Vertebrate Structure, Function and Evolution
SLE224 Animal Behaviour
SLE251 Research Methods and Data Analysis
SLE254 Genetics
SLE263 Marine and Coastal Ecosystems
plus two elective units

Level 3
SLE354 Disease Ecology and Epidemiology
SLE371 Human and Animal Navigation
SLE372 Evolutionary Ecology
SLE397 Sensory Neurobiology and Behaviour
plus four elective unit

Recommended elective unit
SLE355 Evolutionary and Ecological Physiology

COURSES



JACK HENNESSY

BACHELOR OF BIOMEDICAL SCIENCE
GEELONG WAURN PONDS CAMPUS AND
MELBOURNE BURWOOD CAMPUS

'Deakin has been great. Moving to Geelong and living on campus has been one of the best experiences of my life. The learning environment at Waurn Ponds was so supportive and intimate – I've made so many great friends. The ability to liaise on a personal level with the academic staff has also been a real benefit.

The flexible study options and the ability to choose units from a wide range of areas really appealed to me; I wanted to do units that would complement my degree.

The huge amount of options in regards to major sequences can really be helpful in choosing a particular career path. I had no idea I would find nutrition and exercise science so fun. The practical aspect of the course has been a great eye-opener into what it's like in the industry.'

GLOBAL SCIENCE AND TECHNOLOGY PROGRAM

DEAKIN CODE	ATAR	INDICATIVE FIRST YEAR FEE
Refer to specific course entry.	B 80.00* G 80.00*	Refer to specific course entry.
YEAR 12 PREREQUISITES		**EXTRA REQUIREMENTS**
Applicants must refer to the prerequisites for their specific science preference. Minimum ATAR of 80.00.		All applicants must complete and submit the Global Science and Technology Program Supplementary Information Form (deakin.edu.au/sebe/global).

The Global Science and Technology Program aims to recognise, reward and nurture high-achieving students who want to conduct part of their studies overseas through an exchange or study abroad program. A minimum ATAR of 80.00 is required for entry into this program. Successful applicants will be offered a scholarship of $3000 to assist with travel costs and will participate in the Deakin Global Citizenship Program. Scholarships will be awarded across the faculty to students undertaking any course offered by the Faculty of Science, Engineering and Built Environment, admitted to the program through VTAC.

Course structure

You are able to select any one of the undergraduate degrees offered by the Faculty of Science, Engineering and Built Environment through this single, campus-based VTAC preference. Refer to specific course entries and campus offerings in this booklet from the list of science courses.

* Minimum ATAR.

SCIENCE AND TECHNOLOGY (DEAN'S SCHOLARS PROGRAM)

DEAKIN CODE	ATAR	INDICATIVE FIRST YEAR FEE
Refer to specific course entry.	B 90.00* G 90.00*	Refer to specific course entry.
YEAR 12 PREREQUISITES		
Applicants must refer to the prerequisites for their specific science preference. Minimum ATAR of 90.00.		

The Dean's Scholars Program aims to recognise, reward and nurture high-achieving students. A minimum ATAR of 90.00 is required for entry into this program. Scholarships will be awarded annually across the faculty to Year 12 students admitted to the program through VTAC. Successful applicants will also be offered a professional development program and have a high chance of being selected for the Science, Engineering and Built Environment Industry-Based Learning Program.

Course structure

You are able to select any one of the undergraduate degrees offered by the Faculty of Science, Engineering and Built Environment through this single, campus-based VTAC preference. Refer to specific course entries and campus offerings in this booklet from the list of science courses.

* Minimum ATAR.

ASSOCIATE DEGREE OF ARTS, BUSINESS AND SCIENCES^ 2 G* W

DEAKIN CODE	INDICATIVE FIRST YEAR FEE
A200	$6590 (CSP)[1]

YEAR 12 PREREQUISITES AND NON-YEAR 12 REQUIREMENTS

There are no prerequisite studies for this course.
You will need to complete an application form including a detailed personal statement. You also need to attend an information session including completion of a literary exercise as part of an interview process.

The Associate Degree of Arts, Business and Sciences will help you develop skills in research, written communication, group presentations, critical thinking and learning technologies, which increase your chances of success at university. The key advantage of the associate degree is that it provides a supported transition to tertiary study. It allows for entry into a range of target degrees (as approved by Deakin University) offered at the Warrnambool Campus, Geelong Waterfront Campus, Geelong Waurn Ponds Campus, or via off-campus study. Completion of the associate degree may give you up to 18 months credit towards one of these target degrees.

Career opportunities

The associate degree can open doors to employment in a range of fields including administration, marketing, business, management, banking, finance, community work, health, natural resource management and science. You also have the option of continuing your studies to complete a bachelor's degree, which will provide access to a wide range of careers and employment opportunities.

Course structure

To graduate from the Associate Degree of Arts, Business and Sciences, you must complete a minimum of 16 credit points, comprising core units and elective units. If you are studying through a partner TAFE these credit points can also include credits gained through subjects studied as part of your TAFE diploma course.

The core units will focus on the knowledge and skills you need to be a successful university student. They will provide you with an introduction to studying at university from the perspective of three different disciplines or subjects, and ensure that you become a more self-directed learner. They will also provide support for your study in other subject areas, particularly through the development of academic writing, critical thinking and information technology skills.

In addition to the core units, you will select four electives in your first year and eight in your second year, from units offered by the Faculties of Arts and Education; Business and Law*; Science, Engineering and Built Environment; and Health. Major sequences in arts, business, education, health and science are available.

You will be guided with your subject selection to ensure you choose units that will provide the maximum credit when using the associate degree as a pathway to a bachelor's degree, or to optimise employment opportunities.

If you study this course through the Warrnambool Campus or Geelong Waurn Ponds Campus* you will also have the option to complete a mentored work placement in your final trimester. This is a great way to gain real-life work experience and enhance your employment opportunities.

Core units – for course offered at the Warrnambool and Geelong Waurn Ponds Campuses*

Level 1
EAD101 Learning for a Knowledge Society
EAD102 E-Literacy for Contemporary Learning
EAD104 Work and the Sustainable Society (2 credit points)
plus four elective units from the list below

Level 2
Select eight first or second level units from a target bachelor's degree.

Elective units

You may choose from a range of units offered at levels 1 and 2 from the Warrnambool Campus, Geelong Waurn Ponds Campus* (or off campus) as listed below, or the Work Placement unit, which is recommended for those intending to finish at the end of level 2.

ACV101 Studio Art: Painting A
ACV102 Studio Art: Painting B
AIA105 Visions of Australia – Time and Space From 1700 to 2010
AIA106 Populate or Perish: Australia's People
ALC101 Contemporary Communication: Making Sense of Text, Image and Meaning
ALC102 Contemporary Communication: Making Sense of New Media
ALW117 Writing for Professional Practice
ASC101 Introduction to Sociology A
ASC102 Introduction to Sociology B
EAD103 Independent Study (recommended)
EAD105 Applied Community Project (recommended)
HBS107 Understanding Health
HBS108 Health Information and Data
HBS110 Health Behaviour
MAA103 Accounting for Decision Making
MAE102 The Global Economy
MIS101 Business Information Systems
MMM132 Management
SLE102 Physical Geography
SLE103 Ecology and the Environment

Work placement unit

EAD201 Work Placement (2 credit points)

^ As part of the Deakin at Your Doorstep initiative, this course is offered at the Warrnambool Campus and Geelong Waurn Ponds Campus*. The University also offers the course through its TAFE partners at their campuses in Bairnsdale, Craigieburn, Dandenong, Mornington Peninsula, Portland, Swan Hill and Wangaratta.

* Faculty of Business and Law units are offered from the Geelong Waterfront Campus.

For more information and to click through to unit descriptions, please visit **deakin.edu.au/courses**.

COURSES

COMBINED COURSES

BACHELOR OF ARTS/ BACHELOR OF SCIENCE 4 B G

DEAKIN CODE	ATAR	INDICATIVE FIRST YEAR FEE
D311	B 62.80 G 59.70	$7110 (CSP)[1]
YEAR 12 PREREQUISITES		**NON-YEAR 12 REQUIREMENTS**
VCE units 3 and 4 – a study score of at least 25 in English (ESL) or 20 in any other English.		VTAC Personal History online.

This combined course enables you to pursue studies in a variety of contemporary themes such as the body, the environment, science policy and practice, and others. You may combine major sequences such as public relations/chemistry, philosophy/mathematical modelling, sociology/biology or environmental science/journalism.

Career opportunities

This combined course offers you the chance to broaden your career opportunities after graduation. The types of opportunities available will depend on the major sequences taken within the course. This course allows you to explore the relationships between various areas of study, combining them in innovative ways to prepare yourself for a career in areas like policy development and implementation, human services, and in the various science fields.

Work-Integrated Learning

As part of the Bachelor of Science component of this course you are required to complete Professional Practice. This will allow you to gain valuable work experience, giving you the opportunity to apply and consolidate knowledge gained in your course, experience workplace culture and workplace practices, explore career options and develop a professional network. You may also have the opportunity to undertake industry-based-learning, which can be credited towards your degree.

Course structure

You must complete 32 credit points of study –16 credit points from the Bachelor of Arts and 16 credit points from the Bachelor of Science, including a major sequence from each degree.

Bachelor of Science major sequences and units

Refer to the Bachelor of Science (S320) course entry on page 14 for details of major sequences and units available.

Bachelor of Arts major sequences

- Animation B
- Anthropology G X
- Arabic B G X
- Australian studies B G X
- Children's literature B G X
- Chinese B G
- Criminology G X
- Dance B*
- Drama B
- Film studies B
- History B G X
- Indonesian B G X
- International relations B G X
- Journalism B G X
- Language and culture studies B G X**
- Literary studies B G X
- Media and communication B G X
- Middle East studies B G X
- Philosophy B G X
- Photography B
- Politics and policy studies B G X
- Professional and creative writing B G
- Public relations G X
- Sociology B G X
- Visual arts B F

* Dance major sequence offered to Bachelor of Teaching (Secondary)/Bachelor of Arts (D347) and Bachelor of Creative Arts students only from 2013.

** A full major sequence in Chinese is not available at this campus.

For more information on these major sequences, please refer to the *2014 Undergraduate Arts, Humanities and Social Sciences Career Booklet.*

BUSINESS SCHOLARS PROGRAM

If you enrol in a business degree in the Faculty of Business and Law, you may apply for the Business Scholars Program. For more information, please visit **deakin.edu.au/buslaw/student-scholarships**.

BACHELOR OF COMMERCE/ BACHELOR OF SCIENCE 4 B G/F*

DEAKIN CODE	ATAR	INDICATIVE FIRST YEAR FEE
D321	B 70.80 G/F N/A	$8740 (CSP)[1]

YEAR 12 PREREQUISITES	NON-YEAR 12 REQUIREMENTS
VCE units 3 and 4 – a study score of at least 25 in English (ESL) or 20 in any other English.	VTAC Personal History online, academic results and GPA.

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, information systems or marketing with a relevant science stream, for example biology, biological chemistry, chemistry, environmental science, mathematical modelling or zoology.

Professional recognition

Deakin's Bachelor of Commerce is internationally recognised and EPAS accredited by the European Foundation for Management Development (EFMD).

The Bachelor of Commerce component of this course can lead to accreditation with many professional bodies, such as the Certified Practicing Accountant (CPA) Program of CPA Australia, entry into the CA program of the Institute of Chartered Accountants in Australia (ICAA), the Association of Chartered Certified Accountants (ACCA), the Institute of Public Accountants Professional Accounting Program, the Australian Computer Society (ACS), the Economics Society of Australia and the Australian Marketing Institute, providing you meet the specified requirements within the course.

Career opportunities

A combined course offers you the chance to broaden your career opportunities after graduation. The types of opportunities available will depend on the major sequences you take within the course. For information on career outcomes for the Bachelor of Science, please see page 14.

A Bachelor of Commerce degree can open doors to careers in virtually every area of business and government internationally, including professional accountant, IT and systems professional, economist, financial planner, business consultant, network manager, internet administrator, human resources manager, manager, social and economic policy developer, international trade officer or marketing assistant/manager.

Work-Integrated Learning

As part of the Bachelor of Science component of the course, you are required to complete Professional Practice. This will allow you to gain valuable work experience, giving you the opportunity to apply and consolidate knowledge gained in your course, experience workplace culture and workplace practices, explore career options and develop a professional network. You may also have the opportunity to undertake industry-based learning, which can be credited towards your degree.

As part of the Bachelor of Commerce component of this course, the Faculty of Business and Law offers Work-Integrated Learning, which covers business internships, community-based volunteering, industry-based learning and international study opportunities. For more information, please visit **deakin.edu.au/buslaw/wil**.

Course structure

You must complete 32 credit points of study – 16 credit points from the Bachelor of Commerce and 16 credit points from the Bachelor of Science, including a major sequence from each degree.

Bachelor of Science major sequences and units

Refer to the Bachelor of Science (S320) course entry on page 14 for details of major sequences and units available.

Bachelor of Commerce units

Core units

Level 1

MAA103 Accounting for Decision Making
MAE101 Economic Principles
MAE102 The Global Economy
MAF101 Fundamentals of Finance
MCA010 Communication for Academic Studies (0 credit points)
MIS101 Business Information Systems
MIS171 Business Analytics
MLC101 Business Law
MMM132 Management

Level 2

MMH299 Business Communication
MMK277 Marketing Management

Elective units

MIS291 Community Based Volunteering A
MIS292 Community Based Volunteering B
MIS390 Business Internship A
MIS391 Business Internship B
MIS394 Industry Based Learning in Business A
MIS395 Industry Based Learning in Business B
MIS396 Industry Based Learning in Business C
MIS397 Industry Based Learning in Business D
MME101 Business Academic Skills
MMM233 Business and the Environment
MMM241 Entrepreneurship and Innovation
MMM385 Business in Asia
MMP111 Introduction to Property
MMS308 Sport Marketing
SHD201 Creating Sustainable Futures
SHD301 Creating Sustainable Futures

Bachelor of Commerce major sequences

- Accounting B F X
- Accounting information systems B F X
- Business information systems B F^ X
- Commercial law B F X
- eBusiness B F X
- Economics B F X
- Finance B F X
- Financial planning B F X
- Human resource management B F X
- Interactive marketing B F^ X
- International business B
- International management B F^ X
- International trade and economic policy B F X
- Management B F X
- Marketing B F X
- Quantitative business analysis B F^ X
- Supply chain management B F X

^ You will be required to undertake one or more units in online or off-campus mode.

For more information on these major sequences, please refer to the *2013 Undergraduate Business Career Booklet*.

* Students enrolled at the Geelong Waterfront Campus will be required to undertake some units of study at the Geelong Waurn Ponds Campus.

N/A Refer to page 5.

COURSES

BACHELOR OF ENGINEERING/ BACHELOR OF SCIENCE 5.5 G

DEAKIN CODE	ATAR	INDICATIVE FIRST YEAR FEE
D372	G 63.20	$8370 (CSP)[1]
YEAR 12 PREREQUISITES		**NON-YEAR 12 REQUIREMENTS**
VCE units 3 and 4 – a study score of at least 25 in English (ESL) or 20 in any other English and a study score of at least 20 in mathematical methods (CAS) or specialist mathematics.		VTAC Personal History online and demonstrated mathematical background equivalent to Year 12 level.

This combined course will strengthen your engineering degree with complementary studies in science. You may combine one of the engineering major sequences – civil, electrical and electronics, mechanical or mechatronics and robotics engineering – with a science stream, for example, biology, biological chemistry, chemistry, environmental science, mathematical modelling or zoology.

Professional recognition

Deakin's Bachelor of Engineering is accredited by Engineers Australia, which gives the degree international recognition, allowing graduates to practise as professional engineers in many countries around the world.

Work-Integrated Learning

As part of the Bachelor of Engineering component of this course you must obtain an aggregate of at least 12 weeks of suitable practical experience during your program. Practical experience is normally undertaken during the vacation periods.

As part of the Bachelor of Science component of this course you are required to complete Professional Practice. This will allow you to gain valuable work experience, giving you the opportunity to apply and consolidate knowledge gained in your course, experience workplace culture and workplace practices, explore career options and develop a professional network. You may also have the opportunity to undertake industry-based learning, which can be credited towards your degree.

Career opportunities

The Bachelor of Engineering/Bachelor of Science offers you the chance to broaden your career opportunities after graduation. The opportunities available will depend on the major sequences you take within your course.

For information on career outcomes for the Bachelor of Science, please see page 14.

Deakin's Bachelor of Engineering is designed to maximise your employment prospects, making you an industry-ready engineer who is immediately employable and capable of adapting to an ever-changing future.

Depending on your chosen specialisation, career opportunities can be found in civil, electrical and electronics, mechanical or mechatronics and robotics engineering.

For more information on career outcomes for the Bachelor of Engineering please refer to the *2014 Undergraduate Engineering Career Booklet*.

Course structure

You must complete 44 credit points of study, which must include specified engineering and science core units and a major sequence from each degree.

Bachelor of Science major sequences and units

Refer to the Bachelor of Science (S320) course entry on page 14 for details of major sequences and units available.

Bachelor of Engineering major sequences

- Civil G X
- Electrical and electronics G X
- Mechanical G X
- Mechatronics and robotics G X

For more information on these major sequences, please refer to the *2013 Undergraduate Engineering Career Booklet*.

DID YOU KNOW?

At Deakin we offer a number of combined courses that enable you to obtain two highly-regarded professional qualifications in a shorter timeframe than it would take to complete the courses separately – thereby saving time and money and broadening your skills.

BACHELOR OF FORENSIC SCIENCE/ BACHELOR OF CRIMINOLOGY 4 G

DEAKIN CODE	ATAR	INDICATIVE FIRST YEAR FEE
D329	G 66.75	$7430 (CSP)[1]
YEAR 12 PREREQUISITES		**NON-YEAR 12 REQUIREMENTS**
VCE units 3 and 4 – a study score of at least 25 in English (ESL) or 20 in any other English and a study score of at least 20 in mathematics (any).		VTAC Personal History online.

Deakin's Bachelor of Forensic Science/Bachelor of Criminology gives you the opportunity to study forensic science and criminology as a combined course. It has been designed to enable graduates to work both in specialised fields and across professional boundaries. The course is contemporary and relevant, and has teaching staff who are active researchers in their respective fields.

You will learn the skills and techniques essential to modern forensic science, including the examination and presentation of scientific evidence. The course will also give you practical, professional training and enable you to study critical analysis in the fields of policing, security, corrections, crime prevention and community safety, and various paralegal fields.

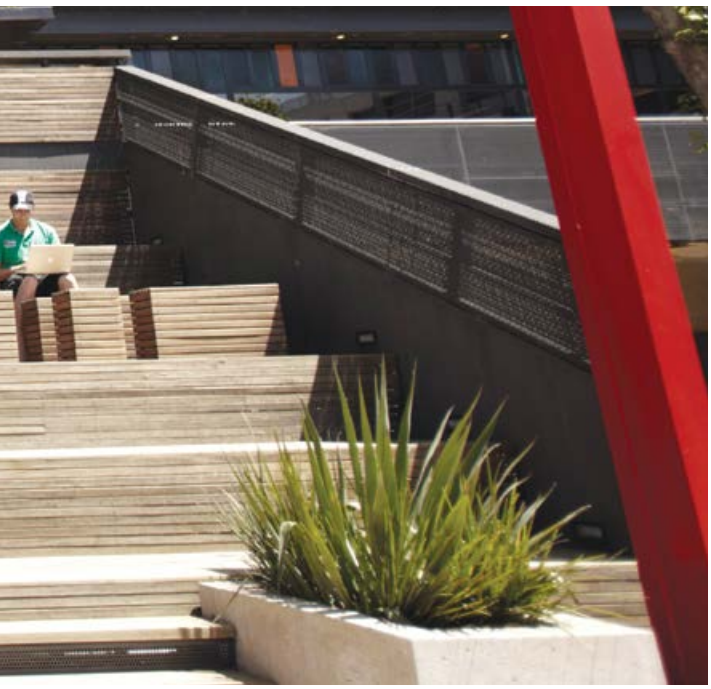
Career opportunities

As a graduate of this course, you may find employment opportunities as a forensic scientist, criminologist or related role, in both the public and private sectors, in areas such as the forensic science industry, science-based industries, teaching, government agencies, state and federal police, ASIO, correctional services, community services, and private security industries.

Work-Integrated Learning

Deakin's Bachelor of Forensic Science offers the opportunity to undertake an industry-based learning placement or internship.

The Bachelor of Criminology component of this course includes an elective work placement/internship program, which gives you invaluable experience working with the local community.



Course structure

You must complete 32 credit points of study – 16 credit points of units from the Bachelor of Criminology and 16 credit points of units from the Bachelor of Forensic Science including a major sequence in forensic biology or forensic chemistry.

Bachelor of Forensic Science major sequences and units

Refer to the Bachelor of Forensic Science (S324) course entry on page 12 for details of major sequences and units available.

Bachelor of Criminology units

Core units

Level 1

ASL111 Understanding Criminal Justice
ASL113 Understanding Crime
MLP103 Police and the Law
SLE112 Fundamentals of Forensic Science

Levels 2 and 3

ASL204/ASL304 Issues and Ethics in the Criminal Justice System
ASL208/ASL308 Terrorism, Transnational Crime and Security
ASL209 Criminology
ASL214 Criminological Research Methods
ASL221/ASL321 Crime Prevention and Security
MLP301 Sentencing Law and Practice

Elective units

ASC270/ASC370 Sociology and the Law
ASC304 Culture and Control: Boundaries and Identities
ASC320 Sex, Crime and Justice in An Electronic Age
ASL219/ASL319 Drugs, Crime and Society
ASL222/ASL322 International and Comparative Criminal Justice
ASL311 Criminology Internship
ASS229 Anthropology of Crime and Violence
HPS206 Psychology in the Criminal Justice System

For more information and to click through to unit descriptions, please visit **deakin.edu.au/courses**.

COURSES

BACHELOR OF INFORMATION SYSTEMS/ BACHELOR OF SCIENCE 4 B

DEAKIN CODE	ATAR	INDICATIVE FIRST YEAR FEE
D369	B N/A	$8370 (CSP)[1]
YEAR 12 PREREQUISITES		**NON-YEAR 12 REQUIREMENTS**
VCE units 3 and 4 – a study score of at least 25 in English (ESL) or 20 in any other English.		VTAC Personal History online, academic results and GPA or interview.

This course allows you to combine studies in information systems with studies in a science stream such as biology, biological chemistry, environmental science or mathematical modelling. You will gain a broad knowledge of contemporary science and information systems, giving you the potential to work in a wide range of fields, including agriculture, medicine and human health, pharmaceuticals and food technology.

Career opportunities

A combined course such as the Bachelor of Information Systems/Bachelor of Science offers you the chance to broaden your career opportunities after graduation.

Information systems professionals have access to employment in just about every Australian industry, including all levels of government. The course is designed to give you essential business skills, as well as expertise in information systems, enabling you to achieve specialist information systems career roles such as project manager, business analyst, security analyst, database developer, web designer and information systems project leader.

For information on career outcomes for the Bachelor of Science, see page 14.

Work-Integrated Learning

As part of the Bachelor of Science component of this course, you are required to complete Professional Practice. This will allow you to gain valuable work experience, giving you the opportunity to apply and consolidate knowledge gained in your course, experience workplace culture and workplace practices, explore career options and develop a professional network. You may also have the opportunity to undertake industry-based learning, which can be credited towards your degree.

As part of the Bachelor of Information Systems component of this course, the Faculty of Business and Law offers Work-Integrated Learning, which covers business internships, community-based volunteering, industry-based learning and international study opportunities. For more information, please visit **deakin.edu.au/buslaw/wil**.

Course structure

You must complete 32 credit points of study – 16 credit points from the Bachelor of Information Systems and 16 credit points from the Bachelor of Science, including a major sequence. The 16 credit points studied within the Bachelor of Information Systems must include the 16 credit points of core units.

Bachelor of Science major sequences and units

Refer to the Bachelor of Science (S320) course entry on page 14 for details of major sequences and units available.

Bachelor of Information Systems units

Core units

Level 1

MCA010 Communication for Academic Studies (0 credit points)
MIS101 Business Information Systems
MIS171 Business Analytics

Level 2

MIS201 Business Requirements Analysis
MIS202 Managing Data and Information
MIS211 IS Services, Infrastructure and the Cloud
MIS231 Professional Ethics in the Digital Age
MIS271 Business Intelligence
MIS276 Design Thinking
MIS291 Community Based Volunteering A

Level 3

MIS312 eBusiness Strategies
MIS332 People, Work and Technology
MIS352 Enterprise Systems
MIS398 Project Management
MIS399 Capstone Project

Plus 2 credit points of Work-Integrated Learning chosen from:
MIS390/MIS391 Business Internship A or B
MIS394/MIS395/MIS396/MIS397 Industry Based Learning in Business A, B, C or D

N/A Refer to page 5.

BUSINESS SCHOLARS PROGRAM

If you enrol in a business degree in the Faculty of Business and Law, you may apply for the Business Scholars Program. For more information, please visit **deakin.edu.au/buslaw/student-scholarships**.

BACHELOR OF SCIENCE/ BACHELOR OF LAWS 5 B G/F*

DEAKIN CODE	ATAR	INDICATIVE FIRST YEAR FEE
D331	B 91.25 G/F N/A	$9000 (CSP)[1]

YEAR 12 PREREQUISITES

VCE units 3 and 4 – a study score of at least 35 in English (ESL) or 30 in any other English.

NON-YEAR 12 REQUIREMENTS

ALSET.#

You are exempt from sitting the ALSET if you:

- are a current Year 12 student; or
- have completed Year 12 studies in 2010, 2011 or 2012 and have not undertaken any tertiary studies (including TAFE studies, diploma or above) in the interim; or
- sat the ALSET in 2010, 2011 or 2012 and intend to use the result from that year; or
- are currently enrolled or were enrolled in a Bachelor of Laws, Bachelor of Laws/ combined course or the Juris Doctor (no other law course is eligible under this exemption clause) in 2011, 2012 or 2013 and have completed the equivalent of one full-time year at an Australian university (including at least two law (LLB) units); or
- have successfully completed an Australian postgraduate qualification in law in the past 10 years (three out of four units must be law (LLB) units).

Combining another degree with a Bachelor of Laws is an excellent way to enhance your understanding of the context in which the law operates. In the Bachelor of Science/Bachelor of Laws, you can combine studies in law with studies in science, such as biological chemistry, biology, chemistry, environmental science, mathematical modelling or zoology.

This course enables you to undertake legal studies that satisfy the university component of the requirements for admission to practise law in Victoria, as well as studies in other specialist areas.

Professional recognition

Deakin's law studies satisfy the academic requirements for admission to practise law in Victoria.

Career opportunities

A law degree, especially when combined with another degree such as science, is a qualification that offers unequalled career opportunities. As an alternative to practising as a barrister or solicitor, you may choose to pursue a career in a wide range of organisations, government services, industrial relations, research, public administration, diplomatic service, the media, legal aid, law reform or teaching either in schools or universities. There is also an increasing need for lawyers who understand science, and scientists who understand the law, to work in specialist roles and to deal with complex, often intertwined scientific and legal issues.

Work-Integrated Learning

Please refer to the Bachelor of Science (S320) course entry on page 14 for Work-Integrated Learning for the Bachelor of Science component of this course. To satisfy the law component of this course, and be eligible to graduate, you are required to complete the prescribed professional experience, further enhancing your studies.

Professional experience

The practical experience requirements will provide you with an opportunity to enrich your legal education and theoretical knowledge, and assist in preparing you for employment in the industry. Your degree is enhanced by the requirement to complete 30 days of work placement in a legal environment to gain experience on how the law operates in practice, and to develop professional networks.

Practical legal training

In your final year, you will undertake a unique capstone unit, 'Legal Problem-Solving and Persuasion', which will teach you about the science of persuasion and approaching problems in a clear-minded manner in order to achieve optimum outcomes. In the process you will develop presentation skills and experience presenting in the courtroom.

Regular, compulsory practical experience placements throughout the course also offer you the opportunity to experience legal environments first-hand and develop useful workplace contacts.

Law Clinic

As part of this course, Deakin also offers Law Clinic, a clinical skills unit that involves you working at a community legal centre under the supervision of a legal practitioner. This unit not only gives you credit towards your degree, it also enhances your overall learning experience, providing you with a unique insight into the community legal centre environment.

Course structure

You must complete 40 credit points of study – 24 credit points from the Bachelor of Laws and 16 credit points from the Bachelor of Science, including at least one major sequence.

Within the 24 credit points required from the Bachelor of Laws, 21 credit points are compulsory and 3 credit points are taken as elective law units. In addition, you will be required to complete the prescribed professional experience.

Bachelor of Science major sequences and units

Refer to the Bachelor of Science (S320) course entry on page 14 for details of major sequences and units available.

* Students enrolled at the Geelong Waterfront Campus will be required to undertake some units of study at the Geelong Waurn Ponds Campus.

\# ALSET criteria is currently under review. For the most up-to-date information, please visit the VTAC website www.vtac.edu.au.

N/A Refer to page 5.

> Continued on next page ...

DID YOU KNOW?

Experience has shown that employers prefer graduates who have studied combined courses. These graduates are highly regarded for their breadth of knowledge and their unique perspective of the business environment.

COURSES

Bachelor of Laws units

Core units

Level 1
MCA010 Communication for Academic Studies (0 credit points)
MLL110 Legal Principles and Skills
MLL111 Contract

Level 2
MLL213 Torts
MLL214 Criminal Law
MLL215 Commercial Law
MLL217 Misleading Conduct and Economic Torts
MLL218 Criminal Procedure
MLL221 Corporate Law

Level 3
MLL323 Constitutional Law
MLL324 Administrative Law
MLL325 Land Law
MLL327 Property
MLL334 Evidence
MLL335 Legal Practice and Ethics
MLL342 Workplace Law
MLL391 Civil Procedure and Alternative Dispute Resolution

Level 4
MLL405 Equity and Trusts
MLL406 Taxation
MLL409 Competition Law and Policy
MLL410 Intellectual Property
MLL411 Legal Problem Solving and Persuasion

Elective units

Select 3 to 8 credit points of elective law units from the following:

Level 3
MLL301 International Litigation and Dispute Settlement – Jessup Moot
MLL302 Human Rights Law
MLL315 Personal Injuries Compensation Schemes
MLL316 Mining and Energy Law
MLL317 Superannuation Law
MLL318 Insolvency
MLL336 International Commercial Law
MLL344 Chinese Commercial Law
MLL351 Law Clinic
MLL355 International Litigation and Dispute Settlement
MLL370 Law and the Internet
MLL377 International Law
MLL382 Indian Law
MLL388 International Financial Crime

Level 4
MLL408 Family Law

Law electives are offered on a rotational basis. Not every unit is offered every year.

BACHELOR OF TEACHING (SCIENCE)/ BACHELOR OF SCIENCE 4 B

DEAKIN CODE	ATAR	INDICATIVE FIRST YEAR FEE
D351	B 62.10	$7710 (CSP)[1]
YEAR 12 PREREQUISITES		**NON-YEAR 12 REQUIREMENTS**
VCE units 1 and 2 – two units (any study combination) from general mathematics or mathematical methods (CAS). VCE units 3 and 4 – a study score of at least 30 in English (ESL) or 25 in any other English and a study score of at least 20 in any one of mathematics (any), biology, chemistry, environmental science.		VTAC Personal History online and GPA.

The Bachelor of Teaching (Science)/Bachelor of Science is designed to introduce you to contemporary science and its applications, and innovative teaching and learning situations, so that you will be able to introduce and sustain innovative practices in school science that engage students and support quality learning.

The course includes a professional practice sequence designed to introduce a broader and more contemporary view of science.

Professional recognition

Successful completion of this course will meet the registration requirements of the Victorian Institute of Teaching, and other state teacher registration boards in Australia.

Career opportunities

Graduates from this program have found careers in Australian and overseas secondary schools, government departments, universities, the public service, TAFE and adult community educational institutions, health and welfare organisations as well as in private academies and agencies.

Graduates will also have opportunities to work in science-related industries such as science writing and interpretation, government departments, teaching, university research, and in public sector positions such as conservation groups and other research positions in a variety of organisations.

Work-Integrated Learning

You will undertake 80 days of supervised work placement organised by the Professional Experience Office as part of your completion of the course. Some of this experience will take place in non-school settings, consistent with current directions advocated by the Victorian Institute of Teaching.

As part of the Bachelor of Science component of the course you are required to complete Professional Practice. This will allow you to gain valuable work experience, giving you the opportunity to apply and consolidate knowledge gained in your course, experience workplace culture and workplace practices, explore career options and develop a professional network. You may also have the opportunity to undertake industry-based learning, which can be credited towards your degree.

Work placement requirements

The Working with Children Act 2005 (Vic.) requires a person who engages in child-related work, as defined in the Act, to obtain an assessment notice under the Act, known as a Working with Children Check (WWCC). The Act is administered by the Department of Justice: **justice.vic.gov.au**. School experience placements in schools in the course of a university degree are 'child-related work'. Under the Working with Children Act 2005 (Vic.), a student teacher must obtain a WWCC before commencing school experience placements. Should a student fail to obtain a WWCC, practical training in a school will not be provided, resulting in the student's inability to complete the degree.

Course duration in years 3
Melbourne Burwood Campus B
Geelong Waterfront Campus F
Geelong Waurn Ponds Campus G
Warrnambool Campus W
Off campus X

Course structure

You must complete 32 credit points of study – 16 credit points from the Bachelor of Teaching (Science) and 16 credit points from the Bachelor of Science, including at least one major sequence and one minor sequence.

Level 1
EPP101 Teacher–Learner Identity
EPP102 Learning–Teaching Communities
SEP122 Physics for the Life Sciences
SLE010 Laboratory and Fieldwork Safety Induction Program (0-credit-point compulsory safety unit)
SLE111 Cells and Genes
SLE133 Chemistry in our World*
SLE155 Chemistry for Professional Sciences*
plus up to two science major units and one science minor unit

* Students who have not completed Year 12 Chemistry or equivalent may choose to undertake SLE133 Chemistry in our World in Trimester 1. Students who have completed Year 12 Chemistry or equivalent may choose to undertake SLE155 Chemistry for the Professional Sciences in Trimester 2.

Level 2
EES200 Communicating Science
EPP207 Pedagogy
SLE103 Ecology and the Environment#
SLE352 Community Science Project

Plus one unit from:
SIT194 Introduction to Mathematical Modelling
SLE251 Research Methods and Data Analysis#
plus two science major units and one science minor unit

\# Sequence of units may vary depending on students' choice of major sequence. Students should contact the Student Support Office for advice.

Level 3
EEH531 Promoting Student Wellbeing
EPP304 Ways of Knowing Children and Adolescents
Secondary curriculum study 1A and 2A
plus three science major units and one science minor unit

Level 4
EPP305 Policy, Schooling and Society
EPP406 Professional Identity and Curriculum Work
ESM415 Problem Solving and Modelling in the Mathematics Classroom
ESS415 Resources in the Contemporary Science Curriculum
ESS439 Issues in Science and Environmental Education
EXC425 Literacy and Numeracy Across the Curriculum
EXC440 Teaching for Diversity
Secondary curriculum study 1B and 2B

Note: Students undertaking a mathematics major or sub major may elect to enrol in ESM415 in lieu of ESS439.

Professional experience units
Professional experience units are academic units that incorporate practicum. The number of practicum days required for each unit is indicated below.

Level 1
EPP101 Teacher–Learner Identity (4 days)
EPP102 Learning–Teaching Communities (6 days)

Level 2
EPP207 Pedagogy (10 days)

Level 3
EPP304 Ways of Knowing Children and Adolescents (15 days)
EPP305 Policy, Schooling and Society (10 days)

Level 4
EPP406 Professional Identity and Curriculum Work (35 days)

Major/minor sequences

- Biological chemistry B
- Biology B
- Environmental science B
- Mathematical modelling B X

1 The indicative first year fee is an approximate indication of the cost of this course in the first year of full-time study for a Commonwealth Supported Place. We can't specify the exact figure, because fees are charged per unit, not per course, so the actual fees may vary depending on what units you choose to study.

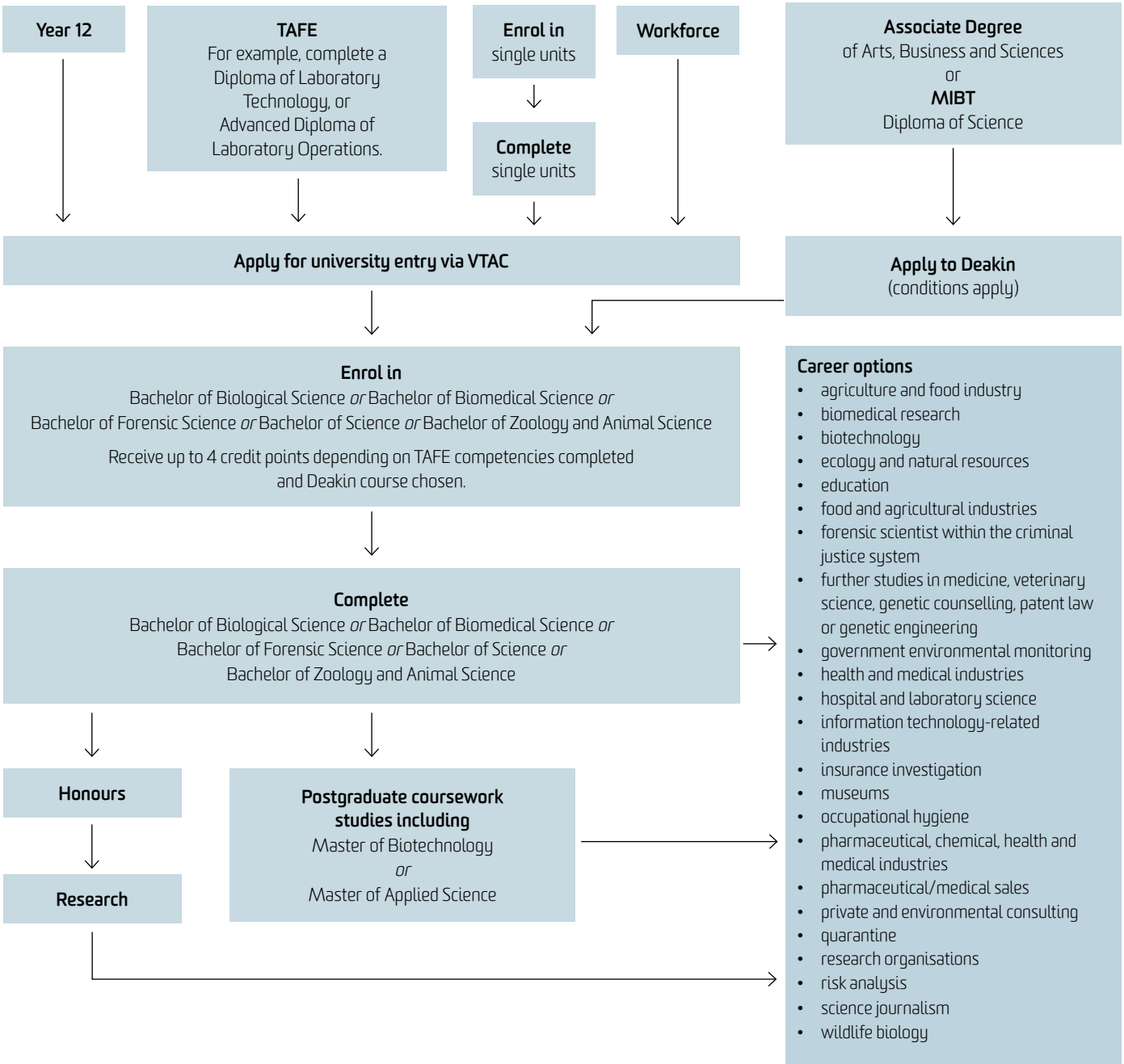
The fees quoted in this booklet are for Australian students in 2013, and may change for 2014 and later years. You can find more information about fees on our website at deakin.edu.au or at studyassist.gov.au. For information on fees for international students, please visit deakin.edu.au/international.

For more information and to click through to unit descriptions, please visit **deakin.edu.au/courses**.

For the latest information about new courses at Deakin University, please visit **deakin.edu.au**.

PATHWAYS

Pathway programs provide alternative entry options that take into consideration previous qualifications or your time in the workforce. Deakin has pathway options for a range of applicants including current Year 12 students, International Baccalaureate (IB) students and non-school leavers. Examples for science students include:



Please note applicants are subject to entry requirements.
For more examples of pathways into Deakin University, please visit **deakin.edu.au/pathways**.

TAFE pathways

If you complete a diploma or advanced diploma at TAFE in a field similar to the Deakin course of your choice, you can then apply for the Deakin course and you may receive credit for your TAFE qualification. In most cases, this will reduce the number of units you need to complete to obtain your Deakin qualification. Plus, upon graduation, you'll have not one, but two qualifications.

Deakin has formal pathway programs and special credit arrangements with its four partner TAFEs (Box Hill Institute and Chisholm in Melbourne, South West TAFE in Warrnambool and The Gordon in Geelong) however all TAFE qualifications are considered for application to Deakin.

The assessment of credit is based on a number of factors and is determined on an individual basis. To find out what credit you are entitled to, please visit **deakin.edu.au/courses/credit**.

Melbourne Institute of Business and Technology (MIBT)

Deakin University and the Melbourne Institute of Business and Technology (MIBT) have been in partnership for more than 15 years. MIBT can provide an excellent pathway to Deakin for students who do not meet the admission requirements for Deakin University courses. MIBT is located at Deakin's Melbourne Burwood Campus, Geelong Waterfront Campus and Geelong Waurn Ponds Campus, allowing you the opportunity to gain access to Deakin's facilities and services and get involved in uni life.

MIBT may provide a direct pathway to second-year study at Deakin (conditions apply). MIBT diplomas are equivalent to the first year of a Deakin University undergraduate degree. On successful completion of a diploma and meeting University academic entrance criteria, you may be eligible for entry to second year of the relevant Deakin University undergraduate degree.

DID YOU KNOW?

Deakin offers a range of scholarships to support students in their studies. For more information, please visit **deakin.edu.au/scholarships**.

Deakin's Associate Degree of Arts, Business and Sciences

The Associate Degree of Arts, Business and Sciences (Deakin at Your Doorstep), is a two-year, full-time (or part-time equivalent), 16-credit-point program specifically designed for students who would benefit from a supported entry to tertiary study.

The associate degree course structure provides flexible pathways into tertiary education, and can be used as a guaranteed pathway into a range of Deakin degrees at the Warrnambool Campus, Geelong Waterfront Campus, Geelong Waurn Ponds Campus or off campus. The degree may also be taken as a stand-alone, two-year exit qualification.

Students studying the associate degree at one of our partner TAFE campuses – Advance in Bairnsdale, Chisholm in Dandenong and Rosebud, Kangan Institute at Hume Global Learning Centre in Craigieburn, Sunraysia in Swan Hill, GOTAFE in Wangaratta and South West TAFE in Portland – will study the course concurrently with a diploma qualification.

For more application information, please visit **deakin.edu.au/doorstep**.

Pathway to a career in medicine

Biomedical science at Deakin offers graduates another exciting option – a potential pathway to Deakin's four-year graduate-entry medicine program based at the Geelong Waurn Ponds Campus. For more information about the Bachelor of Medicine Bachelor of Surgery, please refer to the *2014 Undergraduate Health Career Booklet*.

Choice of campus

One of the great things about Deakin is that we have four campuses throughout Victoria. Many of our courses are offered at more than one campus and the ATAR required for each campus often differs, but the same high-quality degree is delivered no matter which campus you study at. This provides you with more entry options and enables you to transfer your studies from one campus to another.

Single unit (non-award) study

You may wish to undertake a single unit of study at Deakin (without being enrolled or accepted into a course). These units are subject to fees and do not lead to a degree, but may be credited towards a degree if you succeed in gaining entry to a course at a later stage.

For more information, please visit **deakin.edu.au/study-at-deakin/apply/other-types-of-application/apply-for-a-single-subject**.

For more information on pathways into Deakin University, please visit **deakin.edu.au/pathways**.

HOW TO APPLY

Applying to study at Deakin University is easy. Whether you are a current Year 12 student, TAFE graduate, mature-age student, non-school leaver, or international student studying VCE in Australia, you can apply to study a Deakin undergraduate course through the Victorian Tertiary Admissions Centre (VTAC) (unless stated otherwise in the VTAC CourseSearch **www.vtac.edu.au** or under the individual course entries in this booklet).

When you are applying for a course, make sure you check all of the entry requirements carefully. Most courses have prerequisites and some have additional requirements that you will need to complete to be eligible for selection into that course. For prerequisite and extra requirement information, please visit the VTAC website **www.vtac.edu.au**.

For more information on how to apply, including special consideration and deferment, please visit **deakin.edu.au/study-at-deakin/apply**.

DID YOU KNOW?

If your application to study at Deakin is successful but it's not the right time for you to commence university, you can defer your studies in most Deakin courses for up to two years. This means you can postpone your studies to work, travel or volunteer and still retain your university place. For more information, please visit **deakin.edu.au/study-at-deakin/apply/enrol-defer-withdraw-or-transfer**.

DR MICHELLE HARVEY

COURSE LEADER, BACHELOR OF FORENSIC SCIENCE
SCHOOL OF LIFE AND ENVIRONMENTAL SCIENCES
GEELONG WAURN PONDS CAMPUS

'Students in the forensic science course receive exposure to a wide variety of subject matter, from the legal system to crime scene processing, fingerprinting to fibre analysis, techniques in analytical chemistry to forensic entomology, DNA profiling to forensic botany. We really emphasise the multidisciplinary nature of forensic science, as it is important to appreciate the full range of techniques and experts that may be involved in analyses where a wide variety of evidence is collected.

It's critical to keep on top of emerging technologies and legal and scientific issues in the field. We do this through professional interactions with other members of the forensic community. By seeking feedback from potential employers of our graduates, we can anticipate key areas of future demand in the field, and topics that may need further development to best equip our graduates. By bringing in external experts or altering the course material, we can maintain a dynamic and flexible course suited to the needs of our graduates and their prospective employers.'

At Deakin you can gain hands-on experience by participating in laboratory, field and project work.

FIND OUT MORE

Talk to us

For more information, phone 1300 DEGREE (1300 334 733) to speak with a course adviser. You can also contact us via email at enquire@deakin.edu.au.

Website

Deakin on the web, **deakin.edu.au**, contains detailed information on everything at Deakin, including:

- courses
- fees
- campuses
- facilities and services
- applications and scholarships
- events and activities for VCE, TAFE and non-school leavers
- student profiles.

To search for courses and click through to unit descriptions visit **deakin.edu.au/courses** or **deakin.edu.au/handbook**.

School of Life and Environmental Sciences website: **deakin.edu.au/sebe/les**.

Other useful websites

Future students
deakin.edu.au/study-at-deakin

Subject information
deakin.edu.au/handbook

Campuses
deakin.edu.au/campuses
deakin.edu.au/tour

Clubs and societies
dusa.org.au/pages/clubs

Scholarships
deakin.edu.au/scholarships

Services and facilities
deakin.edu.au/campus-life/services-and-facilities

VTAC
www.vtac.edu.au

Study Assist
studyassist.gov.au

Social media@Deakin

Connect with Deakin University on Facebook, Twitter and YouTube. Talk with other future students and ask current students and staff about life and study at Deakin.

facebook.com/DeakinUniversity
twitter.com/DiscoverDeakin
youtube.com/DeakinUniversity

Visit us

There are many opportunities throughout the year to visit Deakin, experience a campus tour and talk with representatives face-to-face.

To organise a campus tour and presentation for an individual or group, please phone:

Geelong	03 5227 8525
Melbourne	03 9246 8063
Warrnambool	03 5563 3444

or email future-students@deakin.edu.au.

For our 2013 Open Day dates, see the back cover of this booklet.

For more information on event dates visit **deakin.edu.au** or phone 1300 DEGREE (1300 334 733).

Victorian Tertiary Admissions Centre (VTAC)

Contact VTAC for information about:

- the application process
- VCE prerequisites
- extra requirements
- middle-band selection
- clearly-in ATARs
- fees
- Special Entry Access Schemes (SEAS).

www.vtac.edu.au

Further reading

Deakin University produces a range of booklets to help you choose the right course. These include:

- *2014 Undergraduate Course Guide*
- *Accommodation Guide 2014*
- *Introduction to University Guide*
- *Pathways to Deakin 2014*
- *Parents' magazine*
- *Off-Campus Course Guide 2014*
- *University handbook 2013* **deakin.edu.au/study-at-deakin/find-a-course/university-handbook** (online only)
- *Deakin at Your Doorstep* (Associate Degree of Arts, Business and Sciences)
- 2014 undergraduate career booklets
- postgraduate course information.

You can download copies of these brochures at **deakin.edu.au/course-guides** or to request copies of any of the above, email enquire@deakin.edu.au or phone 1300 DEGREE (1300 334 733).

Deakin University also produces course guides specifically for international students. To request a copy phone Deakin International on +61 3 9627 4877 or email deakin-international@deakin.edu.au.

IMPORTANT DATES 2013

DEAKIN EVENTS

Sunday 4 August
Open Day
Warrnambool Campus

Sunday 11 August
Open Day
Geelong Waurn Ponds Campus and
Geelong Waterfront Campus

Sunday 25 August
Open Day
Melbourne Burwood Campus

Deakin will hold additional events for prospective students and parents. Please visit **deakin.edu.au/study-at-deakin** for updates.

APPLICATION DATES

Trimester 1

Early August*
VTAC applications open

Late September*
Timely VTAC applications close

Mid November*
Late VTAC applications close (late fee applies)

Mid December*
Very late VTAC applications close (very late fee applies)

December
Change of Preference

Please check the Deakin University Change of Preference website closer to the date for specific event details, **deakin.edu.au/cop**.

* Please check the VTAC website www.vtac.edu.au closer to the time for specific dates.

Trimester 2 and 3

Trimester 2 applications open in April and Trimester 3 applications open in August. Course availability and places may be limited. Please visit **deakin.edu.au/apply** closer to the time for more information and specific dates.

CAREER EXPOS

Melbourne

Thursday 2–Sunday 5 May
The Age VCE Careers Expo

Saturday 1–Sunday 2 June
Melbourne – Reinvent Your Career Expo

Friday 16–Sunday 18 August
Herald Sun Careers Expo

Interstate

Saturday 23–Sunday 24 March
Brisbane – Reinvent Your Career Expo

Sunday 12–Monday 13 May
Adelaide – Tertiary Studies and Careers Expo

Thursday 16–Sunday 19 May
Perth – Careers, Education and Employment Expo

Saturday 20–Sunday 21 July
Brisbane – The Tertiary Studies Expo (TSXPO)

Saturday 21–Sunday 22 September
Sydney – Reinvent Your Career Expo

VTAC OFFERS

Late November*
Early round offers

Mid to late January 2014*
Round 1 offers

Mid to late January 2014*
Negotiated offers (irregular offers)

Early February 2014*
Round 2 offers

* Please check the VTAC website www.vtac.edu.au closer to the time for specific dates.

Box Hill Institute CRICOS Provider Code: 02411J
Chisholm Institute of TAFE CRICOS Provider Code: 00881F
Gordon Institute of TAFE CRICOS Provider Code: 00011G
Kangan Institute CRICOS Provider Code: 01218G
Melbourne Institute of Business and Technology (MIBT) CRICOS Provider Code: 01590J
South West Institute of TAFE CRICOS Provider Code: 01575G
Sunraysia Institute of TAFE CRICOS Provider Code: 01985A

MORE INFORMATION | SCIENCE

1300 DEGREE (1300 334 733) | enquire@deakin.edu.au | deakin.edu.au/sebe/les

2013 DEAKIN UNIVERSITY OPEN DAYS

04.08.13

WARRNAMBOOL CAMPUS
Princes Highway
Warrnambool Victoria

11.08.13

GEELONG WAURN PONDS CAMPUS
75 Pigdons Road
Waurn Ponds Victoria

GEELONG WATERFRONT CAMPUS
1 Gheringhap Street
Geelong Victoria

25.08.13

MELBOURNE BURWOOD CAMPUS
221 Burwood Highway
Burwood Victoria

deakin.edu.au

Published by Deakin University in March 2013. While the information published in this guide was accurate at the time of publication, Deakin University reserves the right to alter, amend or delete details of course offerings and other information published here. For the most up-to-date course information please view our website at **deakin.edu.au**.

Deakin University CRICOS Provider Code: 00113B