

Science



DEAKIN
UNIVERSITY

Biomedical science

Forensic science

Marine

Science

Zoology and animal science

2024 Undergraduate

Tackle the planet's biggest challenges

Science often plays a key role in finding solutions to world issues. If you'd like to improve the world around you, choose science and make an impact in broad fields like climate change, stem-cell research or forensic science. You'll gain more than a degree when you study science at Deakin. With hands-on learning, industry collaboration and expert teaching staff, you'll be well prepared for an exciting future career.

Acknowledgement of Country

Deakin University acknowledges the Traditional Custodians of all the unceded lands, skies and waterways on which Deakin students, staff and communities come together. As we learn and teach through virtually and physically constructed places across time, we pay our deep respect to the Ancestors and Elders of Wadawurrung Country, Eastern Maar Country and Wurundjeri Country, where our physical campuses are located. We also acknowledge the many First Nations from where students join us online and make vital contributions to our learning communities.

Your future in science

Tailor your studies to your interests

How you study science at Deakin depends on your interests and career aspirations. Study a general science degree, with many interesting and diverse study areas, so you can design a program for the direction you want to take. Alternatively, choose a specialist science degree – in biomedical, forensic, marine, or zoology and animal science.

You can also combine science studies with one of the following to maximise your career options:

- arts
- commerce
- criminology
- law
- teaching.

Get a world-class education

Deakin is ranked in the top 1% worldwide for life sciences and medicine,¹ as well as ecology.² So when you choose Deakin, you can be confident you're securing a world-class education – and a bright future.

Drive your career forwards

Science at Deakin opens the door to a range of careers that are stimulating, challenging and rewarding. Choose science if you're interested in finding solutions to key global issues like:

- the impact of climate change
- reducing our carbon footprint
- control of emerging infectious diseases
- the use of stem cells in medical research to improve our quality of life
- using nanotechnology to create new and innovative materials.

A pathway to further research and education

A science degree is an excellent pathway degree, providing a stepping stone to postgraduate studies in teaching, nutrition or medicine, as well as a solid pathway to further research at any of Deakin's campuses, recognised for their strong research culture.

deakin.edu.au/les-honours

1 2022 QS World University Rankings by Subject.

2 2022 ShanghaiRankings Ranking of Academic Subjects.



Award recipients for the promotion of gender equity in STEM

Deakin has received the prestigious Athena SWAN Bronze Institution Award for its programs that encourage more women to study, research and work in Science, Technology, Engineering, Mathematics and Medicine (STEMM).

The Athena SWAN program is run by Science in Australia Gender Equity (SAGE), and the Bronze award recognises Deakin's extensive work in promoting gender equity, inclusivity and diversity.

Your future in science

Hands-on learning so you graduate job-ready

Get practical experience and hands-on learning from your first year onwards. Professional practice units offer opportunities for:

- workplace visits
- field trips
- industry learning
- establishing valuable professional networks before graduation.

Our science and biomedical science students complete placements at leading organisations, including:

- pathology laboratories (e.g. Healthscope)
- research institutions (e.g. Baker Heart and Diabetes Institute, CSIRO, Murdoch Children's Research Institute, Peter MacCallum Cancer Centre)
- hospitals (e.g. St Vincent's)
- secondary school and university laboratories.

Gain professional accreditation

Deakin is the only university in Australia, and the first university in the Asia-Pacific region, to offer a professionally accredited forensic science degree. Both the Bachelor of Forensic Science and the Bachelor of Forensic Science component of the combined course in forensic science and criminology are professionally accredited by the Chartered Society of Forensic Sciences (CSFS).

International study experiences

Explore our various overseas programs, including a trimester abroad, short-term partner programs, faculty-led study programs, overseas internships and international volunteering opportunities. Our students have the opportunity to get hands-on experience in conservation in Costa Rica, Belize or Tanzania, or get involved in a range of community health projects in Thailand, the Philippines and South Africa.

deakin.edu.au/overseas-study

Skills to get you a job

At Deakin, every course is shaped by industry experts, ensuring you'll graduate with real-world expertise and practical skills – giving you a competitive edge in the workplace. Secure your future today at Victoria's #1 university for teaching quality¹ and overall educational experience.¹

Award-winning university career service²

DeakinTALENT will prepare you to secure the jobs of tomorrow. Our award-winning service is available to you from day one and will support you for the rest of your career. You'll have lifetime access to career coaching, industry networking opportunities and a comprehensive suite of digital resources helping you develop the most employable version of yourself.

deakintalent.deakin.edu.au

- 1 2021 Student Experience Survey, Quality Indicators for Learning and Teaching (QILT).
- 2 Australian Graduate Recruitment Industry Awards 2017, 2018, 2019, 2020 winner for most popular career service in Australia; Employability award, 2021 Australian Financial Review Higher Education Awards.

Enjoy state-of-the-art facilities

Access cutting-edge technology and the very best in facilities, with the Geelong Technology Precinct featuring the latest research capabilities in materials, biotechnology, chemistry and environmental engineering. Deakin also has a purpose-built crime scene training facility for our forensic science students – and state-of-the-art biomedical research laboratories, with links to the Deakin Medical School.

Scan to explore



Disciplines

Take a look through our disciplines (also known as study areas) to choose your area of expertise. Knowing which discipline you're interested in helps career advisers find the best course for you. Corresponding courses are featured in the following pages, so you can learn more about what you'll study, available work experience opportunities and the types of careers you could pursue. Once you have chosen a course, you can pick which discipline to specialise in within that course. Visit deakin.edu.au/science for detailed discipline and course information, including a description of the units within each degree.

Animal biology

Discover different aspects of animal biology, including animal structure and function, evolution and evolutionary biology.

Biomedical science

Understand the science underpinning medical applications, from basic biology to specific disease processes. 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.

Cell biology and genomics

Gain insight into the nature of genes, genomes and the molecular and biochemical basis of cells, including their physiological properties, development, function and interaction with their environment. You will also learn about DNA sequencing and analysis and how an understanding of genomics relates to human health and wellbeing, the environment, biodiversity management and food production systems.

Chemistry

Develop an understanding of the synthesis, separation, detection and measurement of chemical substances, their properties and reactions.

Environmental health

With a focus on healthy environments and healthy people, choose this study area if you're interested in working in public health policy, environmental health and other related areas.

Environmental science

Focus on the technical science aspects of environmental science, including environmental studies on the geosphere, hydrosphere, atmosphere and biosphere.

Forensic biology

Acquire the specific biological skills that are critical in the forensic science workplace. These biological-based skills complement the generic forensic science attributes developed in the core units of the forensic science course. Study in this area may lead to a career in DNA-based forensic science.

Forensic chemistry

Forensic chemistry provides you with the specific chemistry skills that are critical in the forensic science workplace. These chemically based skills complement the generic forensic science attributes developed in the core units of the forensic science course. Study in this area may lead to a career based on toxicology, drug detection and arson investigation.

Forensic science

Gain formal training in the skills and techniques essential in the modern forensic field, including the examination and presentation of scientific evidence. Deakin is the first university in Australia, and the only university in the Asia-Pacific region, to offer a professionally accredited forensic science course.

Human biology

Discover how the body works and why it works that way through studies covering a broad range of areas relevant to human biology, including physiology and genetics, and their relationship to human disease.

Infection and immunity

Build on the core skills of genetics, microbiology and immunology. This is an advanced and integrated study area that offers a deeper understanding of host-pathogen interactions, as well as the public health and clinical epidemiological burdens of infectious diseases.

Marine science

Gain essential knowledge and skills in ocean systems and resources through a multidisciplinary approach in the areas of marine microbiology and genomics, oceanography, coastal processes, marine modelling, marine biology, marine ecology, fisheries and aquaculture. This course will provide you with the skills required to join the greater marine science community using new marine technologies and innovative approaches to help protect and drive the sustainable future of the world's oceans.

Mathematical modelling

Acquire strong critical knowledge and develop your powers of analysis, logical thinking and problem-solving, as well as a high level of numerical ability. With an emphasis on developing solid background knowledge in the discipline, this major covers traditional subjects (calculus, algebra and discrete mathematics) and also modern topics (information modelling and data analysis), which will help you develop practical skills to implement mathematics in a variety of applications.

Disciplines

Medical biotechnology

Use cells and cell materials to produce pharmaceutical and diagnostic products that help treat and prevent human diseases. You'll gain a sound understanding of the core sciences underpinning biotechnology for medical advancement.

Medical genomics

Explore core genomics areas, including medical and human genomics, comparative genomics, microbial and forensic genomics, biotechnology (drug discovery) and phylogenomics. Through this major you'll gain a sound understanding of methodologies including Next Generation Sequencing, high throughput genotyping, metagenomics and small RNA and transcriptome analysis, as well as gain the skills required for genomics research and big data analysis.

Molecular life sciences

Acquire an advanced understanding of chemical, physiological and genetic processes that determine health and disease at the molecular level. You'll also develop the technical skills relevant for biomedical research.

Ocean, fisheries and aquaculture sciences

Fisheries and aquaculture provide food for millions of people around the world every day, however marine and aquatic ecosystems are under stress – from climate change, unsustainable fishing and aquaculture practices, and pollution. Understand the sciences underpinning fisheries and aquaculture through exploration of topics in physical geography, marine microbiology and genomics, oceanography and marine science.

Pharmaceutical science

Learn about the chemistry, biology and technology of medicines. You'll gain an enhanced understanding of the discovery, design and function of drugs, applicable both in medicinal research and the pharmaceutical industry.

Plant biology

This major is suited to those interested in botany and includes studies in plant morphology, identification, reproduction and evolution, as well as vegetation management and biogeography.

Sustainable marine management

As marine ecosystems come under increasing pressure, the adequate and sustainable management of marine environments requires a complex, comprehensive and ecosystem-based approach. Gain a deep understanding of these complex relationships through exploration of topics in environmental sustainability, marine disturbance and remediation, and the integration of marine, coastal and catchment management for a sustainable marine future.

Zoology and animal science

Understand the form and function of different animals and how they adapt to their environment, including the diversity, ecology, behaviour, physiology, genetics and evolutionary biology of animals, from amoeba through to zebra.

Hands-on learning opportunities will prepare you with the real-life skills you need to succeed in your future career.





'The facilities, particularly for science students, are incredible. The labs you complete practicals in are brand new and have all the resources needed to ensure you can learn an extensive range of practical techniques.'

Ellen Gunn
Bachelor of Biomedical Science graduate

The secret behind scientific discoveries

From discovering the earth is round to developing vaccines for infectious diseases, understanding the human mind and identifying the structure of DNA, scientists have been unlocking the secrets of the universe and improving our quality of life for millennia.

Scientists are often on the cutting edge of advancement, says scientist Professor Leigh Ackland from Deakin University's School of Life and Environmental Sciences.

Scientific inquiry is a process of exploration rather than attempting to identify a linear path from hypothesis to conclusion. Professor Ackland says small scientific discoveries happen every day in the lab – where, in case you're wondering, scientists wear lab gowns rather than lab coats – but often it's only after teams of scientists have done a lot of similar experiments over many years that they are able to fully understand what's going on. 'Altogether that's probably what most people would consider a scientific discovery,' she says.

Investigating two seemingly unrelated concepts is often the key that unlocks major scientific discoveries. 'When someone has a very creative idea about something, where they might link two independent findings together and follow this up with testing to prove their idea, this can lead to completely novel ways of looking at things,' says Professor Ackland.

She cites an example of two identical cells growing in her lab that behaved differently. 'When we looked into it, what we found is the conditions that I'd been growing one group of cells under meant that the cells had changed into another cell type,' she says. 'When I followed this up, I discovered that it was one of the first examples of how human cancer cells could be "switched on" or "switched off".'

'In other words, we discovered you can push a cell to become more cancerous or less cancerous – that hadn't been demonstrated before. It was only by paying attention to those small details of why the cell wasn't behaving like we thought it might that lead to this new insight.'

'It's about being very observant with your experiments and thinking of other explanations for your results. Science is actually a really creative process – it's about using your intuition to discover how things work.'



Courses

Deakin code	X123	Online	O
ATAR	70.00	Melbourne Burwood Campus	B
Not published	NP	Geelong Waterfront Campus	WF
Course duration in years	3	Geelong Warrn Ponds Campus	WP
Trimester	T	Warrnambool Campus	WB

Bachelor of Biomedical Science

S323 B 80.00 WP 72.75 3 T1, T2

Develop an in-depth understanding of human biology through the Bachelor of Biomedical Science and graduate with the skills and experience to play an important role in the diagnosis and treatment of diseases at molecular, cellular and systems levels. Expertise in biology and the science behind disease puts you in a position to make a real difference. Explore early diagnosis, disease progression and prognosis, and the role of pharmaceutical science in the treatment of disease and improved health.

Careers

Graduates can confidently enter a range of health-related areas including:

- genetic engineering
- laboratory technology
- medical research
- the pharmaceutical industry
- pharmaceutical/medical sales.

You can also advance to honours or postgraduate studies, either in more specialised areas of biomedical science (which will enhance your professional development as a scientist), or in other disciplines including medicine (which will complement your scientific training and broaden your career opportunities).

Work experience

Professional Practice is a compulsory unit in the Bachelor of Biomedical Science. This means you'll have 80–160 hours' work experience in a course-related organisation, giving you insight into future career options.

You can also elect to study a range of placement and industry-based learning units, bringing together theory, site studies and laboratory investigations.

Course structure

This 24-credit-point course consists of 15 credit points of core units, at least 6 credit points from an approved major sequence and 3 credit points of elective units.

	Trimester 1	Trimester 2
Year 1	Cells and Genes Chemistry in Our World Essential Skills in Science Elective/major	Chemistry for the Professional Sciences Biology: Form and Function Physics for the Life Sciences Elective/major
Year 2	Biochemistry Microbiology Research Methods and Data Analysis Elective/major	Genetics and Genomics Systems Physiology Elective/major x 2
Year 3	Advanced Topics in Biomedical Science Elective/major x 3	Professional Practice Medical Microbiology and Immunology Advanced Cell Biology Elective/major

▶ Ready to find out more? Visit our course webpage for full details including pre-course and entry requirements, unit selection options and campus and trimester availability for domestic and international students, and more. deakin.edu.au/course/S323

The student experience

Hear from one of our biomedical science students on their experience of studying at Deakin at deakin.yt/study-sci.

Calling all analytical minds

The skills and knowledge you learn in biomedical science are transferable to almost any industry. Associate Professor Lambert Brau is the Deputy Head of School (Burwood) at Deakin University's School of Life and Environmental Sciences. He explains that in addition to good communication skills and an eye for detail, utilising analytical thinking skills also helps to lay the perfect foundation for further study in masters programs. Read the full article at this.deakin.edu.au/career/surprising-careers-in-biomedical-science.

Courses

Deakin code	X123	Online	O
ATAR	70.00	Melbourne Burwood Campus	B
Not published	NP	Geelong Waterfront Campus	WF
Course duration in years	3	Geelong Warrn Ponds Campus	WP
Trimester	T	Warrnambool Campus	WB

Bachelor of Forensic Science

S324 **WP** 61.15 **3** T1, T2

Deakin's Bachelor of Forensic Science exposes you to the full scope of modern forensic science, from simulated crime scenes to courtroom presentations. With a strong focus on practical training, you'll graduate with the skills needed to confidently examine, interpret and present forensic evidence. You'll enhance your courtroom skills by building knowledge of the science behind criminal investigations and gain authentic experiences in our unique crime scene training facility.

Professional recognition

The Bachelor of Forensic Science is professionally accredited by the Chartered Society of Forensic Sciences (CSFS). Students of this course are encouraged to apply for membership of the Australian and New Zealand Forensic Science Society (ANZFSS).

Careers

Through your extensive practical training, you'll graduate with the technical and soft skills needed to thrive in a range of areas including:

- chemical, biological, food and pharmaceutical industries
- forensic laboratories
- government institutions
- insurance investigations
- policing
- research science
- risk analysis.

Work experience

This course aims to provide students with a holistic experience of their role as forensic analysts. You'll have the opportunity to visit a court and participate in a 'moot court', which allows students to experience a simulated courtroom environment.

Explore an industry-based learning experience, available as part of the Faculty of Science, Engineering and Built Environment's work-integrated learning program.

deakin.edu.au/sebe/wil

Majors

- Forensic biology **WP**
- Forensic chemistry **WP**

Course structure

This 24-credit-point course consists of 12 core units and a major sequence in either forensic chemistry or forensic biology and 6 credit points of electives.

	Trimester 1	Trimester 2
Year 1	Cells and Genes Chemistry in Our World Introduction to Statistics and Data Analysis Elective	Biology: Form and Function Chemistry for the Professional Sciences Fundamentals of Forensic Science Introducing Crime and Criminal Justice
Year 2	Analytical Chemist's Toolbox Research Methods and Data Analysis Major Elective	Forensic Biology Major x 2 Elective
Year 3	Professional Practice Major x 3	Forensic Analysis and Interpretation Level 3 elective x 2 Level 2 or 3 elective

▶ Ready to find out more? Visit our course webpage for full details including pre-course and entry requirements, unit selection options and campus and trimester availability for domestic and international students, and more. deakin.edu.au/course/S324

Gain practical 'crime scene' experience

Our purpose-built and flexible crime scene training facility offers you real-life experience of working a crime scene. With a kitchen, lounge room and bedroom set, it enables a wide range of realistic scenarios to be staged and directly equips students with the skills they will need to succeed in the real world.

deakin.edu.au/study-forensic-science



Courses

Deakin code	X123	Online	
ATAR	70.00	Melbourne Burwood Campus	
Not published	NP	Geelong Waterfront Campus	
Course duration in years	3	Geelong Warrn Ponds Campus	
Trimester	T	Warrnambool Campus	

Bachelor of Marine Science

S337 66.45 55.85 T1, T2

Study marine science at Deakin where you will have access to spectacular marine environments teeming with rich biodiversity on your doorstep. Become an expert in ocean systems by exploring a broad range of disciplines, including marine biology and ecology, oceanography, marine mapping, conservation, aquaculture, fisheries, marine and coastal management. The Bachelor of Marine Science equips you with the skills needed to create a sustainable future for the world's oceans.

Careers

As a marine scientist, you'll gain skills across multidisciplinary areas which allow for a diverse range of career opportunities in both research and applied fields, including areas such as oceanography, marine biochemistry and biotechnology, fisheries, remote sensing, marine biology and ecology, microbiology and genomics, mathematics and economics. Further postgraduate studies, including research training, can lead to specialisation in a specific field of marine science.

Majors

- Ocean, fisheries and aquaculture sciences
- Sustainable marine management

Work experience

As part of the course, you'll undertake a compulsory professional practice unit of 80–160 hours of work experience in a course-related host organisation, providing opportunities for workplace visits, field trips,

industry learning and to establish valuable networks – giving you better insight into your possible career outcomes. You can also elect to undertake a discipline-specific industry placement or elective units with work-integrated learning experiences.

Course structure

This 24-credit-point course consists of 12 core units and one 6-credit-point major sequence, plus 6 credit points of elective units or a minor sequence (4 credit points) plus two electives. Students may be required to undertake cross-campus study between the Warrn Ponds and Warrnambool campuses for some units depending on the major or electives selected.

	Trimester 1	Trimester 2	Trimester 3
Year 1	Marine Environments Cells and Genes Chemistry in Our World	Ocean Processes Oceans, Coasts and Climate Change Major Elective/minor	
Year 2	Research Methods and Data Analysis Marine Biology Major Elective/minor	Marine Ecology Marine Geographic Information Systems Major Elective/minor	Marine Wildlife
Year 3	Professional Practice Marine Science Transdisciplinary Project Major Elective	Major x 2 Elective x 2	

▶ Ready to find out more? Visit our course webpage for full details including pre-course and entry requirements, unit selection options and campus and trimester availability for domestic and international students, and more. deakin.edu.au/course/S337

From Warrnambool to the world

Studying at Deakin took marine graduate Ally Clark from Warrnambool to the beaches of Costa Rica, giving her an international experience as part of her course.

During her studies, Ally spent a month in Costa Rica, working on a turtle project where students monitored a hatchery. The project, which involved releasing baby turtles and doing night patrols on the beach to collect eggs and protect them from predators, contributed to Ally's course and helped pave the way to her subsequent work as a Coastcare Facilitator at the Department of Environment, Land, Water and Planning (DELWP).



Happiest in the great outdoors?

If you thrive in nature, spending the majority of your week in a temperature-controlled office can be confronting. Or, if the ocean is your number one happy place, you might not flourish in a job that keeps your eyes glued to a computer screen.

So, what are some careers you should consider if you don't want to be stuck indoors?

Marine science, and ecology and marine mapping are areas that indulge a love of the great outdoors.

Marine science

If you like the idea of studying oceans and the organisms that live in them, you've probably considered marine science as a career. Marine scientists might be found on a research vessel collecting data, snorkelling or scuba diving to monitor marine ecosystems or field sampling in a diverse range of marine habitats such as sandy beaches, estuaries, rocky shores or mangrove forests.

Dr Prue Francis, senior lecturer in Deakin's School of Life and Environmental Sciences, explains, 'A marine scientist has a multidisciplinary skill set across all science fields such as biology, chemistry, physics, ecology, genomics and modelling.'

Ecology and marine mapping

When you combine an ecological understanding and the ability to work with state-of-the-art technologies, you arrive at careers in marine ecology and marine mapping.

Dr Mary Young, Research Fellow in the School of Life and Environmental Sciences, says, 'We have to know where species are likely to be found to help us observe them using underwater visualisation techniques. We also need to map their habitats, including both the sea floor habitat (rocks, sand) and the oceanography (temperature, waves, currents, nutrients).'

Find your niche and explore other career paths in the great outdoors: this.deakin.edu.au/career/happiest-in-the-great-outdoors-four-career-paths-to-consider.

Courses

Deakin code	X123	Online	O
ATAR	70.00	Melbourne Burwood Campus	B
Not published	NP	Geelong Waterfront Campus	WF
Course duration in years	3	Geelong Warrn Ponds Campus	WP
Trimester	T	Warrnambool Campus	WB

Bachelor of Science

S320 B 61.05 WP 60.00 3 T1, T2

Deakin's Bachelor of Science prepares you to enter the exciting world of scientific discovery, while allowing you to forge your own unique path by choosing from a wide range of disciplines. The course is about more than just laboratory work – it equips you for the diverse, innovation-driven real-life settings in which today's science graduates work. With this industry-led degree, you can follow your curiosity into any field of science that inspires you.

Careers

The Bachelor of Science offers a world of possibilities for graduate employment in a diverse range of areas. Depending on what you choose to study, you may find employment as a:

- chemist
- clinical trial leader
- environmental consultant
- environmental manager
- field botanist
- park ranger
- project manager
- research scientist
- secondary teacher
- scientific editor
- technician.

Work experience

You will have an opportunity to undertake a discipline-specific industry-based learning placement as part of your course. This will provide you with the opportunity to apply and consolidate what you are learning in your course, experience workplace culture and practices, explore career options and develop a professional network before you graduate.

deakin.edu.au/sebe/wil

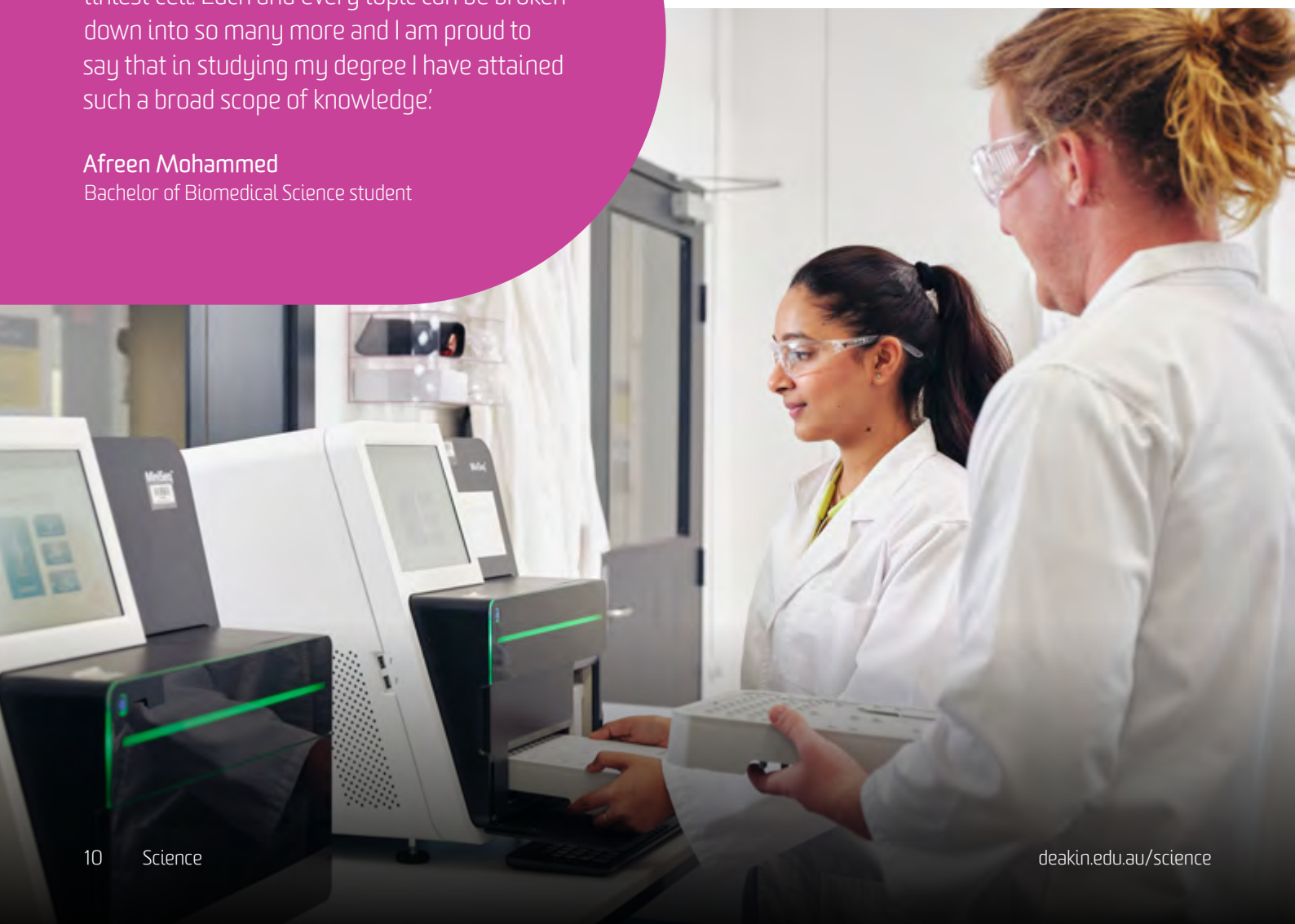
Majors

- Animal biology B WP
- Cell biology and genomics B WP
- Chemistry B WP
- Environmental science B
- Human biology B WP
- Mathematical modelling O B WP
- Plant biology B

'When I started my degree I soon came to realise and appreciate how vast the field [of science] was and the complexity of even the tiniest cell. Each and every topic can be broken down into so many more and I am proud to say that in studying my degree I have attained such a broad scope of knowledge.'

Afreen Mohammed

Bachelor of Biomedical Science student



Courses

Deakin code	X123	Online	O
ATAR	70.00	Melbourne Burwood Campus	B
Not published	NP	Geelong Waterfront Campus	WF
Course duration in years	3	Geelong Warrn Ponds Campus	WP
Trimester	T	Warrnambool Campus	WB

Bachelor of Science *continued*

Course structure

This 24-credit-point course consists of nine core units and 6 credit points from an approved science major sequence, plus 9 credit points of electives.

	Trimester 1	Trimester 2
Year 1	Cells and Genes Chemistry in Our World Ecology and the Environment Essential Skills in Science	Physics for the Life Sciences Chemistry for the Professional Sciences Introduction to Statistics and Data Analysis OR Introduction to Functions Major
Year 2	Communicating Science Ideas Major Elective x 2	Science and Society Major x 2 Elective
Year 3	Community Science Project Major Elective x 2	Major Elective x 3

▶ Ready to find out more? Visit our course webpage for full details including pre-course and entry requirements, unit selection options and campus and trimester availability for domestic and international students, and more. deakin.edu.au/course/S320

▶ What's it really like to study science?

Hear from our students on the diverse study opportunities available and benefits of the hands-on, practical approach at Deakin at deakin.yt/study-sci.



'I chose a Bachelor of Science with a major in animal biology as a pathway into veterinary. Animals have always been my passion and I love science, especially biology, so it was the perfect fit.'

Madeleine Nicolls
Bachelor of Science graduate

Honours in science

Deakin's science courses let you undertake an additional year of specialised study, so you can focus on what you're really passionate about. And when you undertake research at Deakin, you'll be joining a world-class research community – Deakin is ranked above world standard for biological sciences and well above world standard for environmental sciences.¹

- Develop an in-depth knowledge of a particular discipline through research after you complete your undergraduate degree.
- Gain entry into further research study.
- Get a competitive edge in the job market.

deakin.edu.au/course/S400

¹ 2018 Excellence in Research for Australia (ERA) Rankings.

Courses

Deakin code	X123	Online	O
ATAR	70.00	Melbourne Burwood Campus	B
Not published	NP	Geelong Waterfront Campus	WF
Course duration in years	3	Geelong Warrn Ponds Campus	WP
Trimester	T	Warrnambool Campus	WB

Bachelor of Zoology and Animal Science

S369 WP 65.50 3 T1, T2

Through Deakin's Bachelor of Zoology and Animal Science, you'll explore the social and economic impact that human activity has on animals and their ecosystems. Investigate how animals respond and adapt to changes in the environment, including climate change, with a strong focus on Australian fauna and its unique importance in the global environment. Apply the latest research techniques to test hypotheses in the real world and develop evidence-based decision-making skills valued by industry.

Careers

Employers value Deakin graduates' range of practical experience and critical thinking skills. You'll be well-placed to explore opportunities in areas including:

- environmental monitoring and management
- government quarantine
- private environmental consulting
- wildlife biology
- zoological research.

Graduates typically take on roles such as:

- collection managers of aquaria and zoological gardens
- environmental managers
- pest management officers
- primary and secondary teachers (with relevant teaching qualifications)
- research assistants.

Further postgraduate studies, including research training either in Australia or overseas, can also lead to becoming a research scientist in a specific field, a museum curator or even a university academic.

Work experience

A professional practice unit gives you the opportunity to complete a placement as part of your course. This means you'll gain 80–160 hours of work experience in a course-related organisation, providing insight into future career options.

You can also undertake an industry-based learning experience as part of the Faculty of Science, Engineering and Built Environment's work-integrated learning program.

deakin.edu.au/sebe/wil

Course structure

This 24-credit-point course consists of 18 credit points of core units and 6 credit points of electives or a 4-credit-point minor plus 2 credit points of electives.

	Trimester 1	Trimester 2
Year 1	Cells and Genes Chemistry in Our World Ecology and the Environment Foundations of Zoology	Biology: Form and Function Physics for the Life Sciences Chemistry for the Professional Sciences Minor/elective
Year 2	Animal Diversity Research Methods and Data Analysis Marine Biology Minor/elective	Vertebrate Structure and Function Genetics and Genomics Animal Behaviour Minor/elective
Year 3	Sensory Neurobiology and Behaviour Evolution Ecological and Conservation Genetics Professional Practice	Disease Ecology and Epidemiology Zoological and Wildlife Field Studies Minor/elective Level 2 or 3 elective

► Ready to find out more? Visit our course webpage for full details including pre-course and entry requirements, unit selection options and campus and trimester availability for domestic and international students, and more.

deakin.edu.au/course/S369

#1 Victorian university for course satisfaction

Year on year, Deakin's students have the highest course satisfaction rate of all Victorian universities.¹ We've ranked this highly for the past 13 years, with our students being particularly happy with our:

- teaching
- learning resources
- student support
- skills development
- learner engagement.

¹ Australian Graduate Survey 2010–2015, Graduate Outcomes Survey 2016–2022, Quality Indicators for Learning and Teaching (QILT).

'Increasing numbers of students are taking the opportunity to undertake overseas placements. This then ignites their interest to pursue unexpected career paths.'

Associate Professor Lambert Brau
Deputy Head of School (Burwood)
School of Life and Environmental Sciences

Courses

World-first study reveals environmental influences change our genes' behaviour

In a study of pregnant women, a team of Deakin scientists has shown for the first time that, in humans, pregnancy can induce long-term epigenetic changes to our bodies, with major implications for understanding, preventing and treating disease.

The findings of a recent study from Deakin's Centre for Cellular and Molecular Biology, within the School of Life and Environmental Sciences, showed women experience major molecular changes during pregnancy that could remain with them well after their pregnancy has ended.

The changes are 'epigenetic' – meaning they're not a mutation of the gene's structure, but a change to how genes behave.

Centre Director and lead researcher, Professor Leigh Ackland, explains that while pregnancy is a critical period of hormonal changes, very little is known about epigenetic changes associated with the reproductive cycle.

'This study highlights how the physical effects of pregnancy are ongoing, and how, once you go through pregnancy, your body is altered at the most microscopic level,' Professor Ackland says.

'Long-term epigenetic changes can lead to increased risks of disease for the next generation.

Studies have previously shown the offspring of women with diabetes have an increased risk of developing obesity, glucose intolerance and type 2 diabetes.'

Professor Ackland's research is of major significance to the medical research community because it shows for the first time that the epigenetic fingerprint of humans can change as a result of external factors.

'This has been seen in the laboratory or with animals before, but not in human populations,' she says.

'It contributes to a greater understanding of how epigenetic factors are giving scientists a much more sophisticated understanding of physiology.'



Courses

Deakin code	X123	Online	O
ATAR	70.00	Melbourne Burwood Campus	B
Not published	NP	Geelong Waterfront Campus	WF
Course duration in years	3	Geelong Warrn Ponds Campus	WP
Trimester	T	Warrnambool Campus	WB

Combined courses

Bachelor of Arts/Bachelor of Science

D311 B 72.80 WP 68.60 4 T1, T2, T3

Gain a competitive edge in the job market by studying the Bachelor of Arts/Bachelor of Science combined course. Complement your understanding of science with invaluable skills like critical thinking and strong communication, and open up a world of exciting career options once you graduate. You don't need to have a defined career path mapped out when you start this double degree. Choose from a wide range of science and arts study areas and discover what you love learning as you progress.

Professional recognition

Depending on your arts specialisation, certain majors are accredited by relevant bodies. If you choose public relations, you'll study subjects accredited by the Public Relations Institute of Australia. Our design-related units are recognised by the Design Institute of Australia.

Course structure

32 credit points – 16 credit points (Bachelor of Arts) and 16 credit points (Bachelor of Science), including a major from each degree.

deakin.edu.au/course/D311

Bachelor of Commerce/ Bachelor of Science

D321 B 81.05 4 T1, T2, T3

Deakin's Bachelor of Commerce/Bachelor of Science empowers you to take your science career beyond the lab. Pair specialist science knowledge with a strong foundation in commerce and graduate ready to lead, innovate and disrupt in your chosen field. Dual skills in science and commerce can set you up for a lucrative career.

Professional recognition

Deakin Business School is in the top 1% of business schools globally by holding both AACSB and EQUIS accreditations. These prestigious accreditations are awarded to business schools that meet strict standards of quality, academic and professional excellence, and demonstrate a commitment to ongoing improvement and innovation in their courses, ensuring our graduates are employable worldwide.

Our courses are developed and reviewed with industry and professional input, meaning our commerce graduates can apply for membership to these key professional bodies (depending on units taken):

- Association of Chartered Certified Accountants (ACCA)
- Association of Financial Advisers (AFA)
- Australian Human Resources Institute (AHRI)
- Australian Marketing Institute (AMI)
- Certified Practising Accountants (CPA)
- Chartered Accountants Australia and New Zealand (CA ANZ)
- Financial Adviser Standards and Ethics Authority (FASEA)
- Financial Planning Association of Australia (FPA)
- Institute of Managers and Leaders (IML)
- Institute of Public Accountants (IPA).

Course structure

32 credit points – 16 credit points (Bachelor of Commerce) and 16 credit points (Bachelor of Science), including a major from each degree.

deakin.edu.au/course/D321

Bachelor of Forensic Science/ Bachelor of Criminology

D329 WP 65.20 4 T1, T2

The Bachelor of Forensic Science/Bachelor of Criminology trains you to examine the many facets of crime. Understanding the nature of crime and the motivations behind criminal behaviour is a sought-after skill and is particularly powerful when combined with expertise in modern forensic science. By developing skills in these complementary disciplines, you will graduate with more career options and a broader perspective of crime and the justice system.

Professional recognition

The Bachelor of Forensic Science is professionally accredited by the Chartered Society of Forensic Sciences (CSFS). Students of this course are encouraged to apply for membership of the Australian and New Zealand Forensic Science Society (ANZFSS) and the Australian and New Zealand Society of Criminology (ANZSOC).

The Bachelor of Forensic Science/Bachelor of Criminology (Chemistry major) has been professionally accredited by the Royal Australian Chemical Institute (RACI). Course graduates are encouraged to apply for membership of the respective local branch of the institute.

Course structure

32 credit points – 16 credit points (Bachelor of Criminology) and 16 credit points (Bachelor of Forensic Science), including a major in forensic biology or forensic chemistry.

deakin.edu.au/course/D329



'The facilities for forensic science at Deakin are top of the line. The combination of the crime scene house, the decomposition field and the science labs allows each student to get the chance to try so many aspects of forensic science – just like they would out in the workforce.'

Maddy Bone

Bachelor of Forensic Science/Bachelor of Criminology graduate

Courses

Deakin code	X123	Online	O
ATAR	70.00	Melbourne Burwood Campus	B
Not published	NP	Geelong Waterfront Campus	WF
Course duration in years	3	Geelong Warrn Ponds Campus	WP
Trimester	T	Warrnambool Campus	WB

Bachelor of Science/Bachelor of Laws

D331 B 92.40 5 T1, T2

The commercialisation of rapidly evolving technologies has opened the door to a new kind of expert with specialist knowledge in both science and law. Study Deakin's Bachelor of Science/Bachelor of Laws to graduate with an increasingly sought-after skill set to succeed in either field – or where science and law intersect. This double degree gives you the freedom to learn more about what interests you.

Professional recognition

The Bachelor of Laws fulfils the academic requirements to practise as an Australian lawyer, as set by the Victorian Legal Admissions Board (VLAB). After completion, you'll be required to work for one year as a legal trainee or undertake a practical legal training course before admission.

Course structure

40 credit points – 24 credit points (Bachelor of Laws) and 16 credit points (Bachelor of Science).

deakin.edu.au/course/D331

Bachelor of Science/Master of Teaching (Secondary)

D304 B 66.60 4 T1

Translate your passion for the study of sciences into a career that inspires others, with a Bachelor of Science/Master of Teaching (Secondary) at Deakin. Create unique course combinations with science specialisations and graduate as a qualified secondary school educator. This industry-led combined course allows you to fast-track your studies and graduate with two degrees in just four years.

Professional recognition

This course is accredited with the Victorian Institute of Teaching (VIT) as a nationally accredited course and students are eligible to apply for registration with the VIT upon graduation. If you intend to apply for registration in Victoria or interstate you may be required to provide further information. Applicants are advised to check the registration requirements in their state or territory carefully.

Careers

Graduates of the Bachelor of Science/Master of Teaching (Secondary) are qualified to teach in secondary schools within Victoria, in the private, independent or public education sectors.

Your specialisations and advanced knowledge will also open doors to roles in:

- community services
- government agencies
- not-for-profit organisations.

Professional experience

This course includes 60 days of supervised professional experience placements. A current Working with Children Check is required before beginning school experience.

Course structure

36 credit points, including 24 credit points at undergraduate level, 12 credit points at postgraduate level, plus 60 days of supervised professional experience.

Majors/minors and teaching methods

Alongside core education studies, you will complete one major and minor to support your learning towards your teaching methods in the Master of Teaching. Choose from:

- one of Animal biology B WP, Cell biology and genomics B WP, Human biology B WP and Plant biology B
- Chemistry B WP
- Environmental science B
- Mathematical modelling B WP.

deakin.edu.au/course/D304

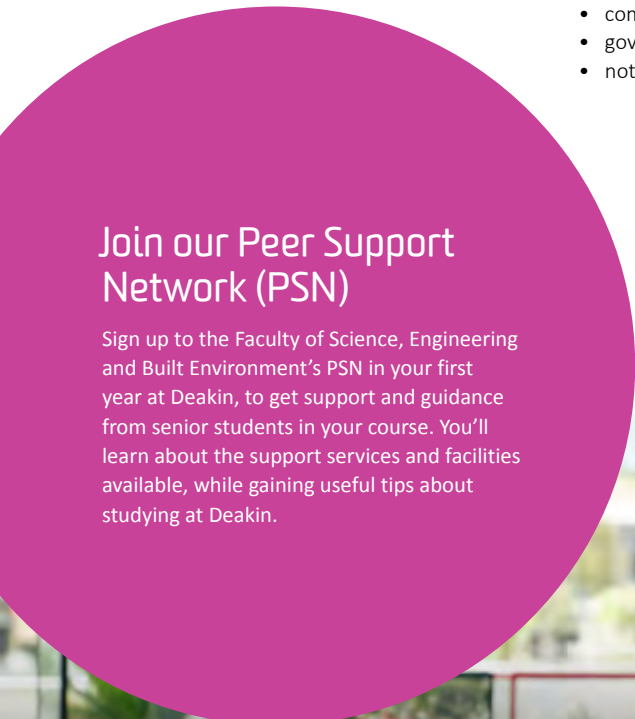


Ready to find out more about our combined courses? Visit our course webpages for full details including pre-course and entry requirements, unit selection options and campus and trimester availability for domestic and international students, and more.

deakin.edu.au/science

Join our Peer Support Network (PSN)

Sign up to the Faculty of Science, Engineering and Built Environment's PSN in your first year at Deakin, to get support and guidance from senior students in your course. You'll learn about the support services and facilities available, while gaining useful tips about studying at Deakin.



Course and entry requirements	Campus and ATAR	Course duration	Trimester intakes	Indicative domestic fee ¹	Indicative international fee ¹
Bachelor of Biomedical Science S323 deakin.edu.au/course/S323 ² Y12 ^{3,4} VCE units 3 and 4 – a study score of at least 25 in English (EAL) or at least 20 in English other than EAL. NY12 ^{4,5} As for Year 12 or equivalent; see webpage for further information.	B 80.00 WP 72.75	3	T1, T2	\$8541	\$39,400
Bachelor of Forensic Science S324 deakin.edu.au/course/S324 ² Y12 ^{3,4} VCE units 3 and 4 – a study score of at least 25 in English (EAL) or at least 20 in English other than EAL. NY12 ^{4,5} As for Year 12 or equivalent; see webpage for further information.	WP 61.15	3	T1, T2	\$8953	\$38,200
Bachelor of Marine Science S337 deakin.edu.au/course/S337 ² Y12 ^{3,4} VCE units 3 and 4 – a study score of at least 25 in English (EAL) or at least 20 in English other than EAL. NY12 ^{4,5} As for Year 12 or equivalent; see webpage for further information.	WP 66.45 WB 55.85	3	T1, T2	\$8074	\$38,200
Bachelor of Science S320 deakin.edu.au/course/S320 ² Y12 ^{3,4} VCE units 3 and 4 – a study score of at least 25 in English (EAL) or at least 20 in English other than EAL. NY12 ^{4,5} As for Year 12 or equivalent; see webpage for further information.	B 61.05 WP 60.00	3	T1, T2	\$8005	\$38,200
Bachelor of Zoology and Animal Science S369 deakin.edu.au/course/S369 ² Y12 ^{3,4} VCE units 3 and 4 – a study score of at least 25 in English (EAL) or at least 20 in English other than EAL. NY12 ^{4,5} As for Year 12 or equivalent; see webpage for further information.	WP 65.50	3	T1, T2	\$8919	\$38,200
Bachelor of Arts/Bachelor of Science D311 deakin.edu.au/course/D311 ² Y12 ^{3,4} VCE units 3 and 4 – a study score of at least 25 in English (EAL) or at least 20 in English other than EAL. NY12 ^{4,5} As for Year 12 or equivalent; see webpage for further information.	B 72.80 WP 68.60	4	T1, T2, T3	\$10,847	\$38,200
Bachelor of Commerce/Bachelor of Science D321 deakin.edu.au/course/D321 ² Y12 ^{3,4} VCE units 3 and 4 – a study score of at least 25 in English (EAL) or at least 20 in English other than EAL. NY12 ^{4,5} As for Year 12 or equivalent; see webpage for further information.	B 81.05	4	T1, T2, T3	\$11,914	\$38,200
Bachelor of Forensic Science/Bachelor of Criminology D329 deakin.edu.au/course/D329 ² Y12 ^{3,4} VCE units 3 and 4 – a study score of at least 25 in English (EAL) or at least 20 in English other than EAL. NY12 ^{4,5} As for Year 12 or equivalent; see webpage for further information.	WP 65.20	4	T1, T2	\$9496	\$38,200
Bachelor of Science/Bachelor of Laws D331 deakin.edu.au/course/D331 ² Y12 ^{3,4} VCE units 3 and 4 – a study score of at least 30 in English (EAL) or at least 25 in English other than EAL. NY12 ^{4,5} As for Year 12 or equivalent; see webpage for further information.	B 92.40	5	T1, T2	\$12,090	\$40,200
Bachelor of Science/Master of Teaching (Secondary)⁶ D304 deakin.edu.au/course/D304 ² Y12 ^{3,4} VCE units 3 and 4 – a study score of at least 25 in English (EAL) or at least 20 in English other than EAL. NY12 ^{4,5} As for Year 12 or equivalent; see webpage for further information.	B 66.60	4	T1	\$7595	\$38,200

- The 2023 indicative domestic/Commonwealth Supported Place (CSP) fees and the indicative international fees are based on a typical enrolment of two trimesters of full-time study, or 8 credit points, unless otherwise indicated. These fees should be used as a guide only and are subject to change in 2024. The fees displayed do not reflect the entire cost of the course if it's completed over a number of years and do not include the Student Services and Amenities Fee or course-related equipment costs.
- Visit our course webpage for full details including pre-course and entry requirements, unit selection options and campus and trimester availability for domestic and international students, and more.

- Recent secondary education applicants include current Year 12 students in 2023, as well as Year 12 graduates from 2022 and 2021.
- International student entry requirements can be found at: deakin.edu.au/international-students.
- For information about non-Year 12 applicant categories and associated admission requirements, please refer to the individual course webpage.
- There is a two-step admission process for combined courses, plus all applicants must successfully complete the Casper test; see course webpage for full details.

	Online	O
	Melbourne Burwood Campus	B
	Geelong Waterfront Campus	WF
Recent secondary education	Y12	
Non-Year 12	NY12	
	Geelong Warrn Ponds Campus	WP
	Warrnambool Campus	WB

Published by Deakin University in March 2023. 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

Contact us

We're here to help

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

Prospective student enquiries

Domestic students

1800 693 888

deakin.edu.au/help-hub

International students

+61 3 9627 4877

study@deakin.edu.au

Social media at Deakin

 facebook.com/DeakinUniversity

 facebook.com/DeakinSciTech

 twitter.com/Deakin

 twitter.com/DeakinSEBE

 instagram.com/DeakinUniversity

 tiktok.com/@deakinuni

 [deakinuni](https://beREAL.com/deakinuni)

 Search Deakin University

Other useful websites

vtac.edu.au

studyassist.gov.au

myfuture.edu.au

youthcentral.vic.gov.au

this.

Inspiration for life, learning and career

Visit this.deakin.edu.au to uncover unique stories about Deakin and explore different perspectives on study, career and self-improvement.

OPEN
OPEN
OPEN
OPEN
ALL YEAR



▶ **CAMPUS TOURS**

WED 12 – THU 20 APR
WED 20 – WED 27 SEP

▶ **ON-DEMAND WEBINARS**

JUN – DEC

▶ **CAMPUS OPEN DAY**

Warrnambool
SUN 6 AUG

Geelong – Waterfront
and Waurin Ponds
SUN 20 AUG

Burwood
SUN 27 AUG

deakin.edu.au/open-all-year