Study Area Science and the Environment



Namra, Singapore Bachelor of Food Science and Human Nutrition, 2019

Why study with us

There are so many possibilities for students interested in the field of science. You might work in a lab, discovering life-changing scientific breakthroughs. You could work in environmental education, sharing advice on ways to live more sustainably with the next generation. Maybe you see yourself using science to shape government policy – or something else entirely. A science degree gives you the flexibility to explore your interests, find a pathway that is right for you and make a real difference in the world.

Top 250 in the world for Environmental Sciences¹

Top 200

in the world - Psychology¹

92.7%

of postgraduate Psychology graduates found employment within four months²



See the website for a full list of our degree options and programs

Bachelor of Biotechnology

CRICOS code	059879B
Duration	3 yrs FT
Locations	Newcastle – Callaghan
Indicative annual fee	2021 A\$40,850 2022 A\$41,872
IELTS	IELTS overall minimum - 6.0 IELTS section minimum - 6.0
Intake	S1
Practical experience	Opportunities available

Course overview

Imagine using living organisms to modify products for the better - like creating a new vaccine to save millions of lives. When you study a Bachelor of Biotechnology, you will help to develop technologies that improve our communities and the health of our planet. The products of biotechnology are all around us and you can be at the forefront of scientific development and discovery. Students undertake a 10-week full-time industrial placement.

What you will study

Our academics are internationally recognised leaders in their fields and are working to solve real-world problems. Under their leadership, you will apply DNA and cell technologies to enhance human health, plant and animal agriculture and environmental wellbeing.

- Core studies include:
- biochemistry
- molecular genetics biomolecules
- molecular biology

Professional recognition

Our graduates can apply for membership to AusBiotech and specialist societies such as the Australian Society of Biochemistry and Molecular Biology. Membership provides access to a large network of biologists who have regular events to help members share knowledge and collaborate.

Career opportunites/outcomes

Biotechnology is predicted to be a key for solving global issues in the future, such as human and animal diseases, climate change, fuel alternatives and food security.

You could enter an exciting career as a:

- Biochemist
- Biotechnologist
- Clinical Research Coordinator Geneticist
- Laboratory Analyst Microbiologist
- Product Developer

in Church

See the website for more information about this degree.

Bachelor of Climate Science and Adaptation

CRICOS code	102644D
Duration	3 yrs FT
Locations	Newcastle – Callaghan
Indicative annual fee	2021 A\$38,660 2022 TBC
IELTS	IELTS overall minimum - 6.0 IELTS section minimum - 6.0
Intake	S1, S2
Practical experience	Opportunities available

Course overview

This specialised degree will allow you to turn your passion into practice by providing you with fundamental tools to address climate-related risks. You will learn how to assess the impacts of climate variability and change and develop adaptation strategies (e.g. infrastructure, planning policy) that reduce the economic, environmental, and social costs of climate hazards and potential future impacts. Through our partnerships with external industries and government agencies, you will also have the opportunity to engage in work - and research - integrated learning when you apply your studies to complete a major project in the final year.

What you will study

This program incorporates courses from multidisciplinary study areas and provides a broad range of elective pathways to complement your career aspirations.

Key areas of study include:

- climate change and resource management
- risk, vulnerability, adaptation and resilience · water, energy and food security climate and energy
- · Earth processes (including climatic, hydrological, coastal, soil)
- environmental sustainability
- human geography
- spatial science
- statistics

Career opportunites/outcomes

Graduates of the Bachelor of Climate Science and Adaptation can go on to work in a diverse range of areas including:

- · air quality control
- climate action and resilience
- climate and energy
- climate change operations
- climate change policy climatology
- ecology
- energy and resources
- · environmental impact and assessment
- · laboratory and research work
- meteorology

Bachelor of Coastal and Marine Science

CRICOS code	0100479
Duration	3 yrs FT
Locations	Newcastle – Callaghan Central Coast
Indicative annual fee	2021 A\$37,590 2022 A\$38,530
IELTS	IELTS overall minimum - 6.0 IELTS section minimum - 6.0
Intake	S1, S2
Practical experience	Opportunities available

Course overview

Are you a passionate marine conservationist? Australia has some of the world's most diverse coastlines and marine ecosystems and we need to make sure they remain protected. By understanding conservation and management issues – such as climate change, pollution and overfishing - we can help find solutions. In this degree you will learn from marine, coastal and ecological experts, giving you practical skills to make a difference in our world. Students are able to tailor their program to suit their career goals. Access worldclass facilities, innovative technologies and participate in field and laboratory work to help develop your analytical, research and communication skills.

What you will study

Students will investigate concepts such as ecosystems, coastal processes, marine flora and fauna, and spatial science. Students can also choose to complete a minor study area such as:

- · Indigenous environmental and community practices
- scientific communication
- environmental regulation
- cell and molecular biology
- water and resource management

Professional recognition

Graduates can apply for membership to a range of professional bodies including the Australian Marine Sciences Association and the Australian Coral Reef Society.

Career opportunites/outcomes

The flexible structure of this degree can lead to careers such as:

- Botanist
- Conservationist/Ecologist
- Environmental Compliance Officer
- Environmental Consultant
- Marine Biologist
- Oceanographer



See the website for more information about this degree.



See the website for more information about this degree.

Bachelor of Environmental Science and Management

CRICOS code	059877D
Duration	3 yrs FT
Locations	Newcastle – Callaghan Central Coast
Indicative annual fee	2021 A\$39,690 2022 A\$40,682
IELTS	IELTS overall minimum - 6.0 IELTS section minimum - 6.0
Intake	S1, S2
Practical experience	Opportunities available

Course overview

If you want to help solve the environmental problems facing our society, and have a passion for sustainability, then the Bachelor of Environmental Science and Management is for you. The University is centrally situated to give you hands-on experience in areas of vast environmental diversity, from terrestrial landscapes, to wetlands and coastal zones. Here you will gain an understanding of the critical issues placing a growing strain on the Earth's natural resources and develop tactics to combat them. Our industry partnerships allow you the chance to take part in exciting work placements and research opportunities, giving you a competitive edge when entering the career market.

What you will study

Students will explore concepts such as environmental systems and practices, and related ethics, values and legislation. Students will also choose one of the following major study areas to specialise in:

- Natural Resources and Hazards
- · Ecosystems and Biodiversity
- Marine Science and Management
- Sustainability

Professional recognition

Depending on your area of study you can gain professional recognition with the Hunter Environmental Institute, Australian Ecology Society, Australian Wildlife Management Society, Birds Australia, Australian Mammal Society or Australian Society of Herpetology.

Career opportunites/outcomes

Graduates of the Bachelor of Environmental Science and Management go on to work in a diverse range of areas, including conservation and ecology, environmental science, laboratory and research work, or urban and regional planning.

Typical employment opportunities include:

- Botanist/Plant Scientist
- Climatologist
- Coastal Management Officer
- Environmental Consultant
- Environmental Health/Sustainability Officer Marine Scientist
- · Water Resource Management Specialist



See the website for more information about this degree.

Bachelor of Food Science and Human Nutrition

CRICOS code	055918K
Duration	3 yrs FT
Locations	Central Coast
Indicative annual fee	2021 A\$40,262 2022 A\$41,269
IELTS	IELTS overall minimum - 6.0 IELTS section minimum - 6.0
Intake	S1, S2
Practical experience	Opportunities available

Course overview

Food is an essential part of everyone's lives. As an increasingly health-conscious society and population, new and innovative approaches are required. This field requires people with a passion for innovative thinking. As a food scientist, you could develop new products for consumers, ensuring the foods we eat are desirable, nutritious, balanced and safe to eat. This qualification allows you to stay up-to-date on scientific developments, learn specialist knowledge and be equipped with skills needed for a successful career. Learn in purpose-built facilities including a commercial testing kitchen and sensory lab, allowing you to design and test concepts as part of the product development process.

What you will study

Graduates develop a strong foundation of the principles underlying the sciences of food technology and human nutrition. This includes basic sciences, chemistry and biology of nutrients, and the attributes of foods including food commodities and functional foods.

You will study topics including:

- biomedical science
- chemistry
- food product development
- macronutrients
- micronutrients
- $\boldsymbol{\cdot}$ nutrition in health and disease

Professional recognition

Graduates are eligible to apply for membership with the Australian Institute of Food Science and Technology (AIFST) and the Nutrition Society of Australia (NSA).

Career opportunites/outcomes

The experience, specialist knowledge and skills you learn will prepare you for a successful career in the food science, health and nutrition industries

Some typical roles after you graduate include:

- Catering Manager
- Flavourist
- · Food Scientist, Technologist or Chemist
- Health Promotion Officer
- Nutritionist
- · Quality Assurance Technician



See the website for more information about this degree.

Bachelor of Psychological Science

CRICOS code	095149D
Duration	3 yrs FT
Locations	Newcastle – Callaghan Central Coast
Indicative annual fee	2021 A\$40,268 2022 A\$41,274
IELTS	IELTS overall minimum - 7.0 IELTS section minimum - 7.0
Intake	S1, S2
Practical experience	Opportunities available

Course overview

Psychological science is a fascinating area which examines the causes of human behaviour. This understanding is then used to solve practical problems that will positively impact the lives of others. Learn from renowned researchers in the field and have the opportunity to undertake Work Integrated Learning (WII)

What you will study

You will cover a broad range of study areas such as mental illness, interventions, the biology of the brain, memory, decision making, as well as developmental, social and personality studies. In addition to these study areas, you will also undertake courses that teach research skills such as methodology and statistics.

Professional recognition

This course is currently accredited by the Australian Psychology Accreditation Council (APAC) and approved by the Psychology Board of Australia. Upon completion of an APAC accredited undergraduate degree, students who go on to complete their honours then postgraduate study will be eligible to apply for provisional registration as a psychologist with the Psychology Board of Australia. Please note that after completion of an APAC accredited undergraduate degree, a further minimum of three years education and training in psychology is required to register as a psychologist in Australia.

Career opportunites/outcomes

Examples of roles that your degree could apply to include:

- Careers Counsellor
- Case Manager
- Case Worker
- Juvenile Justice Officer Market Researcher
- Mediator
- Practicing Psychologist



See the website for more information about this degree.

2

Bachelor of Psychological Science (Advanced)

CRICOS code	0100474
Duration	3 yrs FT
Locations	Newcastle – Callaghan Central Coast
Indicative annual fee	2021 A\$40,320 2022 A\$41,328
IELTS	IELTS overall minimum - 7.0 IELTS section minimum - 7.0
Intake	S1
Practical experience	Opportunities available

Course overview

Understanding the science behind human behaviour, the human brain and its effect on the way we act and why form the foundation of psychological science. The Bachelor of Psychological Science (Advanced) will not only help you deepen your understanding of theoretical methodologies - but you will have the opportunity to participate in Work Integrated Learning (WIL), you will develop valuable connections with industry and other professionals to improve employment outcomes when you graduate.

What you will study

The Bachelor of Psychological Science (Advanced) offers additional work and research-integrated learning, as you will apply your studies to complete a major transdisciplinary capstone project throughout your third year. You will cover a broad range of study areas such as mental illness, interventions, the biology of the brain, memory, decision making, as well as developmental, social and personality studies. You will also learn research skills such as methodology and statistics

Professional recognition

This course is currently accredited by the Australian Psychology Accreditation Council (APAC) and approved by the Psychology Board of Australia. Upon completion of an APAC accredited undergraduate degree, students who go on to complete their honours then postgraduate study will be eligible to apply for provisional registration as a psychologist with the Psychology Board of Australia. On completing this degree, a further minimum of three years education and training in psychology is required to register as a psychologist in Australia.

Career opportunites/outcomes

Examples of roles that your degree could apply to include:

- Careers Counsellor Case Manager
- Market Researcher Mediator
 - Practicing Psychologist
- Case Worker Juvenile Justice
- Officer



See the website for more information about this degree.

Bachelor of Science

CRICOS code	098539К
Duration	3 yrs FT
Locations	Newcastle – Callaghan Central Coast
Indicative annual fee	2021 A\$39,627 2022 A\$40,618
IELTS	IELTS overall minimum - 6.0 IELTS section minimum - 6.0
Intake	S1, S2
Practical experience	Opportunities available

Course overview

The field of science is exciting and always evolving. It underpins areas such as technology, industry, business, agriculture, environment, research and development, health, and the information revolution. Learn from leading science researchers who will guide you through a tailored program, specifically designed to make you a highly-skilled and employable science graduate. You will gain hands-on experience in our world-class facilities while building your professional network with 12 weeks of practical experience within research or industry. The Bachelor of Science will prepare you to contribute solutions to the scientific challenges we are facing.

What you will study

Core courses in the degree have been designed with industry input to ensure students have the skills they need for employment, including lab and field skills, problem solving, project planning, and employment skills. Through your chosen major and elective pathways, you can design your degree to match your personal career aspirations

You can choose to study in areas such as:

- biology
- · chemistry of advanced materials
- earth science
- · biodiversity and conservation
- geography
- mathematics and statistics
- physics
- psychology

Professional recognition

Graduates who complete the accredited Physics major are eligible for accreditation through The Australian Institute of Physics (AIP). Graduates who complete the accredited Statistics major are eligible for accreditation on becoming a member of the Statistical Society of Australia.

Career opportunites/outcomes

The flexible structure of this degree can lead to careers such as:

- Climatologist
- Marine Biologist Conservationist/ Microbiologist
- Ecologist Neuroscientist
- Geographer Oceanographer



See the website for more information about this degree.

Bachelor of Science (Advanced)

CRICOS code	0100473
Duration	3 yrs FT
Locations	Newcastle – Callaghan Central Coast
Indicative annual fee	2021 A\$37,538 2022 A\$38,476
IELTS	IELTS overall minimum - 6.0 IELTS section minimum - 6.0
Intake	S1
Practical experience	Opportunities available

Course overview

In today's society, scientists need to work across research, industry and discipline boundaries to create solutions to the world's most complex issues. You might work in a lab, discovering life-changing scientific breakthroughs, or use science to shape government policy. The Bachelor of Science (Advanced) will allow you to join a high achieving cohort and create your own academic adventure. Tailor your majors and professional pathways to achieve your career goals. You will have access to specialised mentoring, exposure to the wider College of Engineering, Science and Environment community and opportunities to participate in Work Integrated Learning (WIL) and industry engagement.

What you will study

Using the latest scientific developments and advancements, you will learn first hand from our actively involved researchers how to deliver innovative solutions for real-world problems. Choose from 10 majors across eight disciplines to shape your study experience to suit your interests. You can combine a mix of majors and electives to suit your study direction.

You can choose to study in areas such as:

- biology
- · chemistry of advanced materials
- earth science
- · biodiversity and conservation
- geography mathematics and statistics
- physics
- psychology

Professional recognition

Graduates who complete the accredited Physics major are eligible for accreditation through The Australian Institute of Physics (AIP). Graduates who complete the accredited Statistics major are eligible for accreditation on becoming a member of the Statistical Society of Australia.

Career opportunites/outcomes

The flexible structure of this degree can lead to careers such as:

Botanist	•	Physicist
Chemist	•	Statistician

 Chemist Mathematician



See the website for more information about this degree.

3

Master of Business Psychology

CRICOS code	0100761
Duration	2 yrs FT
Locations	Newcastle – Callaghan Online
Indicative annual fee	2021 A\$42,887 2022 A\$43,959
IELTS	IELTS overall minimum - 6.5 IELTS section minimum - 6.0
Intake	S1, S2, T1, T2, T3
Practical experience	Opportunities available

Course overview

This qualification is designed for professionals or recent psychology graduates looking to advance their management skills from a psychological perspective. You will develop an advanced understanding of human behaviour and how this applies to workplace relationships, specialised skills in applied psychology and organisational behaviour. We offer an exceptional learning experience for students with postgraduate psychology students ranking us number five in Australia for learner engagement.¹

What you will study

The University of Newcastle's Master of Business Psychology offers professionals a specialised program that challenges your approach to leadership and enhances your ability to think from a business psychology perspective.

Courses to support your drive and direction include:

- · leadership and organisational change
- psychology skills in the workplace
- organisational interventions

• understanding people in organisations There are opportunities to exit the Masters

program with a Graduate Certificate, depending on the number of units completed

Career opportunites/outcomes

The Master of Business Psychology will prepare individuals for diverse career opportunities that require specialised interpersonal and advanced communication skills. Graduates may be employed in mid to senior management positions across the public and not-for-profit sectors.

Other prospective career paths include:

- case management and managing a multidisciplinary team
- consultant for human services, recruitment, change management and communications
- customer service manager
- hr specialist
- organisational trainer/training manager
- program manager for community work or health



See the website for more information about this degree.

Master of Clinical Psychology

CRICOS code	098562M
Duration	2 yrs FT
Locations	Newcastle – Callaghan
Indicative annual fee	2021 A\$44,510 2022 A\$45,622
IELTS	IELTS overall minimum - 7.0 IELTS section minimum - 7.0
Intake	S1
Practical experience	Opportunities available

Course overview

With expert supervision in our clinic and community settings, this degree helps you work in the prevention, diagnosis, and treatment of many psychological disorders. You will learn to enhance conceptual and interpersonal skills, apply advanced knowledge and methods to procedures, technologies and techniques, collaborate effectively with clients and health professionals, and conduct, evaluate and present systematic research. Our graduates adhere to the 'scientistpractitioner' model of practice.

What you will study

This program will help you gain comprehensive knowledge in professional and ethical practice, counselling and clinical interventions, clinical neuropsychology, health psychology, and the clinical psychology of adults, children, and people with intellectual disabilities.

Key areas of study include:

- advanced methodology
- critical issues and controversies in psychology
- counselling and clinical intervention
- professional and ethical practice

Professional recognition

This program is accredited by the Australian Psychology Accreditation Council (APAC). The Psychology Board of Australia (PsyBA), through APAC, also recognises the program for the purposes of registration and endorsement of practice in clinical psychology.

Career opportunites/outcomes

The Master of Clinical Psychology will prepare graduates to professionally practice as clinical psychologists and provide a broad range of psychological services to long-term patients to treat mild to complex mental health conditions.

Other career prospects may include:

- allied health professions management
- program development and evaluation promoting psychological health through

See the website for

more information

about this degree.

- public policy
- research
- teaching and supervision

Psychology

Master of Professional

CRICOS code	098563K
Duration	1 yr FT
Locations	Newcastle – Callaghan
Indicative annual fee	2021 A\$44,510 2022 A\$45,622
IELTS	IELTS overall minimum - 7.0 IELTS section minimum - 7.0
Intake	S1
Practical experience	Opportunities available

Course overview

If you want to be a registered psychologist, this degree is for you. With intensive training and education, you will learn to apply advanced techniques competently and ethically across broad professional settings. We help you develop your professional skills and career in psychology under the supervision of highly experienced registered psychologists. This supervision ensures you are experienced and prepared before seeking General Registration with the Psychology Board of Australia.

What you will study

Enhance your theoretical skills and learn to use relevant principles and methods to assist people with a range of behavioural problems, taking into account social and cultural diversity, current relevant legal frameworks, mental health practice standards and codes of ethical practice.

Key areas of study include:

- psychological assessment
- psychological treatments and interventions
- professional and ethical practice
- clinical psychology of special groups: intellectual disabilities/older adults

Professional recognition

This program has received provisional accreditation with conditions by the Australian Psychology Accreditation Council.

Accreditation ensures graduates receive a high quality education that will allow them to employ their psychological knowledge and skills in the community.

Career opportunites/outcomes

On successful completion of the program and an additional internship year under the supervision of a registered psychologist, graduates will be eligible for registration with the Psychology Board of Australia as a General Registered Psychologist. Other career prospects may include working in the following areas:

research customer

service manager

 specialist psychological

services

 teaching and supervision

- human resourcesprivate, public and
- non-government
- organisations
- rehabilitation and
- disability services



See the website for more information about this degree.

Science and the Environment

	CRICOS	Duration (Years, semesters or trimesters)	Location	Intakes	IELTS Overall Minimum/ Section Minimum	2021 Indicative Annual Fee A\$^	2022 Indicative Annual Fee A\$^	
Science and Environment								
Bachelor of Biotechnology*	059879B	3	Ν	S1	6.0/6.0	\$40,073	\$41,075	
Bachelor of Climate Science and Adaptation	102644D	3	Ν	S1, S2	6.0/6.0	\$38,660	\$41,872	
Bachelor of Coastal and Marine Science	0100479	3	N, CC	S1, S2	6.0/6.0	\$37,590	\$38,530	
Bachelor of Environmental Science and Management*	059877D	3	N, CC	S1, S2	6.0/6.0	\$39,690	\$40,682	
Bachelor of Environmental Science Management / Bachelor of Business	098483K	4	N, CC	S1, S2	6.0/6.0	\$35,390	\$36,275	
Bachelor of Exercise and Sport Science	102636D	3	CC	S1, S2	7.0/7.0	\$36,293	\$37,201	
Bachelor of Food Science and Human Nutrition*	055918K	3	CC	S1, S2	6.0/6.0	\$40,262	\$41,269	
Bachelor of Food Science and Human Nutrition/Bachelor of Business	095144J	4	CC	S1, S2	6.0/6.0	\$36,146	\$37,150	
Bachelor of Psychological Science	095149D	3	N, CC	S2	7.0/7.0	\$40,268	\$41,274	
Bachelor of Psychological Science (Advanced)	0100474	3	N, CC	S1	7.0/7.0	\$40,320	\$41,328	
Bachelor of Science*	098539K	3	N, CC	S1, S2	6.0/6.0	\$39,627	\$40,618	
Bachelor of Science (Advanced)	0100473	3	N, CC	S1	6.0/6.0	\$37,538	\$38,476	
Bachelor of Science/Bachelor of Innovation and Entrepreneurship	098542D	4	Ν	S1, S2	6.0/6.0	\$33,327	\$34,160	
Graduate Diploma in Psychological Science	102640H	2 semesters	N, CC	S1, S2	7.0/7.0	\$44,510	TBC	
Master of Business Administration (Global) / Master of Science (Data Analytics)	0101396	6 trimesters	S	T2, T3	6.5/6.0	\$34,267	\$35,123	
Master of Business Psychology	0100761	6 trimesters	N, Online	S1, S2, T1, T2, T3	6.5/6.0	\$42,887	\$43,959	
Master of Clinical Psychology	098562M	4 semesters	N, Online	S1	7.0/7.0	\$44,510	\$45,622	
Master of Professional Psychology	098563K	2 semesters	Ν	S1	7.0/7.0	\$44,510	\$45,622	

KEY FOR LOCATIONS

NCNewcastle – CityNNewcastle – CallaghanSSydneySGCCCentral Coast – OurimbahSGSingapore

KEY FOR INTAKES

S1 Semester 1 S2 Semester 2 **T1** Trimester 1

T2 Trimester 2 T3 Trimester 3 W

Winter

* End-on Honours is a separate and additional year of study following the completion of a bachelor degree. This is a very different experience to the earlier years of study. There are fewer formal classes and more individual work. Honours can be course work based, research based, or a combination of the two. Admission requirements for End-On Honours vary by program, but often require a minimum GPA.

Q University of Newcastle

china.newcastle.edu.au

🔇 1300 275 866 (inside Australia)

Newcastle Campus
Callaghan
University Drive,
Callaghan NSW 2308

(+61 2 4913 8300

A

0

newcastle.edu.au/international

(in 🕑 🕑 🕩 🔊

Sydney Campus 55 Elizabeth Street, Sydney NSW 2000 Newcastle City Campus NUspace Corner Hunter and Auckland Streets Newcastle NSW 2300

Singapore Campus

fiemasek Boulevard, #10-02/03, Suntec Tower 4 Singapore 038986 Central Coast Campus Ourimbah Chittaway Road

Chittaway Road, Ourimbah NSW 2258



1

Connect on WeChat