2023 Undergraduate degrees

THE UNIVERSITY OF NEWCASTLE AUSTRALIA

Contents

The University of Newcastle acknowledges the traditional custodians of the lands within our footprint areas: Awabakal, Darkinjung, Biripai, Worimi, Wonnarua and Eora Nations. We pay respect to the wisdom of our Elders both past and present. We also acknowledge and pay respect to the other Aboriginal and Torres Strait Islander nations from which our students, staff and community are drawn.

Career ideas

	You like	You could study	You could be
	Art, Business Studies, Design and Technology, Economics, Geography, Maths	**Architecture, Building and Construction**	Architect, Building Certifier, Building Surveyor, Construction Manager, Drafter, Product Designer, Project Manager, Property Developer, Quantity Surveyor
	Business Studies, Economics, English, Geography, Languages, Maths	**Business and Management**	Accountant, Account Manager, Business Analyst, Business Development Officer, Data Analyst, Economist, Entrepreneur, Financial Planner, Human Resources Officer, Investment Banker, Marketing Officer, Mortgage Broker, Sports Development Officer, Stockbroker
	Business Studies, Criminology, Data Science, Design and Technology, English, Industrial Technology, Information Technology, Maths, Physics	**Computing, Maths and Technology**	Artificial Intelligence and Machine Learning Specialist, Big Data Specialist, Computer Game Developer, Computer Scientist, Meteorologist, Renewable Energy Project Officer, Risk Analyst, Web Developer
	Art, Design and Technology, Drama, Movies and Television, Writing, Music, Social Media	**Creative Industries and Communication**	Animator, Artist, Copywriter, Filmmaker, Graphic Designer, Journalist, Multimedia Designer, Musician, Public Relations Officer
	Art, Biology, Chemistry, Criminology, Design and Technology, Drama, English, Geography, Health and Physical Education, History, Languages, Maths, Metal Work, Music, Science, Wood Work	**Education**	English as a Second Language Teacher, Learning and Development Consultant, Sport and Recreation Officer, Special Education Teacher, Teacher
	Art, Business Studies, Chemistry, Design and Technology, Engineering Studies, Industrial Technology, Maths, Physics, Science	**Engineering**	Computer Architect, Environmental Impact Consultant, Prosthetics Designer, Robotics Engineer, Satellite Engineer, Structural Engineer, Surveyor, Urban Development Engineer
	Biology, Chemistry, Food Technology, Health and Physical Education, Maths, Science, Physics	**Health and Medicine**	Dental Therapist, Dietitian, Doctor, Exercise Scientist, Food Scientist, Midwife, Nuclear Medicine Technologist, Nurse, Occupational Therapist, Pharmacist, Physiotherapist, Podiatrist, Psychologist, Radiographer, Speech Pathologist, Surgeon
	Art, Biology, Community and Family Studies, English, Geography, Health and Physical Education, History, Languages, Maths, Music, Religion, Society and Culture	**Humanities and Social Sciences**	Community Development Worker, Cultural Heritage Conservationist, Demographer, Environmental Manager, Historian, Human Geographer, International Aid Worker, Media Analyst, Migrant Support Officer, Policy Developer, Social Worker, Town Planner, Translator, Youth Worker
	Business Studies, Criminology, Economics, English, History, Languages, Legal Studies, Media and Entertainment Studies	**Law**	Barrister, Contracts Manager, Human Resources Expert, Industrial Relations Officer, In-House Counsel, International Aid Worker, Lawyer, Lobbyist, Police Detective, Policy Reformer, Political Adviser, Private Investigator, Regulator
	Agriculture, Biology, Business Studies, Chemistry, Earth and Environmental Science, Economics, Geography, Health and Physical Education, Information Technology, Marine Science, Maths, Physics, Science	**Science and the Environment**	Botanist, Climate Change Analyst, Climate Scientist, Data Analyst, Exercise Scientist, Food Scientist, Forensic Chemist, Geologist, Marine Biologist, Mathematician, Medicinal Chemist, Meteorologist, Microbiologist, Physicist, Psychologist, Researcher, Scientific Journalist, Statistician, Wildlife Conservationist

2023 Undergra degrees

Architecture, Building and Construction 36

DEGREE NAME	DURATION	2022 SR	PAGE
Bachelor of Construction Management (Building) (Honours)	4 yrs FT / 10 yrs PT	65.00	38
Bachelor of Design (Architecture)	3 yrs FT / 8 yrs PT	77.00	38
Diploma in Built Environment	1 yr FT / 4 yrs PT	50.00	39

Business and Management 40

DEGREE NAME	DURATION	2022 SR	PAGE
Bachelor of Business	3 yrs FT / 8 yrs PT	67.00	42
Bachelor of Business Analytics	3 yrs FT / 8 yrs PT	67.00	42
Bachelor of Commerce	3 yrs FT / 8 yrs PT	70.00	43
Bachelor of Innovation and Entrepreneurship (Combined)	4 yrs FT / 10 yrs PT	N/A[1]	43
Diploma in Business	1 yr FT / 4 yrs PT	50.00	44

COMBINED DEGREES

- Bachelor of Arts/Bachelor of Innovation and Entrepreneurship
- Bachelor of Business/Bachelor of Business Analytics
- Bachelor of Business/Bachelor of Commerce
- Bachelor of Business/Bachelor of Innovation and Entrepreneurship
- Bachelor of Business/Bachelor of Laws (Honours)
- Bachelor of Chemical Engineering (Honours)/Bachelor of Business
- Bachelor of Civil Engineering (Honours)/Bachelor of Business
- Bachelor of Commerce/Bachelor of Business Analytics
- Bachelor of Commerce/Bachelor of Innovation and Entrepreneurship
- Bachelor of Commerce/Bachelor of Laws (Honours)
- Bachelor of Development Studies/Bachelor of Business
- Bachelor of Electrical and Electronic Engineering (Honours)/Bachelor of Business
- Bachelor of Environmental Science and Management/Bachelor of Business
- Bachelor of Food Science and Human Nutrition/Bachelor of Business
- Bachelor of Information Technology/Bachelor of Business
- Bachelor of Innovation and Entrepreneurship/Bachelor of Laws (Honours)
- Bachelor of Mechanical Engineering (Honours)/Bachelor of Business
- Bachelor of Psychological Science/Bachelor of Business
- Bachelor of Science/Bachelor of Innovation and Entrepreneurship
- Bachelor of Surveying (Honours)/Bachelor of Business

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Computing, Maths and Technology 46

DEGREE NAME	DURATION	2022 SR	PAGE
Bachelor of Computer Science	3 yrs FT / 8 yrs PT	72.00	48
Bachelor of Data Science	3 yrs FT / 8 yrs PT	85.00	48
Bachelor of Information Technology	3 yrs FT / 8 yrs PT	67.00	49
Bachelor of Mathematics	3 yrs FT / 8 yrs PT	85.00	49
Bachelor of Mathematics (Advanced)	3 yrs FT / 8 yrs PT	95.00	50
Diploma in Information Technology	1 yr FT / 4 yrs PT	50.00	50

COMBINED DEGREES

- Bachelor of Chemical Engineering (Honours)/Bachelor of Mathematics
- Bachelor of Civil Engineering (Honours)/Bachelor of Mathematics
- Bachelor of Computer Systems Engineering (Honours)/Bachelor of Computer Science
- Bachelor of Computer Systems Engineering (Honours)/ Bachelor of Mathematics
- Bachelor of Data Science/ Bachelor of Computer Science
- Bachelor of Data Science/ Bachelor of Mathematics
- Bachelor of Electrical and Electronic Engineering (Honours)/ Bachelor of Mathematics
- Bachelor of Information Technology/ Bachelor of Business
- Bachelor of Mathematics/ Bachelor of Science
- Bachelor of Mechanical Engineering (Honours)/Bachelor of Mathematics
- Bachelor of Mechatronics Engineering (Honours)/Bachelor of Mathematics

Creative Industries and Communication 52

DEGREE NAME	DURATION	2022 SR	PAGE
Bachelor of Communication	3 yrs FT / 8 yrs PT	67.00	54
Bachelor of Music and Performing Arts	3 yrs FT / 8 yrs PT	N/A[2]	54
Bachelor of Visual Communication Design	3 yrs FT / 8 yrs PT	67.00	55

COMBINED DEGREES

- Bachelor of Communication/ Bachelor of Laws (Honours)
- Bachelor of Creative Industries/ Bachelor of Innovation and Entrepreneurship
- Bachelor of Music/Bachelor of Arts

Education 56

DEGREE NAME	DURATION	2022 SR	PAGE
Bachelor of Education (Early Childhood and Primary)	4 yrs FT / 10 yrs PT	65.00	58
Bachelor of Education (Primary)	4 yrs FT / 10 yrs PT	65.00	58
Bachelor of Education (Secondary)	4 yrs FT / 10 yrs PT	65.00	59
Diploma in Education Studies	1 yr FT / 4 yrs PT	50.00	60

Engineering 62

DEGREE NAME	DURATION	2022 SR	PAGE
Bachelor of Aerospace Systems Engineering (Honours)	4 yrs FT / 10 yrs PT	80.00	64
Bachelor of Chemical Engineering (Honours)	4 yrs FT / 10 yrs PT	80.00	64
Bachelor of Civil Engineering (Honours)	4 yrs FT / 10 yrs PT	80.00	65
Bachelor of Computer Systems Engineering (Honours)	4 yrs FT / 10 yrs PT	80.00	65
Bachelor of Electrical and Electronic Engineering (Honours)	4 yrs FT / 10 yrs PT	80.00	66
Bachelor of Engineering (Mining Transfer Program)	4 yrs FT / 10 yrs PT	80.00	66
Bachelor of Environmental Engineering (Honours)	4 yrs FT / 10 yrs PT	80.00	67
Bachelor of Mechanical Engineering (Honours)	4 yrs FT / 10 yrs PT	80.00	67
Bachelor of Mechatronics Engineering (Honours)	4 yrs FT / 10 yrs PT	80.00	68
Bachelor of Medical Engineering (Honours)	4 yrs FT / 10 yrs PT	80.00	68
Bachelor of Renewable Energy Engineering (Honours)	4 yrs FT / 10 yrs PT	80.00	69
Bachelor of Software Engineering (Honours)	4 yrs FT / 10 yrs PT	80.00	69
Bachelor of Surveying (Honours)	4 yrs FT / 10 yrs PT	76.00	70
Diploma in Engineering	1 yr FT / 4 yrs PT	50.00	70

COMBINED DEGREES

- Bachelor of Chemical Engineering (Honours)/Bachelor of Business
- Bachelor of Chemical Engineering (Honours)/Bachelor of Mathematics
- Bachelor of Chemical Engineering (Honours)/Bachelor of Science
- Bachelor of Civil Engineering (Honours)/Bachelor of Business
- Bachelor of Civil Engineering (Honours)/Bachelor of Environmental Engineering (Honours)
- Bachelor of Civil Engineering (Honours)/Bachelor of Mathematics
- Bachelor of Civil Engineering (Honours)/Bachelor of Surveying (Honours)
- Bachelor of Computer Systems Engineering (Honours)/Bachelor of Computer Science
- Bachelor of Computer Systems Engineering (Honours)/Bachelor of Mathematics
- Bachelor of Computer Systems Engineering (Honours)/Bachelor of Science
- Bachelor of Electrical and Electronic Engineering (Honours)/Bachelor of Business
- Bachelor of Electrical and Electronic Engineering (Honours)/Bachelor of Computer Systems Engineering (Honours)
- Bachelor of Electrical and Electronic Engineering (Honours)/Bachelor of Mathematics
- Bachelor of Electrical and Electronic Engineering (Honours)/Bachelor of Science
- Bachelor of Environmental Engineering (Honours)/Bachelor of Science
- Bachelor of Mechanical Engineering (Honours)/Bachelor of Business
- Bachelor of Mechanical Engineering (Honours)/Bachelor of Mathematics
- Bachelor of Mechanical Engineering (Honours)/Bachelor of Mechatronics Engineering (Honours)
- Bachelor of Mechanical Engineering (Honours)/Bachelor of Science
- Bachelor of Mechatronics Engineering (Honours)/Bachelor of Electrical and Electronic Engineering (Honours)
- Bachelor of Mechatronics Engineering (Honours)/Bachelor of Mathematics
- Bachelor of Surveying (Honours)/Bachelor of Business

Health and Medicine 72

DEGREE NAME	DURATION	2022 SR	PAGE
Bachelor of Biomedical Science	3 yrs FT / 8 yrs PT	77.00	74
Bachelor of Medical Radiation Science (Honours) (Diagnostic Radiography)	4 yrs FT	95.00	74
Bachelor of Medical Radiation Science (Honours) (Nuclear Medicine)	4 yrs FT	77.00	75
Bachelor of Medical Radiation Science (Honours) (Radiation Therapy)	4 yrs FT	77.00	75
Bachelor of Medical Science/Doctor of Medicine (Joint Medical Program)	5 yrs FT	N/A[2]	76
Bachelor of Midwifery	3 yrs FT / 5 yrs PT	A+C[3]	76
Bachelor of Nursing	3 yrs FT / 6 yrs PT	78.00	77
Bachelor of Nutrition and Dietetics (Honours)	4 yrs FT	75.00	77
Bachelor of Occupational Therapy (Honours)	4 yrs FT	93.00	78
Bachelor of Oral Health Therapy	3 yrs FT	96.20	78
Bachelor of Pharmacy (Honours)	4 yrs FT	92.00	79
Bachelor of Physiotherapy (Honours)	4 yrs FT	99.95	79
Bachelor of Podiatry	3 yrs FT	70.00	80
Bachelor of Public and Community Health	3 yrs FT / 8 yrs PT	70.00	80
Bachelor of Speech Pathology (Honours)	4 yrs FT / 10 yrs PT	82.00	81

COMBINED DEGREES

- Bachelor of Biomedicine/Bachelor of Laws (Honours)

Humanities and Social Sciences 82

DEGREE NAME	DURATION	2022 SR	PAGE
Bachelor of Arts	3 yrs FT / 8 yrs PT	67.00	84
Bachelor of Development Studies	3 yrs FT / 8 yrs PT	79.00	84
Bachelor of Global Indigenous Studies	3 yrs FT / 8 yrs PT	67.00	85
Bachelor of Social Science	3 yrs FT / 8 yrs PT	67.00	85
Bachelor of Social Work (Honours)	4 yrs FT / 10 yrs PT	75.00	86
Diploma in Arts and Social Science	1 yr FT / 4 yrs PT	50.00	86
Diploma in Languages	2 - 6 yrs PT	50.00	87

COMBINED DEGREES

- Bachelor of Arts/Bachelor of Innovation and Entrepreneurship Combined
- Bachelor of Arts/Bachelor of Laws (Honours) Combined
- Bachelor of Arts/Bachelor of Music and Performing Arts
- Bachelor of Arts/Bachelor of Science
- Bachelor of Development Studies/Bachelor of Business
- Bachelor of Development Studies/Bachelor of Communication
- Bachelor of Development Studies/Bachelor of Global Indigenous Studies
- Bachelor of Development Studies/Bachelor of Laws (Honours) Combined
- Bachelor of Development Studies/Bachelor of Social Science
- Bachelor of Global Indigenous Studies/Bachelor of Laws (Honours) Combined
- Bachelor of Social Science/Bachelor of Laws (Honours) Combined

Law 88

DEGREE NAME	DURATION	2022 SR	PAGE
Bachelor of Criminology	3 yrs FT / 8 yrs PT	67.00	90
Bachelor of Laws (Honours) Combined	5 yrs FT	90.00	90

COMBINED DEGREES

- Bachelor of Science/Bachelor of Laws (Honours)
- Bachelor of Arts/Bachelor of Laws (Honours)
- Bachelor of Biomedicine/Bachelor of Laws (Honours)
- Bachelor of Business/Bachelor of Laws (Honours)
- Bachelor of Commerce/Bachelor of Laws (Honours)
- Bachelor of Communication/Bachelor of Laws (Honours)
- Bachelor of Criminology/Bachelor of Laws (Honours)
- Bachelor of Criminology/Bachelor of Psychological Science
- Bachelor of Development Studies/Bachelor of Laws (Honours)
- Bachelor of Global Indigenous Studies/Bachelor of Laws (Honours)
- Bachelor of Innovation and Entrepreneurship/Bachelor of Laws (Honours)
- Bachelor of Psychological Science/Bachelor of Laws (Honours)
- Bachelor of Social Science/Bachelor of Laws (Honours)

Science and the Environment 92

DEGREE NAME	DURATION	2022 SR	PAGE
Bachelor of Biotechnology	3 yrs FT / 8 yrs PT	67.00	94
Bachelor of Climate Science and Adaptation	3 yrs FT / 8 yrs PT	67.00	94
Bachelor of Coastal and Marine Science	3 yrs FT / 8 yrs PT	65.00	95
Bachelor of Environmental Science and Management	3 yrs FT / 8 yrs PT	67.00	95
Bachelor of Exercise and Sport Science	3 yrs FT / 8 yrs PT	68.00	96
Bachelor of Food Science and Human Nutrition	3 yrs FT / 8 yrs PT	67.00	96
Bachelor of Psychological Science	3 yrs FT / 8 yrs PT	65.00	97
Bachelor of Psychological Science (Advanced)	3 yrs FT / 8 yrs PT	96.00	97
Bachelor of Science	3 yrs FT / 8 yrs PT	67.00	98
Bachelor of Science (Advanced)	3 yrs FT / 8 yrs PT	95.00	98
Diploma in Environmental Science	1 yr FT / 4 yrs PT	50.00	99
Diploma in Science	1 yr FT / 4 yrs PT	50.00	99

COMBINED DEGREES

- Bachelor of Arts/Bachelor of Science
- Bachelor of Chemical Engineering (Honours)/Bachelor of Science
- Bachelor of Computer Systems Engineering (Honours)/Bachelor of Science
- Bachelor of Electrical and Electronic Engineering (Honours)/Bachelor of Science
- Bachelor of Environmental Engineering (Honours)/Bachelor of Science
- Bachelor of Environmental Science and Management/Bachelor of Business
- Bachelor of Mathematics/Bachelor of Science
- Bachelor of Mechanical Engineering (Honours)/Bachelor of Science
- Bachelor of Science/Bachelor of Innovation and Entrepreneurship
- Bachelor of Science/Bachelor of Laws (Honours)

1 Combined degree only. See degree information for individual Selection Ranks
2 See degree information for further details
3 ATAR + other selection criteria. See degree information for further details.

Combined degrees may have differences in Selection Ranks, durations and other criteria. Please see the website for specific information about each combined degree.

So, you're ready to jump into uni life,
to take control of your learning,
decide what you study and how.

Uni is a place of discovery,
a place to make new friends,
to uncover things about yourself,
about others, and the world.

Here, you'll find new passions,
new perspectives.
You'll collaborate.
You'll grow.
And you'll learn how to make an impact.

It's all here, just waiting.

5 star rating
for social equity[1]

Largest provider
of pathway
programs
in Australia[2]

Ranked 197
in the world[3]

No.1
in the world for Partnering for a Sustainable Future[4]

Welcome to the University of Newcastle

Thank you for considering the University of Newcastle as the destination where you can become a life-ready graduate. For more than 50 years we have been delivering world-class education to talented students, just like you, from right across the globe. In fact, with over 39,000 students from more than 100 countries[5], you will always feel welcome here. Offering an outstanding student experience is at the heart of what we do.

We are a top 200 world university[4] and our degrees are shaped around work placements, global learning and entrepreneurial approaches to study. We offer the latest technologies and innovative learning spaces to deliver an exceptional educational experience.

At the University of Newcastle, we are proud of our strong connection to our local communities. Many of our lecturers work directly with local industry, and as a student you will benefit from countless opportunities that arise from this unique access to business and government. We're committed to offering every student an opportunity to get work experience – we call it Work Integrated Learning – before they graduate.

We also believe in connecting your degree with research that delivers real impact, and we're proud that our researchers are among the world's best. As a student, you will learn from these ground-breaking researchers who are creating new advances, not just in Australia, but around the world.

We look forward to welcoming you to our beautiful campuses and our vibrant education program.

Professor Alex Zelinsky AO
Vice-Chancellor and President

1 The Good Universities Guide 2022.
2 Department of Education Selected Higher Education Statistics – 2019 Student Data.
3 QS World University Rankings 2022.
4 Times Higher Education Impact Rankings 2021.
5 Data Warehouse 2021.

Commitment to equity

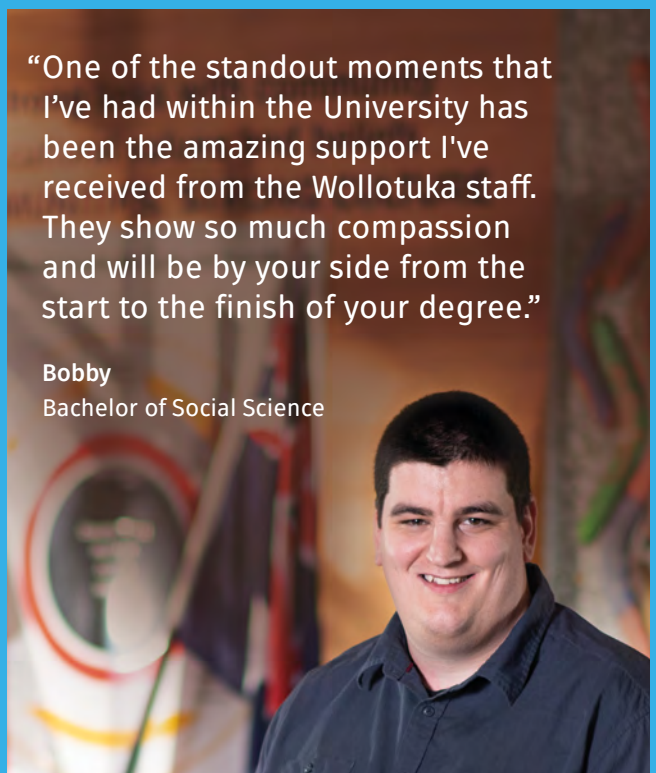
For nearly 50 years, our University has led the way in providing equity of access to higher education. We believe that equitable access is fundamental, and creates positive change in the communities our alumni live and work in. Over half our domestic undergraduate students are the first in their family to go to university, inspiring other relatives and friends to explore further education.

Supporting you, every step of the way

At the University of Newcastle, we'll support you throughout your educational experience. Our entry options mean there's more than one pathway to get into your degree and our scholarships will give you the extra support that might be needed to get you through your studies.

Every age and every life stage

We engage primary and high school students in our steps program to demystify the university experience and encourage them into further education. We also provide free academic and peer support for students and adults to study with us through our pathways programs like Open Foundation and Yapug. If you've ever thought that uni is not for you, think again. A higher education is for anyone who wants to learn, regardless of their background, circumstances, or abilities.



Indigenous support

The Wollotuka Institute and Thurru Indigenous Health Unit will assist you with providing a welcoming space and a place to connect with other Aboriginal and Torres Strait Islander students. You can also access mentorship, tutoring and scholarship assistance from experienced staff, Elders and cultural leaders.

We'll offer you programs that provide multiple pathways to uni and beyond, like our Aboriginal and Torres Strait Islander Admission program, Indigenous Early Entry Scheme (Law), with guaranteed places into our law program, our Miroma Bunbilla Program, a pre-entry pathway to the Joint Medical Program and our Yapug pathway program into our undergraduate degrees.

You'll join a safe and welcoming cultural space, with a diverse staff and student community that celebrates equity and inclusion. You'll have access to the knowledge, industry connections and real-world learning experiences to prepare you for your career and life. Join our community and start your journey today.

Accessibility

We're committed to providing an equitable learning environment for all future and current students – including those with disabilities or medical conditions that may affect their participation, engagement or learning opportunities.

Our AccessAbility initiative aims to support students to reach their full academic potential and create an environment that promotes independence and success.

Learn more about our AccessAbility initatives

1,600+ Indigenous graduates[1]

"Music is a universal language that has the power to cross barriers."

For Bachelor of Music student Katherine, these words are something she lives by – using her music to connect with people from all walks of life and create real change.

Known as Kat to most, she's a proud descendant of the Woppaburra people of the Keppel Islands and Argun tribe of Badu Island, Torres Strait Islands and has always looked to her family and culture as a guiding strength throughout life.

"My family are my biggest influence and inspiration and have always encouraged me to pursue my passion."

After studying at a performing arts school in Brisbane, Kat had the opportunity to audition and was accepted into the University of Newcastle's music program. While relocating for study can be hard for some, Kat found the support and sense of community she needed at the Wollotuka Institute.

"Making the move from Brisbane to Newcastle was a huge leap of faith. Wollotuka has helped alleviate some of the anguish I've experienced since living away from my family, my community and my respective Countries. I know from a cultural perspective, only they could understand and provide the support I needed to continue my study journey."

From help with scholarship applications to financial assistance and opportunities to perform at events hosted by the Institute, Wollotuka has played a pivotal role in Kat's journey.

"I think it's vital to have a community like Wollotuka available to all Aboriginal and Torres Strait Islander students during university study.

"I know there'll be other students like myself coming through university and it's important to have this safe space where students can express what they need in order to achieve their definition of success," said Kat.

Katherine
Bachelor of Music, 2020
Ma & Morley Scholar

1 Data Warehouse 2021.

Life-ready graduates

With outstanding graduate employment rates, you can be confident you'll gain the knowledge, industry connections and real-world experience needed to create the career you want.

The search for your future career doesn't have to wait until you graduate. You can access professional careers advice at any stage throughout your degree. Whether it's through our Career Hub online service, career counselling, meeting employers on campus, or creating the perfect resume – we're here to help you graduate, ready to make an impact.

3,000+
employer connections[2]

Industry partners

Our strong partnerships with local and global organisations help deliver real-world learning experiences to all students.

These are offered across government, not-for-profit and corporate industries such as the Australian Taxation Office, Legal Aid, Hunter New England and Central Coast Local Health Districts, Hunter Medical Research Institute, NSW Department of Primary Industries, MasterFoods, Mission Australia, Ampcontrol and Hunter Water.

Here, you'll also have the opportunity to participate in global learning experiences in countries such as Canada, China, Germany, Singapore, the South Pacific, the United Kingdom, and the United States of America, among others.

89.8%
of our undergraduate graduates find employment within four months of graduating[1]

Antony teamed up with two fellow University classmates and together they founded a startup company, Hone. Their technology – a handheld device, which tests the chemical properties of soil, crops and grain samples in real-time – is revolutionising what has traditionally been a very slow and arduous process for farmers.

"We're now working with large agricultural companies and see a bright future ahead."

Antony
Bachelor of Mathematics/Bachelor of Science (Biotechnology) (Honours), 2014

$63,193

Median starting salary for undergraduate employment[2]

"At university you learn how to hone in on your creative skills but through the industry partnership you really improve your communication skills. It gave me insight into what sort of skills I needed to create what the client wants."

Reid
Bachelor of Visual Communication Design (Honours), 2019

We're home to Australia's only UNITAR accredited training centre – CIFAL Newcastle

Study electives aligned to the United Nations Sustainable Development Goals and get United Nations co-accreditation for your studies.

cifal.newcastle.edu.au

cifal Newcastle

unitar
United Nations Institute for Training and Research

1 Graduate Outcomes Survey 2019-2021.
2 The University of Newcastle Employability and Enterprise Data.

Innovative learning

Your degree is about far more than textbooks and tutorials, libraries and lectures.

When you study here, you'll collaborate with educators, industry professionals, and other students and participate in interactive learning. Maybe you'll advance your teaching skills in a simulated classroom, use 3D printing to develop a prototype for your high-rise design, or learn how to deliver babies through virtual reality.

The way we teach is innovative and always changing – so you'll be workplace-ready when you graduate.

Student journey

Your journey as a university student begins the minute you gain entry into a degree program.

Whether you choose to go directly into the workforce once you complete your undergraduate degree, or continue studying, is up to you. We'll help you ignite a passion for lifelong learning. You might complete your Honours – an additional year of study dedicated to research on a specific area of interest – or go on to study a PhD in a field that interests you. Additional non-research coursework is also available and with over 90 postgraduate programs, there's sure to be an option to suit you.

Bringing immersive teaching to the classroom

A world-first virtual reality (VR) simulation is helping to train nursing students in conflict resolution.

The Conflict Resolution training VR program replicates a real-world emergency room and asks students to respond to a high-pressure mock scenario.

As part of the Bachelor of Nursing, students undertaking their mental health module are immersed via VR headsets and faced with 'Angry Stan' – an avatar based on real-world interactions. Users must respond to the scenario while remaining calm and navigating a range of challenges to manage the situation.

"It was imperative to develop an immersive training program where students can practise dealing with these potential situations in a safe, repeatable and realistic environment."

Professor Mike Hazelton
Professor of Mental Health Nursing
School of Nursing and Midwifery

39,140 students

from 105 countries educated and supported by 2,800+ staff[1]

1 Data Warehouse 2021.
2 QS World University Rankings by Subject 2021.

New teaching technology

Cutting-edge technology, including virtual and augmented reality, is being used to develop our students' understanding of anatomy within diagnostic imaging and other medical disciplines. When combined with traditional anatomical teaching methods, the SECTRA-based teaching table – with 2D and 3D representations of the human body – is providing an innovative way to enhance the learning and study experience.

Top 200

15 subjects ranked in the top 200 in the world[2]

Real-world experience

Sometimes it's best to dive straight in. That's why having the chance to get exciting industry experience is part of all our degrees.

We have strong partnerships with local and global organisations, meaning everything you study is shaped by the real world and you'll graduate ready for a career in your field. Maybe you'll intern with your favourite sporting team, or produce a music video for a major Australian band. You might work with communities in Indonesia to help overcome serious environmental issues, or get a behind-the-scenes look at how a national event comes together.

Whether it's through an internship, practical placement, project-based learning, or Work Integrated Learning, nothing prepares you for the real world like working in it.

"I not only have a network of people that I can consider close friends who share similar values and passions but also this professional network of people who I can work with in the future."

Dr Helena
Bachelor of Medicine, 2020 and
Diploma in Languages, 2020
Ma & Morley Ambassador

Check out Helena's story

"I definitely feel like the Work Integrated Learning has helped me with my employability. Being in an actual industry setting has shown the value of what I've been taught at uni."

Bryce
Bachelor of Computer Science, 2020

Check out Bryce's story

"Doing any kind of work experience as part of your studies is really, really helpful. It gives you that industry experience before you go out into the workforce. You learn new skills, how to collaborate with people and more importantly it builds your confidence as well, so you're building on what you've learnt at uni and then applying it to real-world situations."

Cassey
Bachelor of Communication (Media Production)

Check out Cassey's collaboration with Hockey Dad

"I one hundred percent agree that the Work Integrated Learning component has made me more employable – it's even helped me gain a position as a full-time teacher from next year."

Ryan
Bachelor of Teaching (Technology) (Honours), 2020

Check out Ryan's story

iLEAD

iLEAD is the leadership program you need to position yourself as an adaptive and engaged leader in a global marketplace.

iLEAD is a globally-focussed leadership program that connects you with local, national and international networks and experiences to accelerate your professional development and career readiness. Through carefully curated workshops, mentoring relationships and international experiences, you'll develop a set of skills, traits and perspectives that will position you as a leader of tomorrow.

Learn more about iLead

"Joining the iLEAD program was one of the best decisions I've made while studying at the University of Newcastle.

The workshops and mentoring have been invaluable and I was even invited to be a Group Leader and Student Delegate at the 10th Annual University Scholars Leadership Symposium (USLS) for Humanitarian Affairs in Kuala Lumpur. That experience gave me the chance to put my leadership skills into practice in an international setting and allowed me to build numerous connections with other students from around the globe."

Jennifer
Master of Business Administration/ Master of Marketing, 2020

Entrepreneurial opportunities

If you have passion, drive and big ideas, we're here to help make them a reality. That's why we give you countless opportunities to fine-tune your skills, make the right connections and take your ideas to the next level.

We offer the facilities, courses, mentors and support you need to succeed. Sign up for one of our innovation or entrepreneurship courses, get guidance on your startup through our Integrated Innovation Network (I2N) or use your major project to build a robot that can help save lives.

The possibilities are only limited by your imagination.

Put your entrepreneurial ideas to the test with innovation hackathons and our annual Grand Challenge

Daniel and Bal (Borne Clothing)
2020 Grand Challenge winners

Learn more about the Grand Challenge

"Through I2N I've had great opportunities to develop my personal and professional skills. I'm very grateful for the support that I've received and the knowledge I've gained through the sessions hosted at the I2N Hub – being able to meet up and make connections with like-minded and driven young people who want to achieve the extraordinary. I know for a fact this will serve me and my business in the future and I'm so glad to have been involved."

Martha
Bachelor of Business/Bachelor of Innovation and Entrepreneurship Combined, 2020
Founder and Creative Director, ÆGLE Couture

Design Nuts

Kylie and Glenn, a husband and wife team who co-founded Design Nuts, found that many students today are slower to develop their visual spatial ability because kids don't play and manipulate things the way they used to. It inspired them to develop the Splat – an award-winning tool which helps students draw three dimensional shapes and understand how to use shapes for engineering design.

Connecting with I2N for an Ideas Collider course, Kylie and Glenn's product was quickly endorsed – giving them the confidence and connections to further develop their startup.

"The I2N course really helped confirm that we were on the right track. What the dedicated team at I2N are doing to support local innovation is amazing. What I took away from it was that I2N are some really genuinely interested people offering valuable help," said Kylie.

Through a powerfully simple tool, their vision is to help design a better future.

Splat®

Engineers Australia sponsored STEAM 3D design tool

Find out how Design Nuts helped develop design skills in students

No. 1
ranked university in Australia for industry collaboration[1]

Integrated Innovation Network (I2N)

I2N is the University's epicentre of entrepreneurship.

Its headquarters, located at Honeysuckle, is purpose-built to drive enterprise skill development and startup success with state-of-the-art facilities including a makerspace and free coworking for pre-startups. Connect to a community of change-makers, and their supporters, by engaging in a range of free networking events, hackathons, mentoring, and pre-accelerator programs.

Learn more about I2N

1 Innovation Connections IC Report 2014 - 2020

Experiences across the globe

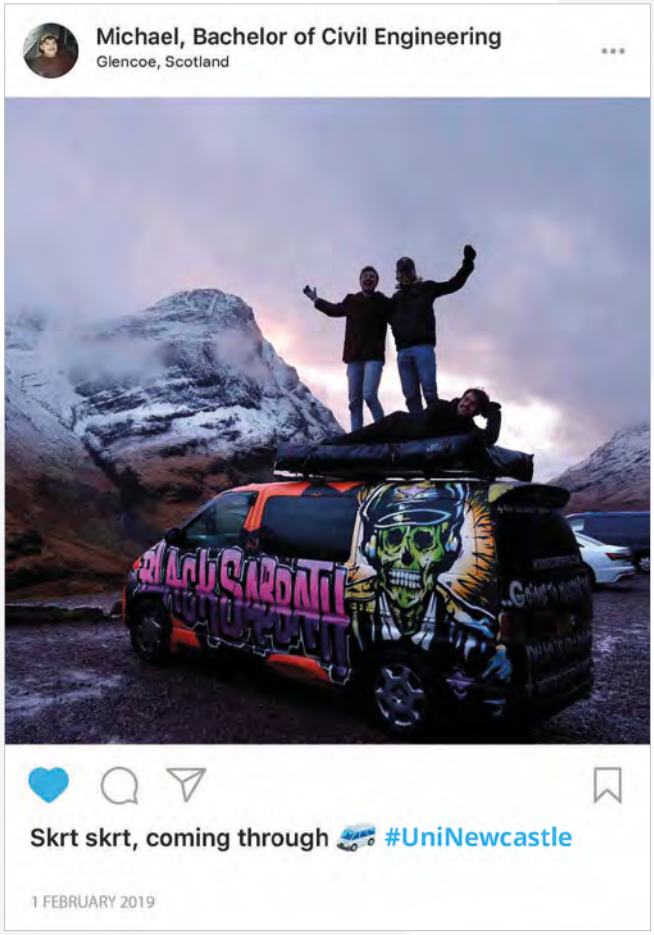
Are you keen to take your studies around the world? When you study here, you could travel and get credit for your degree at the same time. There are opportunities for international experiences across every area of study, whether it's an overseas exchange program, study tour or work placement.

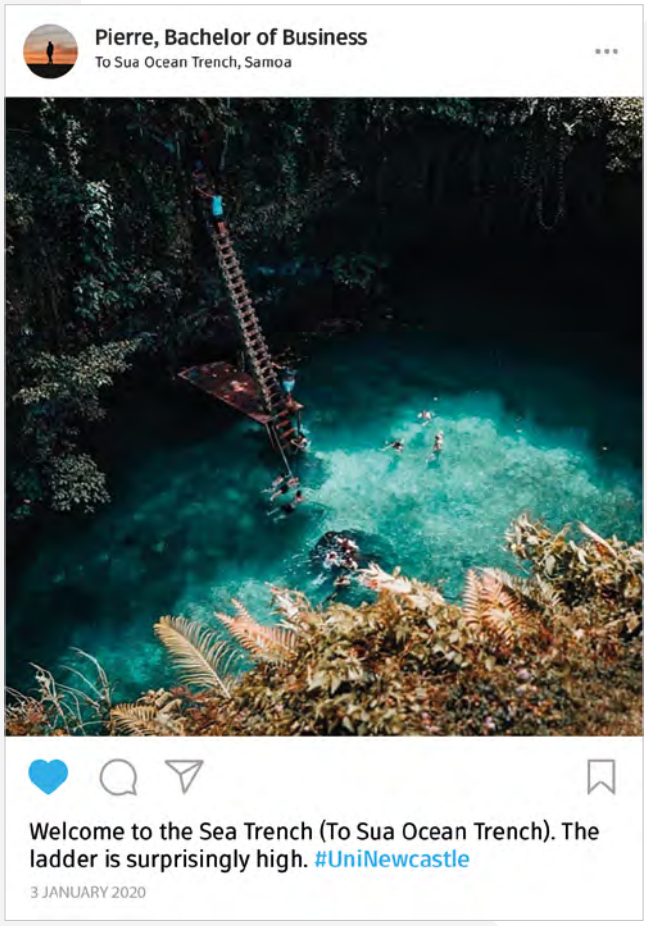
Build global connections, discover new cultures, try new food and make friends from all over the world. With more than 100 partner universities spanning all major continents, it really is the chance of a lifetime.

Learn more about global experiences

180 Partnerships in 32 countries

for student exchange and study abroad programs



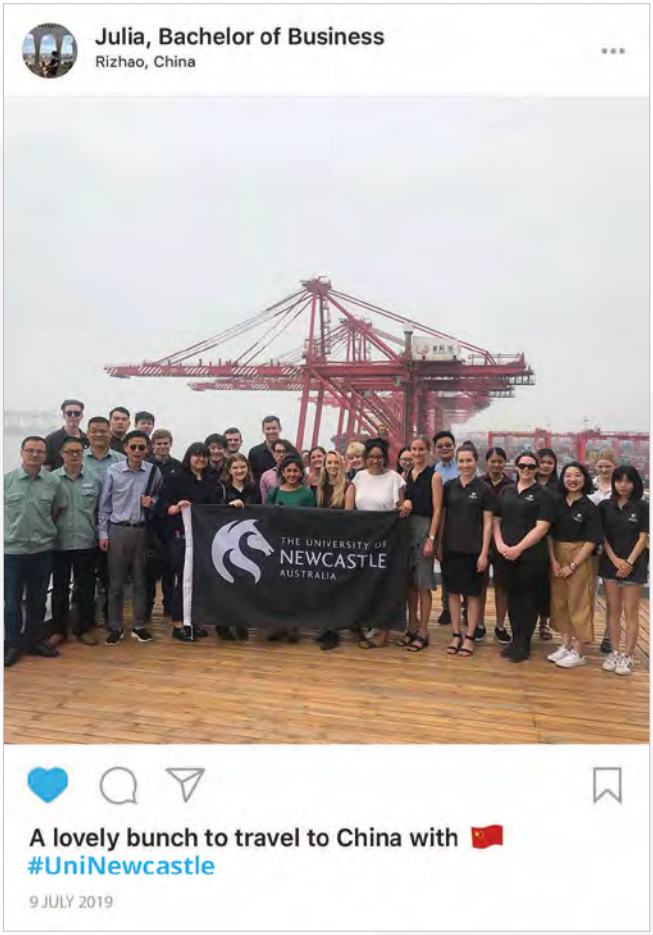


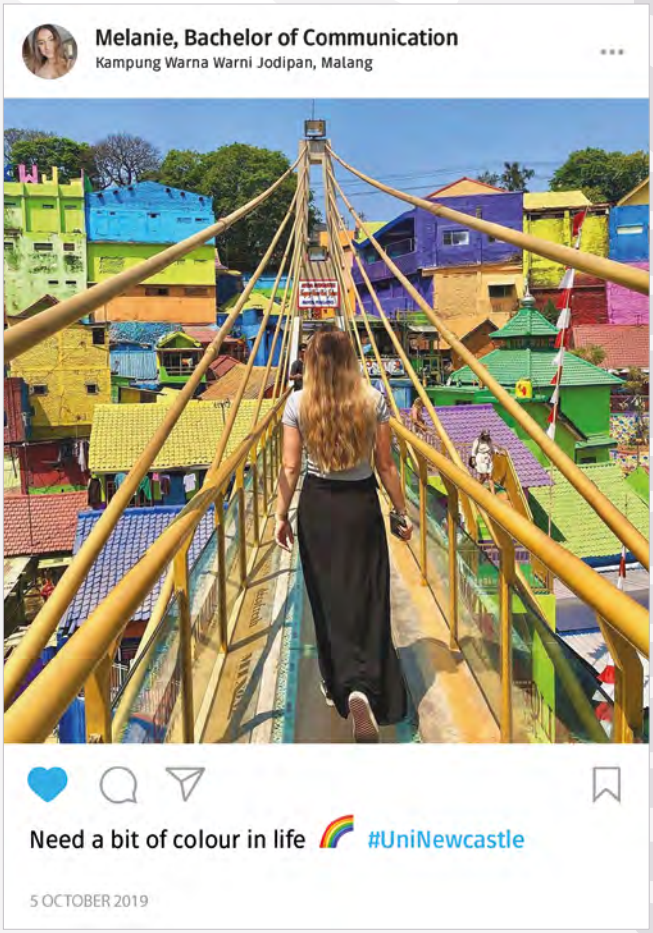
Studying abroad develops your skills and gives you the potential to excel in your future career

New Colombo Plan

The New Colombo Plan Scholarship Program is the most prestigious undergraduate scholarship in the country. Since launching in 2014, the University has received over $13 million dollars in funding to support over 3,500 undergraduate students to participate in semester-based or short-term study, internships, mentorships, practicums and research in 40 host locations across the Indo-Pacific region.

Learn more about New Colombo Plan





75%

of students who undertook an overseas placement or internship said it helped them to gain employment[1]

1 IEAA - Career outcomes of learning abroad report 2020.

Where you'll study

Newcastle City campus, NUspace

Our campuses are welcoming and collaborative environments.

Our main campuses are in Newcastle and on the Central Coast however you might take opportunities to study at one of our regional NSW centres, at our Singapore campus or one of our many partner universities around the world.

Discover life on campus

Newcastle (City)

In the heart of the CBD, our Newcastle City campus provides an integral link with industry in creativity, business and law. Home to the Newcastle Law School and Newcastle Business School, NUspace harnesses the latest in technology and innovation to deliver a world-class student experience.

Overlooking Newcastle harbour, Q Building is home to Creative Industries as well as our Integrated Innovation Network (I2N) Hub, with specialised studios and technologies, and shared spaces to connect with staff, industry, and community.

Just a few minutes walk from Q Building, The Forum Harbourside offers leading health and fitness facilities in a convenient location.

Located in the Newcastle City Precinct, the Conservatorium boasts state-of-the-art concert and teaching facilities and is home to our music and performing arts programs.

We acknowledge the traditional custodians of the lands within our footprint areas: Awabakal, Darkinjung, Biripai, Worimi, Wonnarua and Eora Nations. We pay respect to the wisdom of our Elders both past and present. We also acknowledge and pay respect to the other Aboriginal and Torres Strait Islander nations from which our students, staff and community are drawn.

More than

$125 million

invested into the Newcastle City campus over the past five years

Take a tour on campus

Top Regional University

One of the top regional universities in Australia[1]

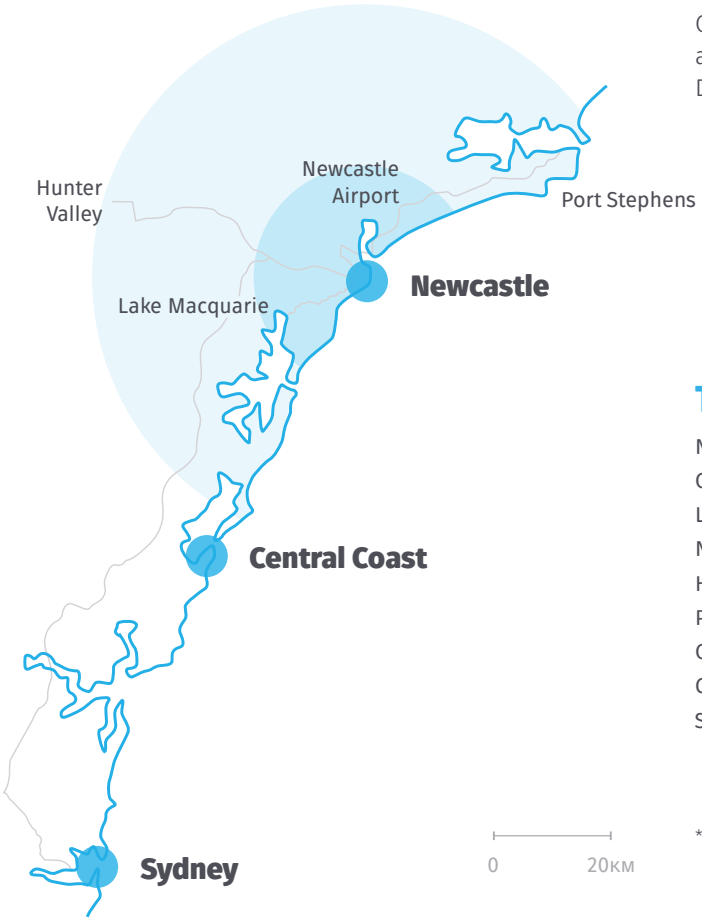
Newcastle (Callaghan)

Our Newcastle Callaghan campus is a central hub for education, humanities, social science, and the fields of science, technology, engineering, mathematics, health and medicine. The region's largest hospitals, the Hunter Medical Research Institute, schools, early childcare facilities, and local defence and industrial hubs are all in close proximity. With all this on your doorstep, you'll have plenty of chances to meet industry leaders and build practical skills. Also located at our Newcastle Callaghan campus, NUsport at The Forum offers state-of-the-art health and fitness facilities and programs to help maintain your physical and mental wellbeing.

Central Coast (Ourimbah and Gosford)

Only an hour drive from Newcastle or Sydney, our Central Coast campus at Ourimbah offers study programs in business, education, humanities and social science, oral health therapy, podiatry and science (food and human nutrition, coastal and marine, environmental management, and exercise and sports).

Strategically located on the grounds of Gosford Hospital, our world-class Central Coast Clinical School has transformed the region into a leader in health, research, innovation and education. Our state-of-the-art facility offers an immersive learning environment with a three-ward simulation centre, anatomy and histology laboratory, research laboratories, virtual reality spaces and more. Our students benefit from strong links with local industry and partnerships with the Central Coast Local Health District for nursing and specialised health degrees.



Travel time*

Newcastle City campus	3mins
Callaghan campus	25mins
Lake Macquarie	25mins
Newcastle Airport	35mins
Hunter Valley	55mins
Port Stephens	1hr
Ourimbah campus	1hr 10mins
Gosford campus	1hr 20mins
Sydney	2hrs 30mins

* All distances are taken from Newcastle CBD and are estimates only.

1 QS World University Rankings 2021.

Live like a local

Whether you're already a local who knows and loves the Newcastle and Central Coast regions, or are from out of town and ready to make the sea change, we've compiled a list of the top 10 things to see and do.

1 **Coastal walk** – pack your swimmers and enjoy the beautiful sights of Newcastle on foot by following the coastal trail from Nobbys to Merewether Beach, or witness the infamous sandstone cliffs surrounding the Central Coast's Bouddi Coastal Walk.

2 **Get back to nature** – are you looking for an outdoor adventure? Head to Glenworth Valley or the TreeTops Adventure Park, both located on the Central Coast. Glenworth offers a variety of outdoor activities including horse riding, quad biking, kayaking, abseiling and even laser skirmish! You can camp there too, so make sure to bring some marshmallows. If you're after an adrenaline boost, give the self-guided high ropes course at TreeTops a crack. Or enjoy a leisurely cycle along one of the many bike tracks around – Fernleigh Track in Newcastle and Tuggerah Lakes Cycleway on the Central Coast are two crowd favourites.

3 **Sip by the sea** – one of the great things about our coastline is that you're never too far away from a hot coffee in the morning or a cold drink in the afternoon. Why not stop in at one of the local surf clubs or grab a seat in a café and enjoy some of the best views in the country.

4 **Shop 'til you drop** – if the weather isn't on your side, set out for one of the local shopping centres and spend the day restocking your wardrobe.
Tip: Long Jetty is home to some great boutique shopping and an even better coffee scene so you can recharge between stores.

5 **Flock to the flicks** – relax and recline in a squishy armchair at one of the big cinemas. If you're looking for more character, support local institutions such as Lake Cinema Boolaroo, where loose change gets you a ticket, drinks and snacks, or enjoy a film under the stars at the Heddon Greta drive-in.

6 **Tune out** – catch some live music at the iconic Cambridge Hotel, the Bar on the Hill at Callaghan campus or local festivals. Newcastle and the Central Coast are renowned for their music scenes, and there are always plenty of home-grown and international gigs to enjoy.

National Geographic Smart City

-Newcastle[1]

1 National Geographic Smart Cities 2017.

visitnewcastle.com.au
visitcentralcoast.com.au
visitlakemac.com.au

7 **Cheap eats** – Newcastle and the Central Coast have a heap of hidden foodie gems consisting of every cuisine imaginable. Whether it's a super fresh Banh mi roll, a juicy burger or the perfect schnitzel, there's something to suit whatever mood you're in and whatever's in your wallet.
Tip: you might want to invest in the local Entertainment Book for deals to save some extra cash.

8 **Ocean baths and pools** – if beaches aren't your thing or the surf's a bit wild, join the locals at The Entrance, Newcastle or Merewether Ocean baths or the stunning Bogey Hole for a relaxing dip with a difference.

9 **Road trip** – if you're in Newcastle, jump in the car and motor to the Central Coast, where you'll find our sister campus located in Ourimbah. Don't miss the chance to visit the pretty towns of Avoca, Terrigal and Long Jetty, where you'll find more boutique shopping and golden beaches to explore. The Hunter Valley is renowned wine country, so if you're in the mood for a tasting, head out and hop from cellar door to cellar door.
Tip: Audrey Wilkinson vineyard has one of the most spectacular views in the valley.

10 **Market-mania** – browse the stalls and grab some grub at artisanal markets like the Avoca Beachside or Olive Tree Markets. Sample some great local produce at the farmers market on Sunday mornings at the Broadmeadow Showground or Gosford City Farmers Markets. Or, if you prefer to sleep in, visit one of the many cafés lining Terrigal Esplanade, Beaumont or Darby Street – they've carefully selected only the best local produce and coffee for you.

© Image copyright the Olive Tree Market, Newcastle's largest and longest running Art, Design and Street food community market.

Student life

Newcastle campus, Callaghan

While your education should be the primary focus during your time at the University of Newcastle, finding the right study/life balance is also important.

Learn more about life at uni

Clubs and societies

University of Newcastle Students' Association (UNSA) is home to more than 120 clubs, societies and social groups. From cheerleading to arm wrestling, chess, and plenty more – there's something for everyone. Our campuses are buzzing with social events throughout the year. Enjoy Autonomy Party and Orientation, band competitions, live music, 'stress less' activities, or snag yourself a sausage at free weekly lunches.

Cafés and live music

Whether you're looking for a good coffee to kick-start your day, a bite to eat at lunch or a place to relax in between classes, we've got you covered with a wide range of cafés, food outlets and bars across all our campuses. Plus, you don't have to venture too far to catch some of the world's biggest musicians and bands. Chances are you'll find a gig at Callaghan's Bar on the Hill, one of the many venues close to the Newcastle City campus or further down the coast at The Beery in Terrigal.

Festivals and events

No matter which campus you study at, there's always something happening during the semester. Take part in study workshops, get involved in health and fitness programs, attend presentations from international scholars, or simply kick back and enjoy watching a movie by moonlight.

Staying active

NUsport at The Forum University (Callaghan), and Harbourside (Newcastle City) offers state-of-the-art health and fitness facilities. You'll find the Hunter Region's premier 50m indoor heated swimming pool, extensive group fitness options and a range of strength and cardio equipment. Indoor courts cater for casual hoops and structured social sport competitions all year. Join one of many sporting clubs or compete in the representative inter-university competition, UniSport Nationals, or apply for support as an elite athlete. Also located at NUsport at The Forum University is a café and physiotherapy clinic.

theforum.org.au

There are plenty of outdoor spaces with sporting fields, an outdoor gym and fitness circuit, shared paths and dedicated fitness trails on campus.

Our Ourimbah campus also offers a gym and covered outdoor recreation area – providing a great place for students to be active and engaged all year round

Getting around

Access via train is available for both Callaghan (Warabrook station) and Central Coast (Ourimbah or Gosford station) campuses and if you're studying at our Newcastle City campus, the Newcastle Light Rail's Civic stop is right at our doorstep.

Beautiful bike paths make riding around campus fun, and our bike hubs at Callaghan and Newcastle City campuses offer showers and secure storage.

A free shuttle bus loops around Callaghan campus to get you to and from class and runs between our Callaghan and Newcastle City campuses every 30 minutes during semester. A shuttle bus runs in the morning and afternoon between Ourimbah and Gosford campus.

An after hours, on-call security shuttle is also available at Callaghan and Ourimbah campuses. The shuttle can take you back to your car, to Warabrook or Ourimbah train stations and surrounding suburbs near Callaghan.

Student support

We provide support for students from every background including students under the age of 18, LGBTQIA+ students, Indigenous students and international students. You'll have access to:

- Academic support
- Peer study support
- Health support
- Counselling
- Religious support
- Career services
- Peer mentoring

Learn more about student support

Services on hand

We offer a number of additional services across our campuses to make student life easier including:

- 24/7 University libraries
- Medical centre and pharmacy
- Post office
- Retailers
- The Shop (University merchandise)
- Childcare
- Counselling
- Cafés and bars

Learn more about services on campus

Accommodation

Newcastle campus, Callaghan

While the thought of moving away from your home town to study might seem daunting, we're here to make this transition as easy as possible. We offer students secure, affordable and comfortable accommodation while studying. Whether it's a self-contained studio you're after or a ten-share apartment, we have plenty of options.

Learn more about living on campus

Living on campus

If you want to meet lifelong friends, get involved in social activities, and enjoy countless amenities at your fingertips, on-campus accommodation might be for you.

There are a range of facilities and living environments available to suit all students – including those living with disability – at our Callaghan and Ourimbah campuses.

Accommodation options include private or shared rooms and amenities, fully-catered, semi-catered or self-catered living. You'll have access to 24/7 security, a range of facilities, support and wellbeing services, academic support, a dedicated Health and Wellbeing Coordinator and our award-winning ResLife Program.

Where can I live?

With nine different residences to choose from across our Callaghan and Ourimbah campuses, you're sure to find the right fit.

Your accommodation costs cover a number of facilities and services including around-the-clock security, internet access, two swimming pools, a large communal kitchen, laundry facilities and common rooms, featuring televisions, table tennis and a foosball table.

2019
Excellence in Customer Service
Asia-Pacific Student Accommodation Association

2017
Housing Operation of the Year Award

Asia-Pacific Student Accommodation Association

Establishing Aboriginal and/or Torres Strait Islander Status within the University

Aboriginal and/or Torres Strait Islander students will receive guaranteed entry to accommodation on campus upon completion of an accommodation application*. Access to guaranteed accommodation for prospective Australian Aboriginal and/or Torres Strait Islander residents will be based on the completion and approval of the Establishing Aboriginality and/or Torres Strait Islander Status Application form.

*Terms and conditions apply.

Entry options

You do have options when it comes to getting into uni. You can get in early, use your Higher School Certificate (HSC) results, gain adjustment points for a Selection Rank or use other options like past study or work experience to get into the degree of your choice. Check online for eligibility requirements as these do change from time to time.

Learn more about getting into uni

5-star

maximum rating for social equity[1]

Get in early

Schools Recommendation Scheme (SRS)

This is an early offer pathway for Year 12 applicants based on Year 11 results and recommendations or ratings submitted by your high school. We have expanded this scheme so that applicants can be considered for any degree, except for the Bachelor of Midwifery and the Bachelor of Medical Science and Doctor of Medicine.

Use your HSC results

Year 12 Subject Spotlight

Gain entry to an undergraduate degree based on your performance – If you have performed well in HSC English and other HSC subjects related to the degree you wish to study. This option is based on individual subject results.

HSC results and your ATAR

If you're completing or have recently completed your HSC or equivalent, you may receive an Australian Tertiary Admission Rank (ATAR), which can be used to enter university. An ATAR is a number between 0 and 99.95 that ranks how you performed in the HSC compared to other students.

1 The Good Universities Guide 2022.

Gain points for a Selection Rank

We use Selection Ranks to determine eligibility for degree programs. Your Selection Rank (SR) is a combination of your ATAR plus any eligible adjustment points, up to a maximum of 12 points.

Year 12 Adjustment

Gain up to four adjustment points based on individual HSC subject results.

Educational Access

To increase equity in higher education, students who have previously experienced significant educational disadvantage can gain up to four adjustment points.

Leaders, Athletes and Performers

Exceptional athletes, performers, artists and leaders with proven experience can gain up to four adjustment points.

Regional and Rural Students

You may be awarded five adjustment points if you completed the HSC at a regional or rural school located in selected postcodes.

TAFE Guaranteed Entry and Credit

We guarantee entry into many of our undergraduate programs to people who have completed a TAFE Certificate IV, Diploma, or Advanced Diploma* through the TAFE Guaranteed Entry program.

You might be eligible for credit from Diploma-level and above qualifications to put towards your degree – this means shorter study time and a faster start to your new career.

In addition, a completed TAFE Certificate III qualification gives you an estimated equivalent ATAR of 67 for competitive entry.

Other options

Special Tertiary Admissions Test

If you are over 18 and not a current Year 12 student, this aptitude test can be used to provide you a new Selection Rank for entry into some of our degree programs.

Aboriginal and Torres Strait Islander Admission

This program helps Aboriginal and Torres Strait Islander applicants gain entry into our degrees. Make sure you indicate that you are Aboriginal or Torres Strait Islander on your UAC application. You can access advice and support to help with your application and selection interviews.

Have you studied before?

You can be considered for admission into an undergraduate degree based on:

- your performance in past HSC exams or equivalent, or partially completed higher education studies in Australia or equivalent overseas qualifications
- TAFE or other qualifications – Certificate III (limited programs), IV or higher
- post-secondary professional qualifications or professional/vocational experience
- performance in alternative entry or Pathways programs like Open Foundation or Yapug
- Australian Defence Force (ADF) personnel qualifications and experience.

Credit transfer

Your past qualifications can be used to apply for a credit transfer, especially if they are related to the area you wish to study. You may be granted credit for up to half of your degree program.

There are also several courses or programs that help prepare you or can give you a pathway into university (see the next page for more details).

* Please note that completed TAFE qualifications must be AQF level IV (Certificate IV), AQF level V (Diploma), or AQF level VI (Advanced Diploma) to be eligible for guaranteed entry.

Admission schemes and adjustments are subject to change. Refer to website for up-to-date information.

Pathways to education

Learn more about pathways

At the University of Newcastle, we believe that a university education should be accessible to anyone who wants to learn, no matter what age or life stage you're at. We've already engaged in our pathways more than 60,000 students since 1974. Regardless of your background, circumstances or abilities, there are pathways to help you get into university.

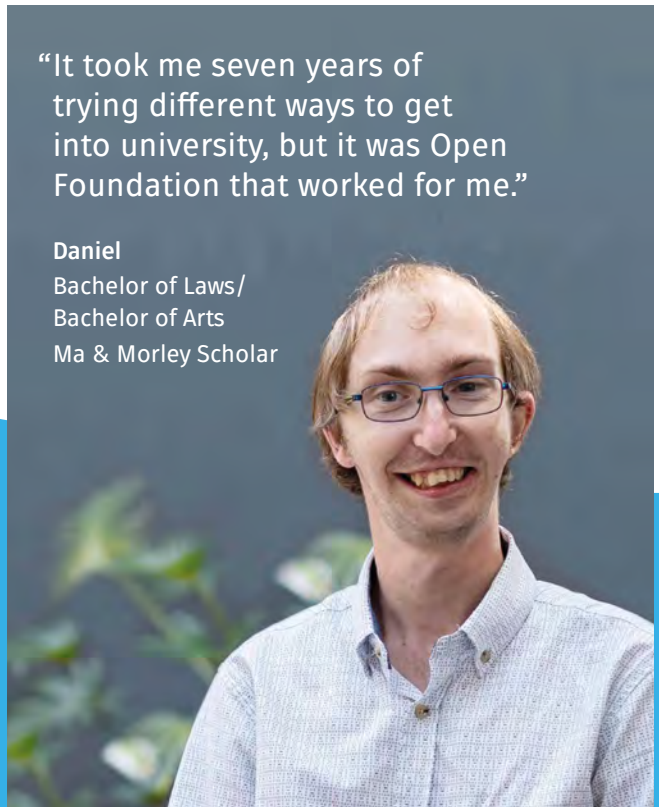
Pathways	Undergraduate	Postgraduate
Pathways programs offer direct entry into undergraduate study on completion.	These study programs offer qualifications that can enhance your career outcomes.	Typically done after earning a Bachelor degree, postgraduate study programs offer further qualifications and lead to high-level and specialised career outcomes.
• Open Foundation • Yapug • Diplomas	• Bachelors	• Masters • Doctorates

NUPrep and NUPrep Plus

These free short courses are a great way to prepare for a pathway or undergraduate program at the University of Newcastle. The individual NUPrep courses focus on core topics within academic skills, maths or science, while NUPrep Plus adds a series of available workshops for students studying a combination of NUPrep courses so they can bridge gaps in knowledge and skills.

"It took me seven years of trying different ways to get into university, but it was Open Foundation that worked for me."

Daniel
Bachelor of Laws/
Bachelor of Arts
Ma & Morley Scholar



Open Foundation

This free pathway program is for you if it has been a while since you've last studied, or you aren't able to get into the degree of your choice directly. Regardless of your circumstances, Open Foundation offers a supported and guaranteed pathway into the first year of selected undergraduate degrees at the University of Newcastle.

Yapug

This free pathway program is for you if you are an Indigenous student who wants to prepare for or gain entry into university, learning through culture. You'll be supported by Indigenous staff to help you get into the first year of your degree of choice, including a pathway into Medicine.

Diplomas

On completion, this fee-paying pathway provides you with guaranteed entry into a range of undergraduate degree programs and credit of up to one year into programs from the same study area. You can also gain additional support to help you adjust to university study and have the option to transfer with credit into many of our undergraduate degrees.

We're the largest provider of alternate pathways in Australia[1]

1 Department of Education Selected Higher Education Statistics – 2019 Student Data.

Scholarships

You might be bursting with new ideas, passion, potential, and dedication. But without support, attending university can sometimes seem impossible. The University of Newcastle's scholarship programs have been designed to provide this support and give you the opportunity to develop your talent and explore your potential.

Discover scholarship opportunities

The Ma & Morley Scholarship Program

The Ma & Morley Scholarship Program aims to inspire, educate and cultivate the next generation of globally aware and socially conscious Australian leaders – and help them change the world.

The Program was established through a generous US$20 million philanthropic commitment by the Jack Ma Foundation to honour the life-changing and enduring friendship between the successful Chinese entrepreneur Jack Ma and respected Novocastrian Ken Morley.

Each year we offer 30 Ma & Morley Scholarships – 20 for new students commencing their undergraduate degree programs – with half allocated to students who have completed one of our pathway programs – and an additional 10 scholarships for continuing students.

There are three categories of scholarships:
- Educational disadvantage
- Indigenous background
- Academic excellence

Ma & Morley Scholars receive:
- up to $75,000 in financial assistance#
- values-based leadership program
- lifelong friendships and bonds
- China immersion experience*

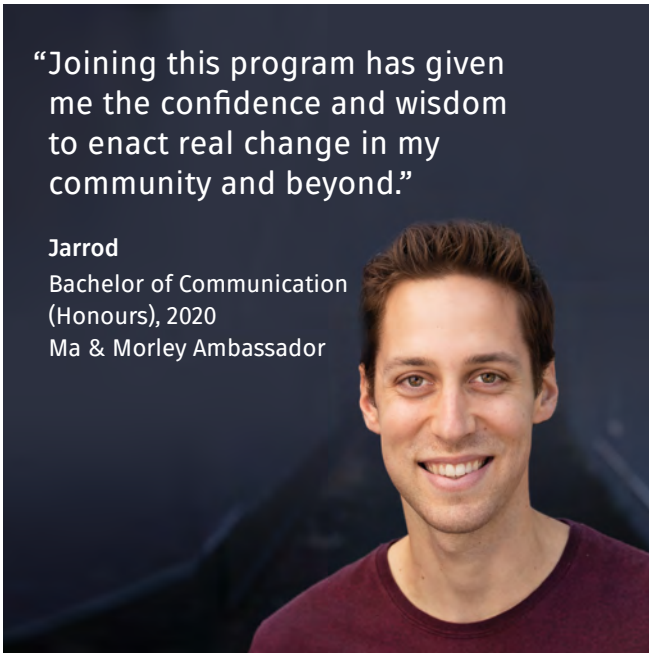
Learn more about the Ma & Morley Scholarshop program

Find a scholarship that fits you

Each year, more than $3 million in scholarships is awarded to students. Our scholarship programs align to the University's values of excellence, equity, sustainability and engagement and are designed to recognise achievement and support enthusiastic and dedicated students.

Many of our scholarships have been created as a result of generous philanthropic donations to the University, from individuals and organisations who share our belief that everyone with talent and dedication deserves the chance to pursue their dreams.

We have hundreds of scholarship programs with over 1,000 individual scholarships on offer, including:
- scholarships for academic excellence
- support for individuals facing financial hardship and educational disadvantage
- support for Indigenous students
- scholarships for developing community leaders
- scholarships for students demonstrating innovative thinking and driving sustainable initiatives in industry
- opportunities to travel, perform, play sport, relocate, or gain global experience



* subject to travel, health and other restrictions
\# financial assistance applies to new students commencing

Uni speak

Some key terms explained

Starting your university journey can sometimes feel overwhelming. This directory defines some useful concepts to help you along the way.

Assumed knowledge and recommended studies

Assumed knowledge relates to things you should have studied before starting your degree. Classes will be taught on the assumption that you have a certain level of knowledge when you begin. Recommended studies are directly related to a particular degree and it's strongly suggested that you have undertaken the listed subjects as the course will be taught on the basis that you understand these subjects. The subjects listed under Assumed knowledge and Recommended studies are HSC courses. Equivalent TAFE, interstate, registered training provider or international qualifications are also accepted.

Bridging and refresher courses

If you're looking to get a head start on your degree or refresh your knowledge on key subject areas, we strongly recommend completing a University of Newcastle Prep bridging and refresher course prior to starting your degree. The courses are free and are available both online and on campus.

newcastle.edu.au/uonprep

College

An organisational unit with responsibility for academic programs, often with a number of sub-units called Schools. All degrees will be owned by a particular College of the University.

Combined degrees

A combined degree means you study two degrees at once. You will then graduate with two qualifications in less time.

Financial assistance

Whatever your background and financial status, we have support systems available to help with the costs involved in studying, including scholarships and emergency loans. You also might be eligible for Australian Government assistance with HECS-HELP loans and income support.

newcastle.edu.au/financial-assistance

Learning formats

- **Blended Learning:** enables you to master course content independently through a variety of online learning activities and then attend active workshops to engage with materials on a deeper level and actively work with course materials.
- **Laboratories:** gives you a chance to practise and experiment with what you are learning.
- **Lectures:** provide the theory component of your area of study in an interactive and engaged environment.
- **Tutorials:** small classes run by tutors where students have the opportunity to explore and ask questions.
- **Workshops:** active classes that give you a chance to practise what you are studying in an engaged environment.
- **Captured Lectures (through UONCapture):** provide slides and audio recordings of your lectures to allow you to listen back and review lecture materials in your own time.

Majors and minors

Some degrees allow you to major or specialise in a particular group of courses. This focuses your area of study and ensures you are suitably qualified for jobs in your preferred field. Some degrees also give you the opportunity to complete a double major which is two specialty areas. A minor is a specialised area of study without the depth of a major.

Mid-year

You can apply to start selected degrees in second semester commencing in July. Mid-year applications are submitted through UAC.

Preferences

You can nominate five preferences in your UAC application. List your preferences in order of the course you'd like to study most, rather than the Selection Rank. Your dream degree should always be at the top of your preference list.

Qualification

- **Bachelor degree:** the university level qualification for entry into many professions.
- **Diploma:** a program of study requiring 80 units to be completed.
- **Doctorate:** the highest postgraduate achievement an individual can earn and recognises a significant original contribution to a field of knowledge.
- **Higher Degree by Research (HDR):** is a postgraduate university degree involving a unique supervised research project. These degrees are either a Masters of Philosophy or a Doctoral degree (either Professional Doctorate or a PhD).
- **Honours:** some degrees allow you to get an additional qualification that helps boost your chances of employment. Embedded honours is included in many 4 year degrees or honours can be studied as a separate additional year for 3 year degrees.
- **Masters:** a qualification granted at the postgraduate level to individuals who have successfully demonstrated a high level of expertise in a specific field of study or area of professional practice.
- **Postgraduate degree:** any qualification being at the level of Graduate Certificate or above.
- **Undergraduate degree:** any qualification up to and including the level of a Bachelor Honours degree.

Selection rank

This score was the lowest Selection Rank of any school leaver to receive an offer in Semester 1, 2022 based on ATAR plus adjustment points. You may meet the score listed using your ATAR alone, or your Selection Rank (your ATAR plus adjustment points).

Please note, some degrees also have additional entry requirements or criteria (such as an audition) so check for these requirements in the degree listing for your chosen program. If criteria in addition to ATAR is considered, the minimum ATAR will be listed as 'A+C' or ATAR + Criteria, and median ATAR will be listed as 'N/A'. If ATAR is not considered, the minimum and median ATAR will be listed as 'N/A'.

Semester

This is the academic teaching period, which is approximately 13 weeks in duration. There are two semesters in a year.

Student support

We have a range of services available to help you, such as:

- **Peer Assisted Study Sessions (PASS):** one-hour weekly review sessions.
- **Academic Learning Support:** for tips, workshops and resources from our Learning Advisers.
- **Careers and Student Development:** for access to valuable work experience opportunities and employment help.

newcastle.edu.au/support

Universities Admissions Centre (UAC)

UAC is the central office that receives and processes applications for admission to most undergraduate degrees and diploma courses at participating tertiary institutions.

uac.edu.au

Work Integrated Learning (WIL)

Work experiences built into most degrees where you can apply your classroom theory to a real-world setting.

Study options

With over 100 undergraduate degrees and even more unique study options to follow, you're sure to find an exciting and rewarding career that's right for you. Choose a degree that excites and motivates you, or combine two and forge your own path.

In this section you'll find all the key information you need to know for each degree – from entry requirements, to what you'll study, practical experience and potential career opportunities.

Find a degree that's right for you

Architecture, Building and Construction

Our architecture, building and construction degrees will empower you to think differently, to imagine new ways to live, work, and experience the world – and bring these ideas to life. Gain the skills needed to design and construct quality environments, from houses to high-rises, galleries, modern factories or freeways. Learn how to emphasise social, economic and environmental sustainability, solve problems and build a better world.

Discover Architecture, Building and Construction degrees

91.7%

of undergraduate Architecture and Building graduates found employment within four months[1]

Top 150

in the world – Architecture and Built Environment[2]

No. 1

in NSW for full-time employment and median salary (Undergraduate Architecture)[3]

Degree options

Bachelor of Construction Management (Building) (Honours)
Bachelor of Design (Architecture)
Diploma in Built Environment

Also consider

Bachelor of Civil Engineering (Honours)
Bachelor of Development Studies
Bachelor of Surveying
Bachelor of Science

1 Graduate Outcomes Survey 2019-2021.
2 QS World University Rankings by Subject 2021.
3 The Good Universities Guide 2021.

"I chose to study Architecture because I love problem solving, drawing and design. I've gained valuable research and visualisation techniques to bring my ideas to life. The immersive studio environment, project-based assessments, knowledge and skills I'm learning have helped me commence my journey to become an architect and learn more about spaces, places and society along the way."

Kim
Bachelor of Design (Architecture)

"My time so far with the University of Newcastle has provided me with the opportunity to broaden my academic prospects and engage actively with a bright community of talented, like-minded individuals. The courses have laid solid paths for my further research into shifting modes of generative responses to culturally-diverse architectural problems."

Jackson
Bachelor of Design (Architecture)

"My degree in architecture has offered a wide range of learning opportunities, combining theory with practical – building models, working in teams, having opportunities to visit building sites and experience first-hand what we might expect after graduating. I also got the opportunity to go on an amazing road trip around NSW studying architecture in its many forms."

Mackenzie
Bachelor of Design (Architecture)

Bachelor of

Construction Management (Building) (Honours)

2022 Selection Rank	Duration
65.00 | Median 72.55	4 yrs FT / 10 yrs PT

UAC Code	Location
482450	Newcastle – Callaghan
482460	Online

Recommended studies English (Standard or Advanced) and Mathematics (Standard or Advanced)

Construction managers lead and coordinate building and physical infrastructure projects. Working both on and off site, they schedule and coordinate the design and construction process, including selecting, hiring and supervising trade contractors, as well as the budget and legal aspects of the project. The Bachelor of Construction Management (Building) (Honours) has a high level of professional recognition both in Australia and overseas. Our flexible delivery options make it easy for you to study on-campus or by distance (online) and work in the industry while completing your degree.

What you will study

Directly reflecting the needs of industry, you will build critical workplace skills in:

- Building Information Modelling (BIM)
- Building Surveying
- Construction Ecology and Technology
- Construction Economics, Finance and Procurement
- Contract Administration
- Estimating and Tendering
- Facilities Management
- Law, Health and Safety
- Management and Communication

Practical experience

Construction management students complete a minimum of 16 weeks of professional practice. Through your industry experience you will build vital professional networks and put your learning into practice.

Career opportunities

Employment opportunities for construction managers are excellent. 98% of our construction management graduates secure a job within four months of graduating (QILT 2019). Our graduates work for major construction companies like LendLease, Brookfield Multiplex, Theiss, John Holland, Hansen Yunken, Leighton Contractors, and Laing O'Rourke. The average starting salary for a construction manager is over $90,000.

The Australian construction industry is massive and continues to grow – over the past five years, employment in the NSW construction industry has increased by 11%. The industry employs more than 1 million people, accounting for around 9% of the country's total workforce and contributes about 7.8% of Australia's gross domestic product (GDP).

Take your pick from a range of job possibilities. As a University of Newcastle graduate you can oversee projects from behind the scenes, take on a specialist position, or you might prefer the satisfaction of on-site management and supervision. Typical roles include:

- Building Surveyor/Certifier
- Construction Manager
- Contract Administrator
- Contracts Manager
- Estimator
- Facilities Manager
- Project Manager
- Property Developer
- Quantity Surveyor

Professional recognition

This degree is fully endorsed by five professional bodies in Australia and internationally. It is accredited by:

- Australian Institute of Building (AIB)
- Australian Institute of Building Surveyors (AIBS)
- Australian Institute of Quantity Surveyors (AIQS)
- Chartered Institute of Building (CIOB)
- Royal Institution of Chartered Surveyors (RICS)

These accreditations reflect the direct relationship between what you'll learn in the degree and the requirements of various sectors of the construction industry.

See the website for more information about this degree

Bachelor of

Design (Architecture)

2022 Selection Rank	Duration
77.00 | Median 83.20	3 yrs FT / 8 yrs PT

UAC Code	Location
482500	Newcastle – Callaghan

Recommended studies English (Standard or Advanced) and History (Ancient or Modern), plus at least one of Visual Arts, Design and Technology or Industrial Technology

Architecture is more than just art and technology. At the University of Newcastle, our Bachelor of Design (Architecture) students are challenged to explore their potential as agents for change. Our graduates don't just design and shape the physical spaces of our cities and buildings – they use architecture to stimulate the places we live and work, engage the community and improve our world. Learn in the state's newest creative innovation centre – Newcastle. Through live projects, you'll develop design principles that emphasise social, economic and environmental sustainability and become a consultative problem solver.

What you will study

More than half of your degree is dedicated to working in the architecture studio, engaging in a range of practical and often live projects.

You'll learn about:

- The architectural site as landscape
- Construction and detailing of buildings
- Construction technology and ecology principles
- Sustainable design practices
- Communication in the built environment
- Digital and parametric design processes
- Making conceptual and realistic models in our workshop

Practical experience

Engage in live projects through hands-on work and public exhibitions. Collaborate with organisations to improve the housing and health of disadvantaged people in remote Australia and developing countries. Our graduates also exhibit their work publicly at our graduate exhibition, an opportunity to showcase work to industry and the local community.

Career opportunities

95.9% of our graduates find work within four months of finishing their degree, with an average starting salary of $70,000.

Some typical careers include:

- Architectural Technician
- Designer
- Drafter
- Infrastructure Planner
- Project Manager
- Town Planner

Broaden your career options and qualify as a professional architect with a Master of Architecture (two additional years of study).

Professional recognition

The Bachelor of Design (Architecture) is a pre-professional qualification, followed by the Master of Architecture, providing qualifications to enable students to enter the Architecture profession. Students are required to complete the Master of Architecture in order to be eligible for registration by the Architects Accreditation Council of Australia, the Board of Architects Malaysia (LAM), Australian Institute of Architects, Royal Institute of British Architects, and the State Boards of Architects.

See the website for more information about this degree

Diploma in

Built Environment

2022 Selection Rank	Duration
50.00 | Median 53.85	1 yr FT / 4 yrs PT
UAC Code	**Location**
489834	Newcastle – Callaghan

From sustainable buildings to climate resilient cities and everything in between, they all start from the ground up and so does our Diploma in Built Environment. You will build the foundational skills needed to excel in a range of roles in the construction industry. Gain a preliminary understanding of the construction and design industries to help start your path to a rewarding career in the sector.

What you will study

The Diploma in Built Environment has been designed to give you a core knowledge base where you'll learn academic literacy, research and discipline-specific skills needed for further study. You'll complete a short list of directed courses, that will give you a taste of discipline areas including construction technology, ecology, communication, digital communication, construction law, building codes and compliance, studio work and visual communication. The Diploma in Built Environment offers a guaranteed entry pathway into the Bachelor of Construction Management (Building) (Honours) or the Bachelor of Design (Architecture).

Course content includes:

- Architecture
- Built Environment
- Construction Management
- Design

Why study with us

- Guaranteed degree entry – complete the Diploma in Built Environment and receive a guaranteed entry into the Bachelor of Construction Management (Building) (Honours), or the Bachelor of Design (Architecture).
- Receive credit – receive up to 80 units credit towards an undergraduate degree.
- No extra time or cost – depending on which degree you would like to move into after the Diploma, it may be possible to complete your degree in the standard, minimum timeframe. Also, for any courses for which you receive credit, you don't have to pay for those again once you get into your degree.
- Extensive Support – gain additional support through pathways courses which develop foundational degree skills in smaller class sizes. The support offered in a Diploma helps students transition into larger classes alongside undergraduate students and experience study as you would in an undergraduate degree program.
- Real-world insights – connect with industry through projects, guest lectures and mentoring.
- Diversify your skills and knowledge – get a taste of the different built environment disciplines with our directed course list.

Career Opportunities

Professionals in Built Environment can explore careers including:

- Architect
- Architectural Technician
- Building Surveyor/Certifier
- Construction Manager
- Contracts Manager
- Project Manager
- Property Developer
- Quantity Surveyor

See the website for more information about this diploma

Business and Management

Business and Management students are trailblazers – whether it's taking a vision and turning it into a successful business, or improving existing business practices around the world. Our degrees are more dynamic, flexible and industry-engaged than ever before. Gain a broad understanding of Australian and global business environments, or become an expert in the world's fiscal systems and complex economic landscapes. With real-world, industry experience embedded into all our degrees, you'll graduate with the skills and professional connections needed to kick-start your career in this fast-growing field.

Discover Business and Management degrees

91.1%

of undergraduate Business and Management graduates found employment within four months[1]

Top 5

in Australia – Business Administration[2]

AACSB ACCREDITED

AACSB accredited degree[3]

EQUIS ACCREDITED

Degree options

Bachelor of Business
Bachelor of Business Analytics
Bachelor of Commerce
Bachelor of Innovation and Entrepreneurship (Combined)
Diploma in Business

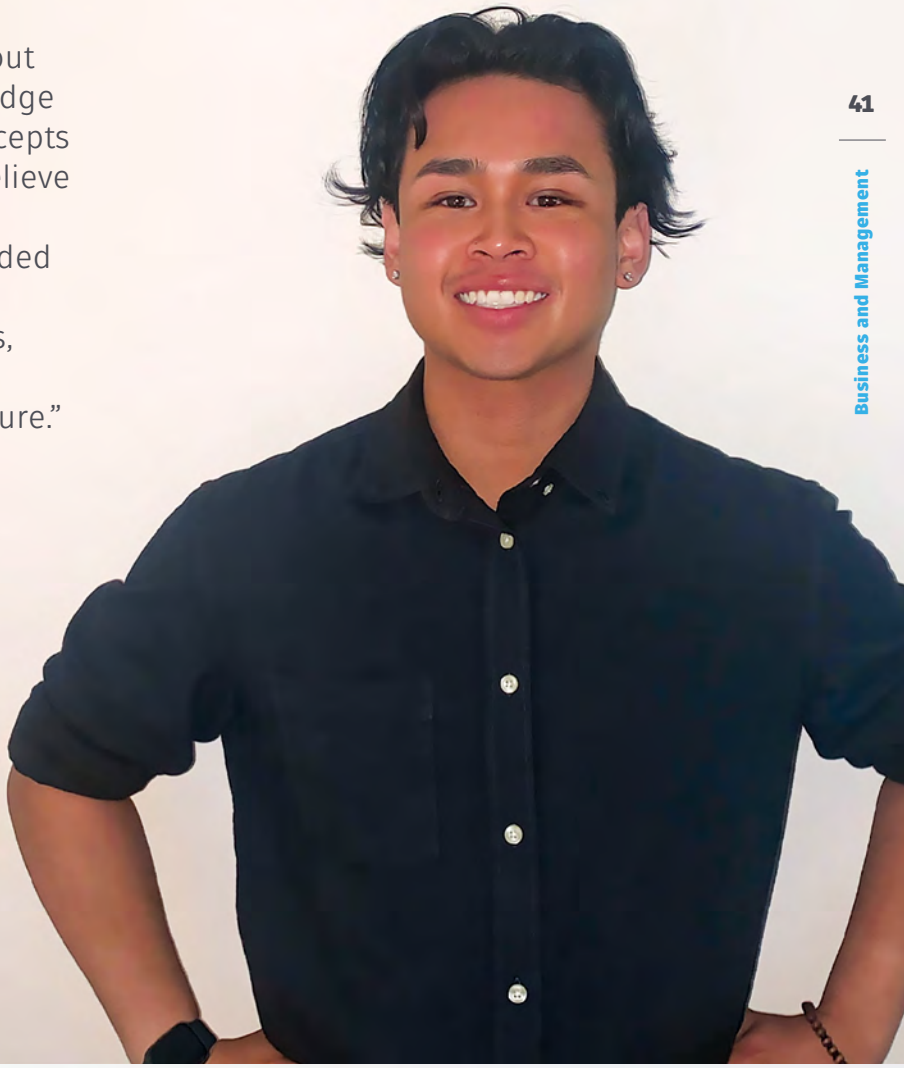
Also consider

Bachelor of Arts
Bachelor of Laws (Honours) Combined

1 Graduate Outcomes Survey 2019-2021.
2 ShanghaiRanking's Global Ranking of Acedemic Subjects 2021.
3 The Newcastle Business School is accredited with the Association to Advance Collegiate Schools of Business (AACSB), placing it within the top five percent of the world's business programs. AACSB is the premier, and longest-standing, international accrediting body for business programs and is the international benchmark for excellence in business education.

"The content I have learned throughout my degree has expanded my knowledge and understanding of the many concepts in the world of business – which I believe will be valuable as I pursue a career. Studying at university has also provided me with the amazing opportunity to connect with like-minded individuals, which has helped to build valuable networks for me to carry into the future."

Alex
Bachelor of Business/Commerce (Combined)



"My study experience within the University of Newcastle has been exceptional. Experiences I have completed include travelling to Japan for a cultural exchange, gaining employment at the University as a Student Ambassador and Careers Assistant, regularly volunteering at events, and completing an internship with Westpac Rescue Helicopter Service as an Events and Marketing Intern."

Rhiana
Bachelor of Business (Marketing)

Bachelor of
Business

2022 Selection Rank
67.00 | Median 74.28

Duration
3 yrs FT / 8 yrs PT

UAC Code
482200
482210

Location
Newcastle – City
Central Coast – Ourimbah

Recommended studies
Mathematics (Standard or Advanced)

The Bachelor of Business is dynamic, flexible, industry-engaged and is the key to limitless opportunities across Australia and the world. You might work as a marketing manager – researching products and audiences for a global consumer goods company, revel in your passion for tourism and event management, or turn your great idea into a company and watch it grow. Our degree gives you a firm understanding of the Australian and global business environments and our international outlook immerses you in contemporary business practice, providing new global experiences.

What you will study
Choose to major in one or two of the following areas:

- Entrepreneurship and Innovation
- Human Resource Management
- International Business
- Leadership and Management
- Marketing
- Politics and International Relations
- Tourism and Event Management

Practical experience
We place importance on learning experiences beyond the classroom to give you professional skills and knowledge. Take advantage of internships and project-based learning, including:

- 100 hours of work placement (if you choose to participate in workplace experience)
- The Empower Network for female students
- Student exchange opportunities
- Local and international work experiences in China, Fiji and Kenya through short-term mobility and international immersion tours

Career opportunities
Our graduates go on to have exciting, stimulating and lucrative careers in the private, government and not-for-profit sectors in Australia and internationally. 91% of graduates are employed full time within 4 months of graduating. (Graduate Outcomes Survey UG Business and Management study area).

Some typical positions include:

- Business Development Manager
- Digital Marketing Analyst
- Employee Relations Manager
- Human Resources Officer
- International Affairs Officer
- Marketing Coordinator
- Product and Brand Manager
- Tourism and Events Agent

Professional recognition
Accredited through the Australian Marketing Institute (Marketing major) and the Australian Human Resource Institute (Human Resource Management major). The Newcastle Business School is accredited by the Association to Advance Collegiate Schools of Business (AACSB), earned by fewer than five per cent of the world's business programs.

Combine this degree with
- Bachelor of Business Analytics
- Bachelor of Chemical Engineering (Honours)
- Bachelor of Civil Engineering (Honours)
- Bachelor of Commerce
- Bachelor of Developmental Studies
- Bachelor of Electrical and Electronic Engineering (Honours)
- Bachelor of Environmental Science and Management
- Bachelor of Food Science and Human Nutrition
- Bachelor of Information Technology
- Bachelor of Innovation and Entrepreneurship Combined
- Bachelor of Laws (Honours) Combined
- Bachelor of Mechanical Engineering (Honours)
- Bachelor of Psychological Science
- Bachelor of Surveying (Honours)

See the website for more information about this degree

Bachelor of
Business Analytics

2022 Selection Rank
67.00 | Median 71.80

Duration
3 yrs FT / 8 yrs PT

UAC Code
484871

Location
Newcastle – City

Recommended studies
Business Studies and Mathematics (Standard or Advanced)

The Bachelor of Business Analytics focuses on emerging issues in business data management and processing. You'll develop the skills needed to implement and oversee data-driven business decisions. In recent years, interest and industry demand for business analytics specialists has increased significantly. The quality, quantity and diversity of data available has never been greater, with many organisations relying on the expertise of business analysts to inform evidence-based decision-making and strategic direction. As a result, career opportunities in this area have boomed.

What you will study
When you study a Bachelor of Business Analytics, you'll explore the key concepts, benefits, and challenges of big data analytics and data visualisation. You'll apply statistical and machine learning-based predictive models in analytics to various business contexts and learn how to effectively develop data skills for revealing evidence-based business insights and communicate business data through various visualisation approaches to stakeholders. Core areas of focus include:

- Collecting and managing business data
- Effectively communicating using visualisation of business data
- Forming inferences and predictions from business data
- Making optimal and robust decisions from business data

Practical experience
We place importance on learning experiences beyond the classroom to give you professional skills and knowledge. Take advantage of internships and project-based learning, including:

- 100 hours of work placement (if you choose to participate in workplace experience)
- The Empower Network for female students
- Student exchange opportunities that are professionally recognised
- Local and international work experiences in China, Fiji and Kenya through short-term mobility and international immersion tours

Career opportunities
Business analytics has emerged in recent years as a powerful and useful capability for organisations in competitive markets. This program enables future-focused skills development for meeting the next-generation industry and communities dynamic demands. Career opportunities for business analytics graduates are predicted to increase by more than 20% over the next five years. With a Bachelor of Business Analytics, you could pursue a career as a:

- Business Analyst
- Financial Analyst
- Financial Manager
- General and Operations Manager
- Management Analyst
- Market Research Analyst
- Marketing Specialist

Once you graduate, some additional roles might include:

- Big Data Specialist
- Business Data Engineers
- Data Analyst
- Information Security Analyst
- Organisational Development Specialist
- Process Automation Specialist

Professional recognition
The Newcastle Business School is accredited by the Association to Advance Collegiate Schools of Business (AACSB), earned by fewer than five percent of the world's business programs.

Combine this degree with
- Bachelor of Business
- Bachelor of Commerce

See the website for more information about this degree

Bachelor of

Commerce

2022 Selection Rank	Duration
70.00 | Median 73.55	3 yrs FT / 8 yrs PT

UAC Code	Location
482500	Newcastle – City
482310	Central Coast – Ourimbah

Go from the classroom to the corporate boardroom with a Bachelor of Commerce at the University of Newcastle. Your studies might lead you to work for a global consultancy – assessing the financial validity and future of corporations – or to work with the Reserve Bank, providing economic forecasts to drive official interest rates. There are so many opportunities when you study commerce. All commerce students will gain insight into the global interplay between financial, legal, political and economic systems. You'll look at how these factors influence the contemporary business environment in Australia and across the globe.

What you will study

You may choose to study one or two majors from the following:

- Accounting
- Economics
- Finance

Practical experience

You will graduate with professional skills, knowledge and real-world experience sought after by the industry. The Newcastle Business School aims to prepare you for the global world of business with national and international exposure and workplace experiences.

While studying, take advantage of:

- 100 hours of work placement (if you choose to participate in workplace experience)
- The Empower Network for female students
- Short-term work placements
- International immersion tours
- Student exchange opportunities

Career opportunities

Our graduates enjoy great employment prospects with 97.9% employed within four months of completing their degree[1]. If you find working with numbers stimulating, you could have a lucrative career in a variety of roles, including:

- Accountant
- Auditor
- Economic Analyst
- Financial Analyst
- Investment Baker
- Mortgage Broker
- Policy Analyst
- Risk Analyst
- Stockbroker

Professional recognition

Our Bachelor of Commerce Accounting major is designed to provide accreditation with the major professional bodies in accounting, including CPA Australia, CA Australia and New Zealand, Association of Chartered Certified Accountants (ACCA) and Association of International Accountants (AIA).

Combine this degree with

- Bachelor of Business
- Bachelor of Business Analytics
- Bachelor of Innovation and Entrepreneurship (Combined)
- Bachelor of Laws (Honours) Combined

See the website for more information about this degree

1 Graduate Outcomes Survey 2019.

Bachelor of

Innovation and Entrepreneurship Combined

Location	Duration
Newcastle – Callaghan and City campus	4 yrs FT / 10 yrs PT

Combined with	2022 Selection Rank	UAC Code
Bachelor of Arts	67.00 | Median 73.70	482030
Bachelor of Business	75.00 | Median 83.98	483060
Bachelor of Commerce	75.00 | Median 81.70	483070
Bachelor of Laws (Honours) Combined*	90.00| Median 96.98	483100
Bachelor of Science	75.00 | Median N/A	484040

Recommended studies Mathematics (Standard or Advanced)

The world is rapidly changing and employers are increasingly looking for the next generation of innovative thinkers with entrepreneurial flair. The Bachelor of Innovation and Entrepreneurship Combined provides you with the skills to take an entrepreneurial idea and turn it into a successful new venture. At the same time, this degree equips you to manage the complexities of driving innovation within existing organisations. This degree is designed for idea-generators who can think globally, and design and execute a refined strategy.

What you will study

This degree gives you the flexibility to select an area of study suited to your interests and combine it with teaching and mentoring in entrepreneurship and innovative thinking. This degree is studied in combination with either a Bachelor of Arts, Business, Commerce, Laws (Honours) or Science.

Practical experience

Studying at the University of Newcastle is exciting for those interested in change and getting ideas off the ground that could revolutionise the world. We connect you to innovative experiences that build your skills and broaden your networks, such as the Microsoft Protégé Innovation Competition. Our Innovation Hub provides opportunities for students to meet with innovators, startups and developers to collaborate and challenge the conventional.

Career opportunities

Innovation and entrepreneurship are at the forefront of economic growth both domestically and internationally. Graduates with entrepreneurial thinking and the ability to devise innovative solutions to common problems are increasingly sought after. You may develop your own ideas into successful new ventures and have the opportunity to create your own career.

Some typical positions include:

- Account Manager
- Business Development Officer
- Business Owner
- Consultant for government, organisations and communities
- Entrepreneur
- Innovation Manager
- Inventor
- Startup Founder

Professional recognition

When delivered in combination with either the Bachelor of Business or Bachelor of Commerce, this degree is accredited through the Association to Advance Collegiate Schools of Business (AACSB), earned by fewer than five per cent of the world's business programs. When you study the Bachelor of Innovation and Entrepreneurship Combined, in conjunction with another degree, some individual majors within these degrees may be accredited. Please see individual degree listings for further detail.

Combine this degree with

- Bachelor of Arts
- Bachelor of Business
- Bachelor of Commerce
- Bachelor of Laws (Honours) Combined
- Bachelor of Science

See the website for more information about each combined degree

* Bachelor of Laws (Honours) Combined degree duration 5 yrs FT

Diploma in

Business

2022 Selection Rank	Duration
50.00 | Median 55.70	1 yr FT / 4 yrs PT

UAC Code	Location
489819	Newcastle – City
489820	Central Coast – Ourimbah

With practical leadership skills in the world of business, you'll be challenged to become a business trailblazer. Find your special interests or develop diverse skills across a broad range of subjects including accounting, finance, law, marketing, business decision making, business information systems and entrepreneurship. Whether you want to work in business locally, globally, or even start a business of your own, the Diploma in Business will help you get there.

What you will study

The Diploma in Business has been designed to give you a core knowledge base where you'll learn academic literacy, research and discipline-specific skills needed for further study. You'll complete a short list of directed courses, providing you with a taste of discipline areas within our Bachelor of Business, Bachelor of Business Analytics or Bachelor of Commerce degrees.

Course content includes:

- Accounting and Finance
- Business
- Business Analytics
- Business and Entrepreneurship
- Commerce
- Economics
- Events
- Human Resources Management
- Industrial Relations
- Management
- Marketing
- Tourism

Why study with us

- Guaranteed degree entry – complete the Diploma in Business and receive a guaranteed entry into the Bachelor of Business, the Bachelor of Business Analytics or the Bachelor of Commerce.
- Receive credit – receive up to 80 units credit towards an undergraduate degree.
- No extra time or cost – depending on which degree you would like to move into after the Diploma, it may be possible to complete your degree in the standard, minimum timeframe. Also, for any courses for which you receive credit, you don't have to pay for those again once you get into your degree.
- Extensive Support – gain additional support through pathways courses which develop foundational degree skills in smaller class sizes. The support offered in a Diploma helps students transition into larger classes alongside undergraduate students and experience study as you would in an undergraduate degree program.
- Real-world insights – connect with industry through projects, guest lectures and mentoring.
- Diversify your skills and knowledge – get a taste of the different business disciplines with our directed course list.

Career Opportunities

The business sector is large and diverse with employment opportunities in business, management, tourism, marketing, accounting and finance, commerce, entrepreneurship, events and international relations.

See the website for more information about this diploma

Combined degrees

Bachelor of Arts/Bachelor of Innovation and Entrepreneurship
Broaden your understanding of how innovation and entrepreneurship is applied within a wider context. This combination will complement your innovative mind-set with an enhanced understanding of how society functions.

Bachelor of Business/Bachelor of Business Analytics
Improve your understanding of business functions in organisations and develop the skills needed to implement and oversee data-driven business decisions. Develop a competitive advantage in a rapidly evolving employment market.

Bachelor of Business/Bachelor of Commerce
Improve your understanding of important areas relevant to business, including economics, finance and accounting. Develop critical thinking, analytical problem solving, task management and strong communication skills.

Bachelor of Business/Bachelor of Innovation and Entrepreneurship
Learn to think distinctively, creatively and critically in a business environment. Develop the skills required to grow entrepreneurial ideas into successful new ventures, or work within existing businesses in an innovative way.

Bachelor of Business/Bachelor of Laws (Honours)
Experience in law is a valuable asset within the business sector. Develop your skills and forge a career as a corporate or in-house lawyer.

Bachelor of Chemical Engineering (Honours)/Bachelor of Business
Complement your technical skills with business acumen and entrepreneurship. Learn how to manage people and finances, propose new business opportunities and market your product.

Bachelor of Civil Engineering (Honours)/Bachelor of Business
Broaden your understanding of the Australian and global business environments. This combination ensures you will have specialist in-depth business knowledge while possessing a strong understanding of the world of civil engineering.

Bachelor of Commerce/Bachelor of Business Analytics
Improve your knowledge and skills across commerce, while developing the skills needed to implement and oversee data-driven business decisions. Develop a competitive advantage in a rapidly evolving employment market.

Bachelor of Commerce/Bachelor of Innovation and Entrepreneurship
Improve your knowledge and skills across commerce, innovation and entrepreneurship, and gain practical experience in diverse industries, to become extremely employable in both the public and private sectors.

Bachelor of Commerce/Bachelor of Laws (Honours)
Combine your background in commerce with a degree in law to improve your knowledge of important legislation that is relevant to accounting, finance and economics.

Bachelor of Development Studies/Bachelor of Business
This combined program builds on interdisciplinary understandings of uneven development and business practice. It also encompasses a practical angle, with students learning from case studies and real business situations in Australia and internationally.

Bachelor of Electrical and Electronic Engineering (Honours)/Bachelor of Business
Complement your technical skills with management skills, business acumen, entrepreneurship and the ability to commercialise engineering innovations. Prepare yourself for a leadership role with this unique package of capabilities.

Bachelor of Environmental Science and Management/Bachelor of Business
Broaden your understanding of human impacts on the environment and apply your business skills and experience to develop solutions to global environmental challenges.

Bachelor of Food Science and Human Nutrition/Bachelor of Business
This combination allows students to undertake and match business skills with their interest in food and nutritional sciences – a synergy that will maximise graduate employability.

Bachelor of Information Technology/Bachelor of Business
If you are technically savvy, a business degree combined with information technology is a highly valued asset for careers in business technology and design, business analysis, and in managing large and complex software systems critical for big corporations and government.

Bachelor of Innovation and Entrepreneurship/Bachelor of Laws (Honours)
This combination is for people who are interested in turning big ideas into new ventures, with the added understanding of the surrounding legal environment.

Bachelor of Mechanical Engineering (Honours)/Bachelor of Business
Complement your strong understanding of business affairs with the ability to commercialise engineering innovations, with this unique combination of capabilities.

Bachelor of Psychological Science/Bachelor of Business
Gain a firm understanding of the Australian and global business environments while understanding how and why people behave and make decisions.

Bachelor of Science/Bachelor of Innovation and Entrepreneurship
If you're passionate about building your knowledge and discovering new things, this combination will allow you to apply your scientific skills to the business arena. Using the latest scientific developments and advancements, you can create innovative futures that influence markets, communities and societies.

Bachelor of Surveying (Honours)/Bachelor of Business
A business degree gives you a firm understanding of the Australian and global business environments. This combination ensures you will have specialist business knowledge while possessing a strong understanding of surveying.

Computing, Maths and Technology

The computing, maths and technology industries are at the cutting edge of new thinking, and are central to the way we work, learn, communicate, socialise and entertain ourselves. They're industries that require critical, creative thinkers. Our degrees teach you the skills required to develop technology and systems to aid advancements in almost any area you can think of. You could work for a big global corporation like Google or Apple, or build your own business and become one of the world's most innovative entrepreneurs.

Discover Computing, Maths and Technology degrees

81.5%

of undergraduate Computing and Information Systems graduates found full time employment within four months[1]

Top 10

in Australia for undergraduate graduates who had a positive educational experience in Computing and Information Systems[2]

No. 1

in NSW for learning resources (Undergraduate Science and Mathematics)[3]

Degree options

Bachelor of Computer Science
Bachelor of Data Science
Bachelor of Information Technology
Bachelor of Mathematics
Bachelor of Mathematics (Advanced)
Diploma in Information Technology

Also consider

Bachelor of Mechatronics Engineering (Honours)
Bachelor of Mechanical Engineering (Honours)
Bachelor of Electrical and Electronic Engineering (Honours)
Bachelor of Computer Systems Engineering (Honours)
Bachelor of Science

1 Graduate Outcomes Survey 2019-2021.
2 Student Experience Survey 2019-2020.
3 The Good Universities Guide 2021.

"Studying at the University of Newcastle was one of the best decisions I've ever made. I've been able to learn from some incredible professors, work with some intelligent peers, and change my way of thinking. I have also made so many friends. I now have the pleasure to work for the University's IT department, where I am constantly learning and improving every day."

Liam
Bachelor of Information Technology

"The relationships I've built at the University have opened many doors for me, including gaining my first industry position. I've enjoyed applying the skills I've learnt in the classroom to real-world scenarios. In 2022 I will be travelling to Taiwan as part of the DFAT New Colombo Plan Scholarship to deepen my understanding of sustainable engineering within an Indo-Pacific context."

Mikyla
Bachelor of Electrical and Computer Systems Engineering

"Studying my degree has opened opportunities for me to explore myself and where I would like to contribute to the field. The most rewarding experience is the connections you make throughout the program – the researchers, academics and industry professionals who open the door to opportunities, and are always willing to help you find a way to make a mark in this sector."

Noel
Bachelor of Computer Engineering (Honours)

Bachelor of
Computer Science

2022 Selection Rank	Duration
72.00 | Median 81.45	3 yrs FT / 8 yrs PT

UAC Code	Location
482400	Newcastle – Callaghan

Assumed knowledge	Mathematics (Advanced) (Band 5 of above)
Recommended studies	Mathematics (Extension 1)

Computer scientists work on challenging programming tasks, developing new software technologies and sophisticated new online systems. Computer science is fundamental to many everyday technologies like mobile phones, autonomous systems, social media, online shopping, computer games and virtual reality. The Bachelor of Computer Science produces innovative and resourceful computer scientists who are experts at complex problem solving. They work across fields such as artificial intelligence, robotics, computer graphics, digital forensics, health informatics, web development, cryptography and data security.

What you will study

Develop skills in the following areas:

- Algorithmic Problem Solving
- Artificial Intelligence
- Computer Graphics
- Computer Networks and Distributed Systems
- Data Security
- Databases and Security
- Distributed and Internet Computing
- Hardware
- Programming and Software Development
- Robotics
- Website Creation

Choose to specialise in one of the following majors:

- Computer Systems and Robotics
- Cyber Security
- Software Development

Practical experience

Our computer science laboratories offer cutting-edge facilities, providing the perfect practical environment to apply your knowledge and test your skills. A Work Integrated Learning (WIL) course is available in your final year where you will have the opportunity to complete 200 hours of work placement in an external organisation.

Career opportunities

Computer science is a high-growth industry with a myriad of career opportunities. Jobs exist all over the world in almost every industry, from IT to business, manufacturing, defence and many more.

Some typical positions include:

- Application Development Manager
- Business Intelligence Director
- Computer Software Program Manager
- Cyber Security Advisor
- Data Scientist
- Games Developer
- Security Architect
- Software Architect

Professional recognition

Accredited by the Australian Computer Society

Combine this degree with

- Bachelor of Computer Systems Engineering (Honours)
- Bachelor of Data Science

See the website for more information about this degree

Bachelor of
Data Science

2022 Selection Rank	Duration
85.00 | Median N/A	3 yrs FT / 8 yrs PT

UAC Code	Location
489791	Newcastle – Callaghan

Assumed knowledge	Mathematics (Advanced)

Data scientists create and use a variety of tools and frameworks to examine patterns in data. These findings are then communicated to inform decision making and business strategies across a broad range of industries. The Bachelor of Data Science will equip you with core skills in data science including data wrangling and visualisation, statistical modelling, programming, data security, and applied artificial intelligence including machine intelligence. You'll also have the opportunity to apply these skills by engaging in current workplace projects alongside industry partners of the University, giving you a competitive edge when you're entering the workforce.

What you will study

Build upon foundational knowledge in data science and increase your employability by studying a variety of elective pathway courses including:

- Biomedical Data Analysis
- Exercise and Sport Analytics
- Numerical Analysis
- Optimisation
- Psychology
- Social Media Analytics
- Statistical Analysis
- System Architecture
- Web and Data Analysis

Key areas of study include:

- Algorithms
- Business Analysis
- Data Mining and Big Data
- Data Structures
- Machine Intelligence and Deep Learning
- Network and Data Security
- Statistics and Time Series Analysis

Practical experience

You will graduate with professional skills, knowledge and real-world experience sought after by the industry. While studying, take advantage of:

- Up to 250 hours of work placement in an external organisation
- Access to cutting-edge facilities such as our computer science laboratories

Career opportunities

If you want to work in a high-growth field where you can apply your data science expertise to almost any industry, you could have a rewarding career in a variety of roles, including:

- Analyst
- Artificial Intelligence and Machine Learning Specialist
- Big Data Specialist
- Consultancy
- Data Analyst and Scientist
- Digital Transformation Specialist
- Entrepreneur
- Information Security Analyst
- Internet of Things Specialist
- Programmer
- Software Architect
- Statistician
- Web Developer
- Web Manager

Professional recognition

Accreditation is currently being sought from Statistical Society Australia (SSA) and Australian Computer Society (ACS).

Combine this degree with

- Bachelor of Computer Science
- Bachelor of Mathematics

See the website for more information about this degree

Bachelor of
Information Technology

2022 Selection Rank	Duration
67.00 | Median 71.55	3 yrs FT / 8 yrs PT

UAC Code	Location
483000	Newcastle – Callaghan

Assumed knowledge	English (Standard or Advanced) and Mathematics (Advanced)

Information technology is all about developing, building and maintaining software systems to meet the challenges faced by society and seizing the opportunities that new technology creates. The Bachelor of Information Technology prepares you for a diverse career. You could specialise in business technology and manage complex systems critical for big corporations and government. Develop cloud-computing solutions, specialise in IT security or create new games, 3D animations, apps and programs for the manufacturing, healthcare, social enterprise, renewable energy or education industries.

What you will study

Choose from one of the following majors, designed to meet the industry's evolving IT needs:

- Business Technology
- Systems Development

Plus, you'll develop skills in:

- Business Analysis
- Computing Fundamentals
- Databases and Information Management
- Foundations Of Information Systems
- Human Computer Interaction
- Programming
- Project Management
- Systems Analysis and Design
- Systems and Network Administration
- Web Technologies

Practical experience

Students have the opportunity to undertake industry placement. This work integrated learning (WIL) opportunity allows students to gain hands-on experience in the industry, creating graduates who are prepared for immediate and productive employment.

In your third year you will work with a team of students to complete a major IT project, with the opportunity to work with an industry partner. This project typically involves:

- Database Design and Implementation
- Interface Design
- Programming
- Project Planning
- Reporting and Presenting

Career opportunities

IT graduates work in a wide range of industries including cloud architecture, software, mobile and application development. You could go on to work for organisations like Google, Amazon, Facebook or Apple.

Some typical positions include:

- Desktop Systems Specialist
- e-Learning Developer
- Finance Software Analyst
- Infrastructure Business Analyst
- IT and Communications Advisor
- IT Project Manager
- Mobile App Designer
- Software Developer
- Software Development Project Manager
- Systems Analyst
- Web Developer

Professional recognition

Graduates are eligible to apply for membership with the Australian Computer Society.

Combine this degree with

- Bachelor of Business

See the website for more information about this degree

Bachelor of
Mathematics

2022 Selection Rank	Duration
85.00 | Median N/A	3 yrs FT / 8 yrs PT

UAC Code	Location
483200	Newcastle – Callaghan

Assumed knowledge	Mathematics (Standard)
Recommended studies	Mathematics (Extension 1)

The Bachelor of Mathematics attracts the very best problem solvers – those who analyse things critically and are eager to make technological discoveries. The computing, maths and technology industries are at the forefront of new thinking, and are central to the way we work, learn, communicate, socialise and entertain ourselves. Through this degree, you might mathematically model the way diseases spread to find a cure for malaria or search for algorithms to speed up computations. You'll use your skills in technology, creativity and logic to push the boundaries and make a difference in society.

What you will study

This degree provides you with the essential skills and knowledge necessary for a career in your chosen field.

Choose from one of the following majors:

- Pure and Applied Mathematics
- Statistics
- Studies in Mathematics and Statistics

Two co-majors are also now available (as a second major):

- Climate Science
- Data Science

Practical experience

Mathematics students learn and create networks with students from other universities through our remote-access lab classes.

Career opportunities

Graduates from the Bachelor of Mathematics will find their degree can take them to varied and groundbreaking places. Graduates work in a wide range of fields including communications, international finance and the futures market, the energy sector, and medical and health research.

Some typical roles are:

- Climate Science Modeller
- Data Mining Analyst
- Economic/Social Statistician
- Investment Banker/Stockbroker
- Meteorologist
- Sports Statistician

Professional recognition

Students may join the Australian Mathematical Society (AustMS) as student members before they graduate. Graduates with a Statistics major are eligible for Graduate Accreditation on becoming a member of the Statistical Society of Australia.

Combine this degree with

- Bachelor of Chemical Engineering (Honours)
- Bachelor of Civil Engineering (Honours)
- Bachelor of Computer Systems Engineering (Honours)
- Bachelor of Electrical and Electronic Engineering (Honours)
- Bachelor of Mechanical Engineering (Honours)
- Bachelor of Mechatronics Engineering (Honours)
- Bachelor of Science

See the website for more information about this degree

Bachelor of

Mathematics (Advanced)

2022 Selection Rank	Duration
95.00 | Median 99.95	3 yrs FT / 8 yrs PT

UAC Code	Location
483985	Newcastle – Callaghan

Assumed knowledge	Mathematics (Advanced)
Recommended studies	Mathematics (Extension 1 or 2)

Are you a problem solver? A critical thinker? Maybe you want to use your analytical skills to make innovative technological discoveries? The Bachelor of Mathematics (Advanced) will prepare you for a career far beyond the norm and outside the conventional roles of a mathematician. You'll join a high achieving cohort and build on your previous knowledge in logic, mathematical modelling, experimental design and data analysis. Enhancing your learning with industry experience, you'll build professional connections which will increase your career outcomes. You can work in a wide range of fields including communications, international finance and the futures market, the energy sector, or even medical and health research.

What you will study

This degree provides you with the essential skills and knowledge necessary for a career in your chosen field. Choose from one of the following majors:

- Pure and Applied Mathematics
- Statistics
- Studies in Mathematics and Statistics

Practical experience

Mathematics students learn and create networks with students from other universities through our remote-access lab classes.

Career opportunities

Graduates from the Bachelor of Mathematics (Advanced) will find their degree can take them to varied and groundbreaking places. Graduates work in a wide range of fields including communications, international finance and the futures market, the energy sector, and medical and health research.

Some typical roles are:

- Algorithm Designer
- Data Mining Analyst
- Economic/Social Statistician
- Investment Banker/Stockbroker
- Meteorologist
- Risk or Strategy Analyst
- Sports Statistician

Professional recognition

Students may join the Australian Mathematical Society (AustMS) as student members before they graduate. Graduates with a Statistics major are eligible for Graduate Accreditation on becoming a member of the Statistical Society of Australia.

See the website for more information about this degree

Diploma in

Information Technology

2022 Selection Rank	Duration
50.00 | Median 57.70	1 yr FT / 4 yrs PT

UAC Code	Location
489832	Newcastle – Callaghan

If you have an interest in developing technology, using critical thinking and redefining the way we work, learn, communicate, socialise and entertain ourselves, then the Diploma in Information Technology is for you. Information technology (IT) is all about learning to develop, build and maintain software technology systems to meet the challenges faced by business and society. You can develop skills around data science to study collecting and analysing data for use to connect devices, systems and networks to bring meaning to complex patterns. Or you could develop software for a variety of electronic devices.

What you will study

The Diploma in Information Technology has been designed to give you a core knowledge base where you'll learn academic literacy, research and discipline-specific skills needed for further study. You'll complete a short list of directed courses, providing you with a taste of discipline areas including programming, cybersecurity, data structures, business decision making and mathematics. The Diploma in Information Technology offers a guaranteed entry pathway into the Bachelor of Information Technology, the Bachelor of Data Science, or the Bachelor of Software Engineering.

Course content includes:

- Data Science
- Information Technology
- Software Engineering

Why study with us

- Guaranteed degree entry – complete the Diploma in Information Technology and receive a guaranteed entry into the Bachelor of Information Technology, the Bachelor of Data Science, or the Bachelor of Software Engineering.
- Receive credit – receive up to 80 units credit towards an undergraduate degree.
- No extra time or cost – depending on which degree you would like to move into after the Diploma, it may be possible to complete your degree in the standard, minimum timeframe. Also, for any courses for which you receive credit, you don't have to pay for those again once you get into your degree.
- Extensive Support – gain additional support through pathways courses which develop foundational degree skills in smaller class sizes. The support offered in a Diploma helps students transition into larger classes alongside undergraduate students and experience study as you would in an undergraduate degree program.
- Real-world insighst – connect with industry through projects, guest lectures and mentoring.
- Diversify your skills and knowledge – get a taste of the different information technology disciplines with our directed course list.

Career Opportunities

IT Professionals work in a large range of areas including:

- Applications Developer
- Cryptographer
- Data Scientist
- e-Learning Developer
- Enterprise Architect
- IT Project Manager
- Logistics Officer
- Mathematical modeller
- Mobile App Designer
- Software Development Manager
- Systems Analyst
- Technical Software Consultant

See the website for more information about this diploma

Combined degrees

Bachelor of Chemical Engineering (Honours)/ Bachelor of Mathematics

Deepen your technical skills with advanced maths courses. Mathematics is fundamental to break-through engineering and can open up new, complementary fields like data mining, mathematical modelling, statistics and predictive analysis.

Bachelor of Civil Engineering (Honours)/Bachelor of Mathematics

Deepen your technical skills with advanced maths courses. Mathematics is fundamental to break-through engineering and can open up new, complementary fields like data mining, mathematical modelling, statistics and predictive analysis.

Bachelor of Computer Systems Engineering (Honours)/ Bachelor of Computer Science

Develop complementary hardware and software skills. Open up opportunities in fields such as artificial intelligence, robotics, computer graphics, digital forensics, bioinformatics, web development and data security. You'll be the ultimate well-rounded computing professional.

Bachelor of Computer Systems Engineering (Honours)/ Bachelor of Mathematics

Deepen your technical skills with advanced maths courses. Mathematics is fundamental to break-through engineering and can open up new, complementary fields like data mining, mathematical modelling, statistics and predictive analysis.

Bachelor of Data Science/Bachelor of Computer Science

The Bachelor of Data Science/Bachelor of Computer Science produces innovative and resourceful computer scientists who are experts at data wrangling and visualisation, programming, data security, and complex problem solving.

Bachelor of Data Science/Bachelor of Mathematics

You will develop core skills and content in data science and mathematics including data wrangling and visualisation, optimisation, mathematical modelling, complex analysis, predictive analytics, programming, data security, and applied artificial intelligence including machine intelligence.

Bachelor of Electrical and Electronic Engineering (Honours)/ Bachelor of Mathematics

Deepen your technical skills with advanced maths courses. Mathematics is fundamental to break-through engineering and can open up new, complementary fields like data mining, mathematical modelling, statistics and predictive analysis.

Bachelor of Information Technology/Bachelor of Business

Complement your technical skills with business acumen, entrepreneurism and the ability to commercialise IT innovations. Learn how to manage people and finances, propose new business opportunities and market your product. Prepare yourself for a leadership role with this unique package of capabilities.

Bachelor of Mathematics/Bachelor of Science

The Bachelor of Mathematics/Bachelor of Science combined program is for those who are interested in understanding the world around us and how it works. This degree is for those who are inspired to build new knowledge and discover new things.

Bachelor of Mechanical Engineering (Honours)/ Bachelor of Mathematics

Deepen your technical skills with advanced maths courses. Mathematics is fundamental to break-through engineering and can open up new, complementary fields like data mining, mathematical modelling, statistics and predictive analysis.

Bachelor of Mechatronics Engineering (Honours)/ Bachelor of Mathematics

Deepen your technical skills with advanced maths courses. Mathematics is fundamental to break-through engineering and can open up new, complementary fields like data mining, mathematical modelling, statistics and predictive analysis.

Creative Industries and Communication

Pursuing a career in creative industries and communication is a chance to bring your boldest ideas to life. You can tailor your degree to focus on an area you're passionate about such as digital content creation, animation, music, art, design, media, filmmaking, journalism, public relations and so much more. Collaborate with industry partners on real-life projects, from the production of music videos to art installations, and contribute to the new-gen thinking that will help define the 21st century.

Discover Creative Industries and Communication degrees

91.2%

of undergraduate Communications graduates found employment within four months[1]

86.8%

of undergraduate Communications students satisfied with facilities and learning resources[2]

Top 5

in Australia for learning resources and overall educational experience (Undergraduate Communications)[3]

Degree options

Bachelor of Communication
Bachelor of Music and Performing Arts
Bachelor of Visual Communication Design

Also consider

Bachelor of Arts
Bachelor of Design (Architecture)
Bachelor of Information Technology

1 Graduate Outcomes Survey 2019-2021.
2 Student Experience Survey 2019-2020.
3 The Good Universities Guide 2021.

"I thoroughly enjoyed my degree and from the first class I knew it was the right career path for me. The degree is extremely practical, and many skills I have learnt have allowed me to feel equipped for my current role as an Engagement Officer at the University. I was able to secure a paid internship in my second year and am impressed at how many University roles are offered to students."

Maya
Bachelor of Communication

"The Bachelor of Communication was dynamic, well-rounded, and hands-on. The wonderful lecturers and tutors managed to find the perfect balance between theory and practice. I built a website, made short films, conducted journalistic investigations, interviewed professional athletes and actors, worked with award-winning organisations – even pitched campaign ideas to international companies."

Jarrod
Bachelor of Communication

Bachelor of

Communication

2022 Selection Rank	Duration
67.00 | Median 77.43	3 yrs FT / 8 yrs PT

UAC Code	Location
482350	Newcastle – City

Assumed knowledge	English (Standard or Advanced)

When you study a Bachelor of Communication, you'll develop cutting-edge skills needed to produce groundbreaking, thought-provoking and engaging work in diverse media industries. With a range of course options, you'll learn to push your individual creative boundaries, while embracing the changing nature of today's complex communication landscape. Choose your major or areas of study and develop work-ready skills – from critical thinking and writing, to creating and producing content for television, film, documentaries, radio, print, gaming and digital media.

What you will study

The Bachelor of Communication will provide you with a broad understanding of the discipline of communication and prepare you to work creatively and analytically in the communication and media industries.

You can specialise in one or two of the following majors:

- Media Arts Production
- News Media
- Public Relations

Additional major options are available to study alongside your Bachelor of Communication major. Choose from Animation and Interaction, Creative Arts or Graphic Design and Illustration.

Practical experience

The Bachelor of Communication has been designed with embedded practical learning experiences throughout the degree and incorporates work placement or projects within the industry as a significant component of your specialist major. Students are invited to take advantage of our business partnership networks with NBN Television, The Newcastle Herald, ABC 1233, the University radio station 2NURFM, and internships with Channel 7 and Foxtel.

Career opportunities

Our graduates enjoy great employment prospects with 85% securing jobs upon completion of their degree. Graduates can find employment in a variety of roles across many different types of organisations.

Some example jobs include:

- AR/VR Specialist
- Camera Operator
- Copywriter
- Digital Producer
- Director
- Editor
- Feature Writer
- Festival/Events Coordinator
- Film and Documentary Maker
- Film/Television Production Assistant
- Games Designer
- News and Specialist Reporter
- Radio Producer
- Scriptwriter
- Web Designer

Combine this degree with

- Bachelor of Developmental Studies
- Bachelor of Laws (Honours) Combined
- Bachelor of Psychological Science

See the website for more information about this degree

Bachelor of

Music and Performing Arts

2022 Selection Rank	Duration
N/A | Median N/A	3 yrs FT / 8 yrs PT

UAC Code	Location
489814	Newcastle – City

Assumed knowledge	Music 1 or demonstrated musical experience or qualification equivalent to Music 1 or AMEB (Grade 6 to 8 to pass)
Admission requirements	Audition and/or interview are required for this degree. See website for more information.

A career in music and performing arts offers an exciting future within the rapidly evolving creative arts industries. Enhance your skills, discover new opportunities, and fast track your creative career through practical and creative learning. At the University of Newcastle, you will learn from leading industry specialists and practitioners to develop your professional skills and networks as you transition into your career.

What you will study

Your studies in our Music and Performing Arts degree will enable you to successfully navigate and build your career in the music and the performing arts industry. With flexible study options, you can tailor your degree by selecting one or two majors in Performance, Songwriting and Production, or the Performing Arts.

The degree offers a wide range of courses in areas suited to your own interests across the School of Creative Industries and the University. Depending on your chosen major/s, examples of what you will study include:

- Creative and Performing Arts
- Directing
- Music Performance
- Music Sound and Visual Media
- Music Teaching and Pedagogy
- Scenography
- Songwriting and Production
- Sound and Lighting
- Stagecraft

Students have the option of completing a single or a double major in this program. Students completing a double major can choose either a double major from the Music and Performing Arts major options (Double Major Pathway B); or one of the Music and Performing Arts major and one School of Creative Industries Major (Double Major Pathway C) from the options listed in the handbook.

Practical experience

When you study the Bachelor of Music and Performing Arts at the University of Newcastle, you will have the opportunity to refine your skills through regular performance opportunities via the University of Newcastle performance venues as well as other popular Newcastle venues. Practical experiences will form an integral part of your studies, as such you'll have access to industry level facilities and resources.

Career opportunities

The following list provides some examples of positions available to graduates of a Bachelor of Music and Performing Arts. Some of these jobs will depend on the amount and level of study undertaken, level of experience, the combination of other majors and electives studied, while some may require further study.

- Drama Teacher
- Film Music Composer
- Music Journalist
- Music Teacher
- Musical Theatre Artist
- Performing Artist
- Scenographer
- Songwriter
- Technical Designer
- Theatre Artist
- Voice or Vocal Coach

Combine this degree with

- Bachelor of Arts

See the website for more information about this degree

Bachelor of
Visual Communication Design

2022 Selection Rank	Duration
67.00 | Median 76.88	3 yrs FT / 8 yrs PT

UAC Code	Location
484650	Newcastle – City

Recommended studies At least one of Visual Arts, Textiles and Design, Design and Technology or Industrial Technology

Study a Bachelor of Visual Communication Design at the University of Newcastle to sharpen your skill set and work with experts on real-world creative tasks while gaining vital industry experience. You'll graduate ready to solve problems by tapping into dynamic visual digital media training and grow a design smart practice over a range of contemporary design areas. You'll be empowered to build a business of your own or establish a creative career in diverse and exciting industries. Focus your study around interactive media and animation, graphic design and illustration or the creative arts and learn about creative career opportunities in games, web, film and television, branding and marketing, art and technology.

What you will study
Our core courses give you a strong foundation in the fundamentals of visual communication design while the majors enable you to focus on more specialised areas that inspire you.

You will have the option to major in one or two of following areas:

- Animation and Interaction
- Creative Arts
- Graphic Design and Illustration

Other major options are available alongside your Visual Communication Design major, such as Media Arts Production, Songwriting and Production, and Public Relations.

Practical experience
This degree has hands-on experience with a wide range of design techniques in emerging and established technologies. You'll have full access to the very best design equipment, allowing you to graduate with an impressive portfolio of your own work. Throughout the program, students have the opportunity to complete work placements and take part in Work Integrated Learning (WIL) projects. International placements and exchanges are also available to expand your knowledge and skills in an international context.

Professional recognition
Upon graduation, students can seek accreditation independently with the Australian Graphic Design Association, Design Institute of Australia and Illustrators Institute of Australia.

Career opportunities
Throughout your studies you will have the chance to build industry connections which will help with securing a job after graduation in roles such as:

- Animator
- Artist
- Creative Director
- Graphic Designer
- Illustrator
- Interactive Media Designer/ Developer
- Motion Graphic Designer
- User Experience Designer
- Web Designer

See the website for more information about this degree

Creative Industries and Communications
Combined degrees

Bachelor of Communication/Bachelor of Laws (Honours)
Some of the most powerful and influential forces within our society are the media and communication technology. Combine this degree with Law and be at the forefront of constantly developing laws and regulations that impact the communication and media industries.

Bachelor of Creative Industries/ Bachelor of Innovation and Entrepreneurship
Broaden your understanding of how innovation and entrepreneurship can be applied within real social and economic communities. This degree will complement your creative mind-set with a deep understanding of how society, culture and business interact for positive outcomes.

Bachelor of Music/Bachelor of Arts
Broaden your understanding of how your potential as a musician can be applied within a wider context. This combination will complement your artistic mind-set with an enhanced understanding of how society functions.

Education

Great teachers can change lives and truly impact the communities in which they live. Through our education degrees, you'll learn more than just how to teach – you'll gain the skills needed to empower future generations and inspire young minds. A career in education is rewarding and diverse. With access to the latest technologies including SimTeach, SimSchool and a 360 degree fully immersive SimCave, in addition to real-life practical experience, you'll graduate with globally-transferable skills and qualifications.

Discover Education degrees

Top 150

in the world - Education[1]

94.1%

of undergraduate Education graduates found employment within four months[2]

Ranked 2

in Australia for skills satisfaction in postgraduate Education[3]

Degree options

Bachelor of Education (Early Childhood and Primary)
Bachelor of Education (Primary)
Bachelor of Education (Secondary)
Diploma in Education Studies

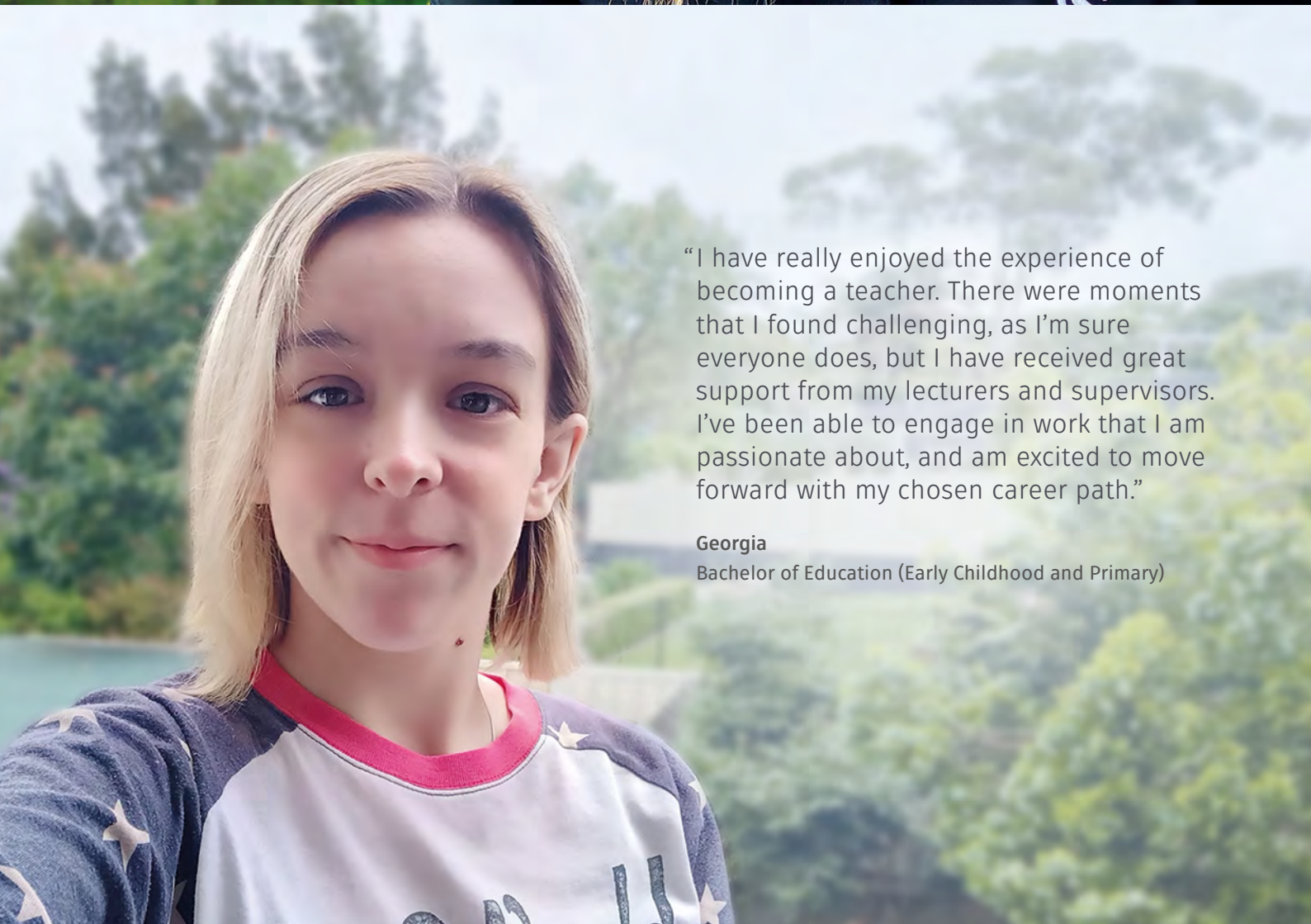
Also consider

Diploma in Languages

1 QS World University Rankings by Subject 2020.
2 Graduate Outcomes Survey 2019-2021.
3 Course Experience Questionnaire 2020-2021.

"Within the first year of my degree I had the opportunity to participate in practical experiences through a program only offered by the University of Newcastle called Teach Outreach. This was such an empowering experience that helped me to connect with teachers and schools, and gain experience and confidence in the classroom."

Abbey
Bachelor of Education (Primary)



"I have really enjoyed the experience of becoming a teacher. There were moments that I found challenging, as I'm sure everyone does, but I have received great support from my lecturers and supervisors. I've been able to engage in work that I am passionate about, and am excited to move forward with my chosen career path."

Georgia
Bachelor of Education (Early Childhood and Primary)

Bachelor of

Education (Early Childhood and Primary)

2022 Selection Rank	Duration
65.00 | Median 70.58	4 yrs FT / 10 yrs PT

UAC Code	Location
484750	Newcastle – Callaghan
484760	Central Coast – Ourimbah

Assumed knowledge English (Standard or Advanced) and Mathematics (Standard or Advanced)

Teachers and education professionals have the power to influence lives and shape young minds. The Bachelor of Education (Early Childhood and Primary) leads to a rewarding career that allows you to work across two different settings:

- **Preschool and early childhood** (birth – five years)
- **Primary School** (Kindergarten – Year 6)

You'll be prepared to work with diverse families and children in childcare centres, preschools, and primary school classrooms. Students will have access to the latest technologies in teacher preparation including TeachLiVE simulated classrooms in our state of the art facilities.

What you will study

You will study courses which develop core knowledge of the foundations of child development, schooling, teaching and specialist subjects and key learning areas.

Key areas of study include:

- Aboriginal Education, Policies and Issues
- Behaviour Management
- Children's Learning and Growth Across the Span of Birth to 12 Years
- Early Childhood Special Education
- Ethics and Professional Codes of Conduct
- Families and Society
- Foundations of Primary Education Curriculum and Pedagogy In K-6
- Language and Mathematical Learning
- Programming and Planning for Children Aged 0-5 Years
- Psychology of Learning and Teaching

Practical experience

You will complete three professional experience placements across early childhood and primary school classrooms for a total of at least 90 days.

You can also take advantage of:

- **EdOutreach** – first-year community learning experiences
- **Teach Outreach** – a volunteer placement program
- **SimTeach** – teach online avatars in a virtual classroom
- **New Colombo Plan Mobility Program** – experience teaching in bilingual classrooms in Asia with funding available

This degree requires students to participate in placements in NSW Department of Education or other NSW schools or services. During placement, students will be subject to the policies and procedures of the placement facility. Students must meet all the Education Placement Requirements, including a NSW Working with Children clearance.

Career opportunities

Our graduates enjoy great employment prospects with 97% securing jobs upon completion of their degree.

Careers may include:

- Community Educator
- Curriculum Developer
- Early Childhood Centre Director
- Early Childhood Teacher
- Educational Researcher
- Primary School Teacher

Professional recognition

Accredited by the NSW Education Standards Authority (NESA) and by the Australian Children's Education and Care Quality Authority (ACECQA).

See the website for more information about this degree

Bachelor of

Education (Primary)

2022 Selection Rank	Duration
65.00 | Median 74.43	4 yrs FT / 10 yrs PT

UAC Code	Location
484800	Newcastle – Callaghan
484810	Central Coast – Ourimbah

Assumed knowledge English (Standard or Advanced) and Mathematics (Standard or Advanced)

Discover how you can empower future generations and influence positive change within classrooms and communities. As a primary teacher, you could find yourself inspiring the next generation of leaders or developing a program to encourage early interest in industries like maths and science. Being a primary teacher goes well beyond teaching maths and ABC's – you'll play a critical role in the growth and transition of children into young adults. Use your skills and knowledge to nurture strong and confident people capable of impacting the world. Students will have access to the latest technologies in teacher preparation including TeachLiVE simulated classrooms in our state of the art facilities.

What you will study

The Bachelor of Education (Primary) will develop your knowledge, confidence and skills through both theoretical and experience-based learning. You'll study a variety of courses in primary education, as well as specialist teaching areas.

Key study areas include:

- Behaviour Management
- Foundations of Primary Education
- How to Teach K-6 Curriculum
- Language and Literacy Development
- Psychology of Learning and Teaching

To diversify your skills and enhance your job prospects, study courses in one of the following areas:

- Creative Arts
- Human Society and Its Environment
- Mathematics
- Personal Development, Health and Physical Education
- Science and Technology
- Special Education

Practical experience

You will complete three professional experience placements totalling at least 90 days.

You can also take advantage of:

- **EdOutreach** – first-year community learning experiences
- **Teach Outreach** – a volunteer placement program
- **SimTeach** – teach online avatars in a virtual classroom
- **New Colombo Plan Mobility Program** – experience teaching in bilingual classrooms in Asia with funding available

This degree requires students to participate in placements in NSW Department of Education or other NSW schools or services. During placement, students will be subject to the policies and procedures of the placement facility. Students must meet all the Education Placement Requirements, including a NSW Working with Children clearance.

Career opportunities

Our graduates enjoy great employment prospects with 94.7% securing jobs upon completion of their degree. Our graduates are qualified specialists who work in classrooms and various education settings. They are also industry leaders, researchers and professionals in a range of related industries in Australia and around the world.

Careers may include:

- Community Educator
- Curriculum Developer
- Education Policy Analyst
- Educational Materials Developer
- Primary School Teacher
- Special Education Teacher

Professional recognition

Accredited by the NSW Education Standards Authority (NESA).

See the website for more information about this degree

Bachelor of
Education (Secondary)

2022 Selection Rank	Duration
65.00 | Median 74.50	4 yrs FT / 10 yrs PT

UAC Code	Location
484860	Newcastle – Callaghan
484870	Central Coast – Ourimbah
Assumed knowledge	English (Standard or Advanced) and Mathematics (Standard or Advanced)
Recommended studies	English (Standard or Advanced), Mathematics (Extension 1) (for Mathematics major) and study in the area of intended teaching area

Where else could you combine your passion for education, explore subject areas you're interested in and apply your in-depth knowledge and skills to inspire young minds? Our graduates are both qualified teachers and highly skilled specialists who work in education as well as a range of related industries. You could find yourself encouraging a student to follow their passions in science – inspiring them to go on to make groundbreaking discoveries – or helping the quiet student to find their voice in public speaking and debating. With this degree, you'll be at the forefront, shaping the minds of tomorrow's leaders. Students will have access to the latest technologies in teacher preparation including TeachLiVE simulated classrooms in our state of the art facilities.

What you will study

Benefit from an integrated study approach to become a skilled, knowledgeable and innovative secondary school teacher, as well as a specialist in your chosen areas of expertise.

You will choose from at least one of the following teaching areas:

- **Health and Physical Education**
  You will motivate and teach secondary students to explore a range of physical activities, sports and healthy lifestyle issues. You'll be given the important task of empowering future generations to make informed decisions regarding the health and wellbeing of themselves and others, helping them develop the skills and confidence needed to participate in a range of physical endeavours, and motivating them to maintain high levels of physical activity and fitness in order to achieve good health.
- **Humanities**
  Explore your interests and diversify your skills in humanities with two or three chosen specialisations. Choose from a range of popular subject areas including Aboriginal Studies, Ancient History, Business Studies, Economics, English, Geography, Languages (French, German, Japanese, Chinese), Legal Studies, Modern History, Society and Culture, Studies of Religion, and TESOL (Teaching English to Speakers of Other Languages).
- **Mathematics**
  As a secondary maths teacher, your love of numbers can shape, guide and nurture our future mathematicians. Hands-on study and rich practical experience will enable you to confidently teach mathematics in innovative ways.
- **Science**
  Choose from Biology, Chemistry, Earth and Environmental Science, Physics or Investigating Science. You'll combine your passion for education and science to become a versatile and innovative secondary school teacher with in-demand skills.
- **Technology**
  Explore and develop your passion for current and emerging technologies and nurture students' abilities to think innovatively and use technological applications in real-world situations. Learn how to design, create and evaluate products and systems in areas such as Computing Information Systems and Software Design, Design and Technology, Engineering Studies, Food Technology, Industrial Technology Engineering, Industrial Technology Graphics and Multimedia, Industrial Technology Timber and Metal, Information Processes and Technology, Software Design and Development.
- **Special Education**
  If you're interested in developing specialist skills to enable you to work with students with diverse needs, this pathway provides an avenue for accreditation as an inclusive educator in a secondary education classroom or special education setting.

Practical experience

You will complete three professional experience placements for a total of at least 90 days. In some disciplines, additional Work Integrated Learning (WIL) courses are provided.

You can also take advantage of:

- **EdOutreach** – first-year community learning experiences
- **Teach Outreach** – a volunteer placement program
- **SimTeach** – teach online avatars in a virtual classroom
- **New Colombo Plan Mobility Program** – experience teaching in bilingual classrooms in Asia with funding available

This degree requires students to participate in placements in NSW Department of Education or other NSW schools or services. During placement, students will be subject to the policies and procedures of the placement facility. Students must meet all the Education Placement Requirements, including a NSW Working with Children clearance.

Career opportunities

Our graduates are well prepared and enjoy great employment prospects across our teaching majors.

The following list provides some typical examples of jobs available to graduates:

- Community Educator
- Education Materials Developer
- Education Publication Writer or Editor
- Health and Fitness Trainer
- High School Teacher
- Special Education Teacher

Professional recognition

Accredited by the NSW Education Standards Authority (NESA).

See the website for more information about this degree

Travel, accommodation and related expenses for professional placements are the responsibility of students. Applicants should be aware of this requirement when applying for entry to programs.

Diploma in
Education Studies

2022 Selection Rank	Duration
50.00 | Median 53.10	1 yr FT / 4 yrs PT

UAC Code	Location
489825	Newcastle – Callaghan
489826	Central Coast – Ourimbah

Discover how you can make an impact in your community and empower the next generation. In the Diploma of Education Studies, you'll develop the knowledge, skills and dispositions necessary to aim for career in teaching. You'll come to understand the profession of teaching, engage with various styles of teaching (pedagogy) and assessment, and explore how educators develop creative abilities in children. You'll learn about historical and contemporary education systems and care, including elements of education curriculum, policy and practice both in Australia and globally. Undertake specialised study in key learning areas including English, PDHPE and HSIE. You'll also have the opportunity to meet the English and Maths level requirements needed to study an undergraduate degree.

What you will study

The Diploma in Education Studies has been designed to give you a core knowledge base where you'll learn academic literacy, research and discipline-specific skills needed for further study. You'll complete a short list of directed courses, providing you with a taste of discipline areas within our Education degrees. The Diploma in Education Studies offers a guaranteed entry pathway into the Bachelor of Education (Primary), the Bachelor of Education (Secondary) or the Bachelor of Education (Early Childhood and Primary).

Course content includes:

- Early Childhood
- Education
- English
- HSIE
- PDHPE
- Primary Teaching
- Secondary Teaching
- Teaching

Why study with us

- Guaranteed degree entry – complete the Diploma in Education Studies and receive a guaranteed entry into the Bachelor of Education (Primary and Early Childhood), the Bachelor of Education (Primary), or the Bachelor of Education (Secondary).
- Receive credit – receive up to 80 units credit towards an undergraduate degree.
- No extra time or cost – depending on which degree you would like to move into after the Diploma, it may be possible to complete your degree in the standard, minimum timeframe. Also, for any courses for which you receive credit, you don't have to pay for those again once you get into your degree.
- Extensive Support – gain additional support through pathways courses which develop foundational degree skills in smaller class sizes. The support offered in a Diploma helps students transition into larger classes alongside undergraduate students and experience study as you would in an undergraduate degree program.
- Real-world insights – connect with industry through projects, guest lectures and mentoring.
- Diversify your skills and knowledge – get a taste of the different education disciplines with our directed course list.

Career Opportunities

Careers in education can be quite diverse and go beyond becoming a teacher at various levels of education. Additional roles include community educator, educational consulting, curriculum development, policy analyst, research, materials developer, evaluator or administrator.

See the website for more information about this diploma

Central Coast campus, Ourimbah

Engineering

The role of an engineer is ever-changing. From building complex computer systems and influencing the infrastructure we use every day, to finding new ways to harness energy or even designing prosthetic limbs to help amputees – engineers play a critical role in overcoming the challenges our world faces. Challenges like food and water security, climate change, data protection and the increasing impact growing populations have on society. As a global leader in engineering higher education, including being ranked No. 13 in the world for Automation and Control Engineering, this is the place to develop world-changing solutions.

Discover Engineering degrees

GE3

One of only three Australian member institutions of the GE3 - Global Engineering Education Exchange program

Ranked 13

in the world - Automation and Control[1]

No. 1

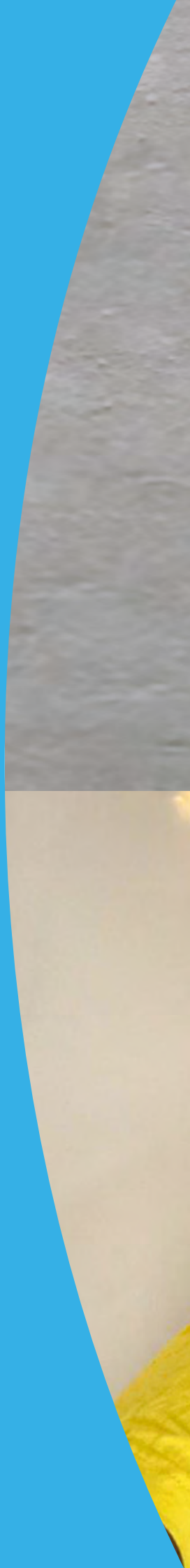
in NSW for student support (Undergraduate Engineering)[2]

Degree options

Bachelor of Aerospace Systems Engineering (Honours)
Bachelor of Chemical Engineering (Honours)
Bachelor of Civil Engineering (Honours)
Bachelor of Computer Systems Engineering (Honours)
Bachelor of Electrical and Electronic Engineering (Honours)
Bachelor of Engineering (Mining Transfer Program)
Bachelor of Environmental Engineering (Honours)
Bachelor of Mechanical Engineering (Honours)
Bachelor of Mechatronics Engineering (Honours)
Bachelor of Medical Engineering (Honours)
Bachelor of Renewable Energy Engineering (Honours)
Bachelor of Software Engineering (Honours)
Bachelor of Surveying (Honours)
Diploma in Engineering

Also consider

Bachelor of Business
Bachelor of Mathematics
Bachelor of Science
Bachelor of Environmental Science and Management



1 ShanghaiRanking's Global Ranking of Academic Subjects 2020.
2 The Good Universities Guide 2021.

"Coming from a trade background, starting at university for me was an opportunity to diversify my skillset and challenge myself. I truly believe that my experience of entering university through a non-traditional pathway was made possible by the inclusivity and opportunities offered by the University of Newcastle."

Nicholas
Bachelor of Mechanical Engineering (Honours)
Bachelor of Business

"As an international student it was daunting to travel halfway across the world to a place I had never been, and had no family. However, it's a decision I'm happy I made. The University of Newcastle has been a great place to study. There's a lot of support provided from both the institution as a whole, as well as from lecturers and fellow students."

Qyto
Bachelor of Surveying (Honours)

Bachelor of

Aerospace Systems Engineering (Honours)

2022 Selection Rank	Duration
80.00 | Median 85.75	4 yrs FT / 10 yrs PT

UAC Code	**Location**
482707	Newcastle – Callaghan
Assumed knowledge	Mathematics (Advanced) (Band 5 or 6) and at least one science-related subject (Biology, Physics or Chemistry preferred)
Recommended studies	Mathematics (Extension 1)

Aerospace systems engineering involves a systems approach to the design, efficient operation, modification, and sustainment of high-tech devices for the aerospace and defence industries. A key challenge for the development of aerospace systems is the need to be as light-weight as possible, yet highly reliable. Aerospace systems engineers need to understand and control the response of aerospace systems to complex interactions between airframes, propulsion systems, sensors, controllers, actuators, avionics and other subsystems, as well as environmental factors to ensure trouble-free, safe and efficient operations that meet customer/operator requirements. Aerospace systems engineering principles deal with the complementary design of aircraft, their subsystems and other support systems to ensure they work in unison, without conflict and to ensure the high levels of reliability required in aerospace operations. The University of Newcastle is an Associate Member of the Group of Eight for Engineering.

What you will study

The University of Newcastle works closely with aerospace systems industry leaders like Boeing, Lockheed Martin, BAE Systems and defence to provide students with authentic real-world experiences and project work. Become job-ready by building critical, technical engineering skills in:

- Aerospace System Design
- Aircraft Operations and Performance
- Aircraft Systems and Avionics
- Airframe and Propulsion Systems
- Embedded Systems Engineering
- Flight Dynamics and Control

During your final year of study you'll have the opportunity to participate in a research project.

Practical experience

All University of Newcastle engineering students have the opportunity to complete 12 weeks of industrial experience during their degree. This can be completed in one block or as shorter placements of no less than two weeks. Through your work placement you'll build important professional networks and put your learning into practice.

Career opportunities

Aerospace engineers are typically employed by national and international airlines, aerospace systems prime contractors, aircraft design and manufacturing companies, airworthiness organisations and the Australian Defence Force.

University of Newcastle Aerospace Systems Engineering graduates will also be well equipped to take up opportunities in systems engineering, mechanical and mechatronics engineering in other industries.

Typical positions include:

- Aerospace Systems Engineer
- Satellite Engineer
- Systems Engineer
- Various positions within aircraft design and manufacturing companies, Australian and international airlines, airworthiness organisations and the Australian Defence Force.

Professional recognition

This program has been accorded conditional provisional accreditation through Engineers Australia.

Combine this degree with

- Mechanical Engineering
- Mechatronic Engineering

See the website for more information about this degree

Bachelor of

Chemical Engineering (Honours)

2022 Selection Rank	Duration
80.00 | Median 88.00	4 yrs FT / 10 yrs PT

UAC Code	**Location**
482600	Newcastle – Callaghan
Assumed knowledge	Mathematics (Advanced) (Band 5 or 6) and at least one science-related subject
Recommended studies	Mathematics (Extension 1)

Chemical Engineering is about designing efficient processes to produce, utilise, transport and transform materials and energy. Chemical engineers work in a vast range of industries, including both large-scale industries such as mineral processing and energy generation, down to the production of consumer products such as food and cosmetics. As a Chemical Engineer, you will apply the fundamental principles of physics and chemistry, and more specialised disciplines such as bionanotechnology, to analyse and design processes, plants and control systems for productivity, safety and sustainability. You could work as a Process Engineer efficiently recovering iron ore from raw mine feed, on developing sustainable biofuel production for remote communities, or on removing heavy metals or other harmful substances from groundwater.

What you will study

Become job-ready through four professional practice courses and diversify your skills with an elective pathway. Build critical technical engineering skills in:

- Fluid Mechanics
- Green Engineering and Sustainability Processes
- Heat Transfer and Design of Energy Systems
- Kinetics and Reaction Engineering
- Mass Transfer and Separation Processes
- Thermodynamics

Become job-ready by studying our professional practice courses. You'll learn to tackle 'wicked problems' and develop essential workplace skills in finance, project management, sustainability, communication and entrepreneurship.

Practical experience

All University of Newcastle engineering students must complete 12 weeks of professional practice during their degree. Through your work placement, you'll build important professional networks and put your learning into practice.

Career opportunities

Chemical engineers are employed in a wide range of industries. They may be involved in creating products like plastics, fertilisers, consumables, pharmaceuticals and paints. They might also work to develop fields such as environmental control, resource utilisation, minerals processing, renewable energy, waste management and recycling. Average starting salaries for engineers are more than $80,000 per annum.

Typical positions include:

- Biotechnology Engineer
- Chemical Safety Manager
- Environmental Remediation Engineer
- Mineral Processing Engineer
- Nuclear Engineer
- Water Treatment Designer

Professional recognition

Our degree is accredited through Engineers Australia and the Institution of Chemical Engineers (UK), meaning graduates have greater opportunities for international mobility. Students who successfully complete the Bachelor of Chemical Engineering (Honours) are eligible to apply for membership to the Institution of Chemical Engineers.

Combine this degree with

- Bachelor of Business
- Bachelor of Mathematics
- Bachelor of Science

See the website for more information about this degree

Bachelor of

Civil Engineering (Honours)

2022 Selection Rank	Duration
80.00 | Median 88.30	4 yrs FT / 10 yrs PT

UAC Code 482610	**Location** Newcastle – Callaghan
Assumed knowledge	Mathematics (Advanced) (Band 5 or 6) and at least one science-related subject
Recommended studies	Mathematics (Extension 1)

Civil engineers are responsible for the physical infrastructure that enables modern societies to function. Buildings, highways and railways, tunnels, airports, water supply and drainage, power generation facilities and harbour facilities are all designed, built and managed by civil engineers. We educate our engineers to meet the global challenges of the future. With a Bachelor of Civil Engineering (Honours), you could engineer energy efficient buildings, or help develop sustainable and resilient infrastructure in developing countries. You might even design Australia's first high-speed train network to connect communities and reduce carbon emissions.

What you will study

All of our civil engineering students complete courses in the three core civil specialisations of structural, water and geotechnical engineering, making them highly employable upon graduation. Become job-ready through four professional practice courses and diversify your skills with an elective pathway. Build critical, technical engineering skills in:

- Civil Engineering Materials
- Engineering Management
- Geomechanics
- Structural Engineering
- Transportation Engineering
- Water Engineering

Practical experience

All University of Newcastle engineering students must complete 12 weeks of professional practice during their degree. Through your work placement you'll build important professional networks and put your learning into practice.

Career opportunities

Our graduates enjoy great employment prospects with 94.1% securing jobs within four months of completing their degree. Civil engineers work for construction companies, consulting firms, project management companies, transport companies and governments.

Some typical positions include:

- Civil Engineering Designer
- Geotechnical Engineer
- Stormwater Engineer
- Structural Engineer
- Transport Systems Engineer
- Urban Development Engineer

Students have the option for further study with a Master of Professional Engineering.

Professional recognition

Recognition through Engineers Australia and the Washington Accord qualifies you as a professional engineer.

Combine this degree with

- Bachelor of Business
- Bachelor of Environmental Engineering (Honours)
- Bachelor of Mathematics
- Bachelor of Surveying (Honours)

See the website for more information about this degree

Bachelor of

Computer Systems Engineering (Honours)

2022 Selection Rank	Duration
80.00 | Median 92.25	4 yrs FT / 10 yrs PT

UAC Code 482630	**Location** Newcastle – Callaghan
Assumed knowledge	Mathematics (Advanced) (Band 5 or 6) and at least one science-related subject (Physics or Chemistry preferred)
Recommended studies	Mathematics (Extension 1)

As a computer systems engineer, you'll combine creativity and problem-solving with your interest in computing and networks. Graduates have a unique skill set in hardware design, software design, communications systems, and networks. These skills are essential in rapidly growing fields like the Internet of Things, autonomous vehicles, and machine learning. With a Bachelor of Computer Systems Engineering (Honours), you might find yourself developing advanced computing hardware and software for diverse industrial sectors including intelligent transport, e-health, aviation, and civic infrastructure, which are the building blocks of modern society.

What you will study

Become job ready through four professional practice courses and diversify your skills with an elective pathway.

Build critical technical engineering skills in:

- Communication Networks
- Computer and Electrical Engineering
- Cyber Security
- Electronics Design
- Embedded Systems
- Internet of Things
- Programmable Logic Design
- Software Engineering

Practical experience

All University of Newcastle engineering students must complete 12 weeks of professional practice during their degree. Through your work placement you'll build important professional networks and put your learning into practice.

Career opportunities

Computer systems engineering is flexible and diverse. Graduates might choose to focus on hands-on fieldwork, design and development, or pursue a leadership role managing people and projects.

Average starting salaries for engineers are more than $80,000 per annum.

Some typical positions include:

- Cloud Computing Engineer
- Computer Systems Analyst
- Computer Systems Engineer
- Computer Systems Specialist
- Cyber Security Engineer
- Electronics Engineer
- Embedded Systems Developer
- Information and Communications Technologist Engineer
- Information Technology Manager
- Network Engineer
- Web Developer

Professional recognition

Recognition through Engineers Australia and the Australian Computer Society. You will be qualified as a professional engineer who can work almost anywhere in the world.

Combine this degree with

- Bachelor of Computer Science
- Bachelor of Electrical and Electronic Engineering (Honours)
- Bachelor of Mathematics
- Bachelor of Science (Physics major)

See the website for more information about this degree

Bachelor of

Electrical and Electronic Engineering (Honours)

2022 Selection Rank	Duration
80.00 | Median 95.95	4 yrs FT / 10 yrs PT

UAC Code	Location
482640	Newcastle – Callaghan

Assumed knowledge	Mathematics (Advanced) (Band 5 or 6) and at least one science-related subject (Physics or Chemistry preferred)
Recommended studies	Mathematics (Extension 1)

Engineers solve problems and develop technology using mathematics, science and creativity for the advancement of humanity. Electrical and electronic technologies are at the heart of our world and our future, including things like alternative energy systems, high speed wireless data communications, electrical transportation systems, micro and nano-electronics, robotics and automation, and medical technologies. Electrical and electronic engineers work on both the hardware and software (the intelligence) behind the myriad of devices essential to address the needs of modern society.

What you will study

Build critical technical and engineering skills in:

- Analog and Digital Communications
- Electric Energy Systems
- Electric Machines and Power Systems
- Electrical Engineering Design
- Procedural Programming
- Signals and Systems

You will tackle real-world challenges through professional practice courses and diversify your skills with an elective pathway. Advance your career and gain a Master of Professional Engineering in just 1 year on top of your combined engineering degree.

Practical experience

All University of Newcastle engineering students have the opportunity to complete 12 weeks of industrial experience during their degree. This can be completed in one block or as shorter placements of no less than two weeks. Through your work placement you'll build important professional networks and put your learning into practice.

Career opportunities

You might focus on electronics engineering, automation and control engineering, robotic engineering or power generation and distribution. Our graduates enjoy great employment prospects with 93.3% securing jobs within four months of completing their degree.

Some typical positions include:

- Automatic Systems Designer
- Biomedical Instrumentation Designer
- Electrical Design Engineer
- Embedded System Designer
- Renewable Energy Systems Engineer
- Robotics Engineer
- Telecommunications Equipment Designer

Students have the option for further study with a Master of Professional Engineering. Remarkably, engineering is the most commonly held degree among the highest performing Fortune 500 CEOs – the CEOs of companies such as Google, Microsoft, Amazon and Tesla Motors are all engineers.

Professional recognition

Professional recognition through Engineers Australia and the Washington Accord qualifies you as a professional engineer.

Combine this degree with

- Bachelor of Business
- Bachelor of Computer Systems Engineering (Honours)
- Bachelor of Mathematics
- Bachelor of Mechatronics Engineering (Honours)
- Bachelor of Science

See the website for more information about this degree

Bachelor of

Engineering (Mining Transfer Program)

2022 Selection Rank	Duration
80.00 | Median 83.73	4 yrs FT / 10 yrs PT

UAC Code	Location
482720	Newcastle – Callaghan

Assumed knowledge	Mathematics (Advanced) (Band 5 or 6) and at least one science-related subject (Physics or Chemistry preferred)
Recommended studies	Mathematics (Extension 1)

Mining engineering is the design, supervision and management of coal, mineral and metal mines and their associated infrastructure, with minimal damage to environments. You'll gain a sound understanding of civil and mining engineering concepts in preparation for a career as a professional engineer. Ranked 23 in the World for Mineral and Mining Engineering, the mining engineering program involves two years of study at The University of Newcastle with the remaining two years undertaken at the University of New South Wales or the University of Wollongong.

What you will study

The first two years of the program will focus on:

- Civil Engineering Materials
- Computer Programming and Numerical Methods
- Engineering Risk
- Geology and Geomechanics
- Mathematics and Physics
- Structural and Fluid Mechanics
- Surveying
- Surveying and Transportation Engineering Design
- Sustainable Engineering Practice

Towards the end of second year, you may apply through UAC to complete your degree at UNSW or UOW. If you don't wish to transfer, your other option is to move into The University of Newcastle's Bachelor of Civil Engineering (Honours) and receive full credit for courses you have already completed.

Practical experience

Your Practical experience will be undertaken during the final two years of study, and those two years will be at your chosen transfer university. Through your work placement you'll build important professional networks and put your learning into practice.

Career opportunities

Large and multinational companies dominate the mining sector, this is typically where you will gain employment. Some typical positions include:

- Development Superintendent
- Mining Engineer
- Mining Superintendent
- Strategic Mine Planning Engineer
- Underground Mining Engineer
- Process Engineer

Professional recognition

If you complete your degree in Mining Engineering at UNSW or UOW, you will qualify for professional recognition through Engineers Australia – enabling graduates to have greater opportunities for international mobility.

See the website for more information about this degree

Bachelor of

Environmental Engineering (Honours)

2022 Selection Rank	Duration
80.00 | Median 89.20	4 yrs FT / 10 yrs PT

UAC Code	**Location**
482650	Newcastle – Callaghan
Assumed knowledge	Mathematics (Advanced) (Band 5 or 6) and at least one science-related subject (Physics or Chemistry preferred)
Recommended studies	Mathematics (Extension 1)

As an environmental engineer you may help rehabilitate land impacted by mining or work on the clean-up of an oil spill that threatens ecosystems. You could even help prevent flooding of some of the world's fast-growing cities in the face of climate change. Environmental engineers apply their knowledge of chemistry, geomechanics, hydrology and land surface processes to find solutions to complex environmental problems. With a Bachelor of Environmental Engineering (Honours), you'll be responsible for developing sustainable engineering practices that have a profound impact on health and quality of life – working with other specialists to optimise the use of resources and minimise long-term environmental impacts.

What you will study

Become job-ready through professional practice courses and diversify your skills with an elective pathway. Build critical technical and engineering skills in:

- Environmental Chemistry
- Environmental Legislation and Planning
- Fluid Mechanics
- Hydrobiological Modelling
- Land Surface Process and Management
- Water Engineering

Practical experience

All University of Newcastle engineering students must complete 12 weeks of professional practice during their degree. Through your work placement, you'll build important professional networks and put your learning into practice.

Career opportunities

Environmental engineering is flexible and diverse. You may prefer hands-on fieldwork, design and development, or a leadership role managing people and projects. Our graduates enjoy great employment prospects with 95.5% securing jobs within four months of completing their degree.

Some typical positions include:

- Climate Change Impact Consultant
- Environmental Impact Consultant
- Environmental Remediation Engineer
- Sustainable Fisheries Consultant
- Toxic Materials Control Engineer
- Water Reclamation Project Designer

Professional recognition

Professional recognition through Engineers Australia and the Washington Accord qualifies you as a professional engineer, meaning graduates have greater opportunities for international mobility.

Combine this degree with

- Bachelor of Civil Engineering (Honours)
- Bachelor of Science

See the website for more information about this degree

Bachelor of

Mechanical Engineering (Honours)

2022 Selection Rank	Duration
80.00 | Median 84.28	4 yrs FT / 10 yrs PT

UAC Code	**Location**
482670	Newcastle – Callaghan
Assumed knowledge	Mathematics (Advanced) (Band 5 or 6) and at least one science-related subject (Physics or Chemistry preferred)
Recommended studies	Mathematics (Extension 1)

Mechanical engineers mobilise, connect, and power our society. They design, manufacture and optimise specialist machines and processes. They solve important problems using CAD, robotics, new advanced materials, the fundamental laws of energy generation and transmission and the computer control of physical systems – from nano to mega-tonne scale. Mechanical Engineering is at the heart of many aeronautical, motorsport and manufacturing degrees. With a Bachelor of Mechanical Engineering (Honours), you could design self-driving farm machinery for ultra-efficient food production, or build revolutionary biomechanical solutions for people with disabilities.

What you will study

Mechanical engineering is the broadest of all engineering disciplines. You will gain essential workplace skills with professional practice courses and diversify your capabilities with an elective pathway. You will develop critical technical and professional skills in:

- Advanced Materials and Manufacturing
- Bulk Solids Handling
- Computer-Aided Engineering, including CAD Modelling and Drawing
- Design of Machines and Systems
- Fluid Dynamics
- Fundamental Mathematics and Physics
- Mechanics of Materials, Structures, and Machinery
- Thermodynamics

Practical experience

All University of Newcastle engineering students must complete 12 weeks of professional practice during their degree. Through your work placement, you'll build important professional networks and put your learning into practice.

Career opportunities

Almost all industries need mechanical engineers and 94.1% of graduates find work within four months of completing this degree. They work in medical, transport, aerospace, electronics, mining, renewable energy, robotics, automation and advanced manufacturing industries.

Some typical positions include:

- Engineering Project Manager
- Mechanical Engineering Designer
- Mechanical Systems Supervisor
- Mechanical Technology Engineer
- Operating Plant Manager

Students have the option for further study with a Master of Professional Engineering.

Professional recognition

Professional recognition through Engineers Australia and the Washington Accord qualifies you as a professional engineer, meaning graduates have greater opportunities for international mobility.

Combine this degree with

- Bachelor of Business
- Bachelor of Mathematics
- Bachelor of Mechatronics Engineering (Honours)
- Bachelor of Science

See the website for more information about this degree

Bachelor of

Mechatronics Engineering (Honours)

2022 Selection Rank	Duration
80.00 | Median 89.10	4 yrs FT / 10 yrs PT

UAC Code	**Location**
482680	Newcastle – Callaghan
Assumed knowledge	Mathematics (Advanced) (Band 5 or 6) and at least one science-related subject (Physics or Chemistry preferred)
Recommended studies	Mathematics (Extension 1)

The Bachelor of Mechatronics Engineering (Honours) focuses on the synergy of electrical, computer and mechanical technologies that lead to new solutions to industrial problems. You might build robots or unmanned aircraft, design bionic implants or even energy harvesting equipment. Mechatronics engineers are involved in the technical design, automation and operational performance of the electromechanical systems used in industries such as defence, advanced manufacturing, mining and health.

What you will study

Gain essential workplace skills with professional practice courses and build critical technical and engineering skills in:

- Computer-Integrated Manufacturing
- Electronic Design
- Mechatronics Design
- Microprocessor Systems
- Modelling and Simulation
- Sensors and Actuators

Practical experience

All University of Newcastle engineering students must complete 12 weeks of professional practice during their degree. Through your work placement, you'll build important professional networks and put your learning into practice.

Career opportunities

Mechatronic engineers play an essential role in a growing number of fields. Our graduates enjoy great job prospects with 94.1% securing work within four months of completing their degree. They might take up careers in the robotics, aerospace, chemical, defence, automotive, marine, manufacturing, mining or finance industries.

Some typical positions include:

- Avionics Engineer
- Data Communications Engineer
- Industrial Automation Engineer
- Robotics Designer
- Smart Infrastructure Designer

Professional recognition

Professional recognition through Engineers Australia and the Washington Accord qualifies you as a professional engineer, meaning graduates have greater opportunities for international mobility.

Combine this degree with

- Bachelor of Electrical and Electronic Engineering (Honours)
- Bachelor of Mathematics
- Bachelor of Mechanical Engineering (Honours)

See the website for more information about this degree

Bachelor of

Medical Engineering (Honours)

2022 Selection Rank	Duration
80.00 | Median 97.03	4 yrs FT / 10 yrs PT

UAC Code	**Location**
482690	Newcastle – Callaghan
Assumed knowledge	Mathematics (Advanced) (Band 5 or 6) and at least one science-related subject (Biology, Physics or Chemistry preferred)
Recommended studies	Mathematics (Extension 1)

Medical engineering is a new and exciting discipline of engineering spanning medicine, biomedical science and engineering. Medical engineers seek to improve human health through the development and design of equipment, devices, computer systems and software. A degree in medical engineering allows you to combine your interest in health and medicine with creativity and problem-solving to address health care challenges such as metabolic disorders, remote diagnostics, and health care accessibility. We offer the only medical engineering degree in NSW, so our graduates are uniquely placed to improve lives both locally and around the world.

What you will study

Build critical medical and engineering skills through courses in:

- Analog and Digital Communications
- Electrical Engineering Design
- Electronics Design
- Fluid Mechanics
- Human Pathophysiology
- Neurobiology
- Pharmacology
- Programming and Computing

Choose one of the following majors:

- Biomechanics
- Medical Devices

You'll also be able to diversify your skills through courses that can be used to:

- Deepen your technical competence in your engineering/health field
- Broaden your expertise in another area of engineering
- Specialise your skills in areas outside engineering, such as business or communications
- Study overseas at one of our many partner institutions

Practical experience

All University of Newcastle engineering students must complete 12 weeks of professional practice during their degree. Through your work placement, you'll build important professional networks and put your learning into practice.

Career opportunities

Depending on your area of specialisation, you could work with:

- Artificial Organs
- Biomedical Devices
- Diagnostic Equipment
- Dialysis Equipment
- Implantable Devices
- Nanotechnology Drug Delivery
- Prosthetic Limbs
- Radiotherapy Equipment
- Rehabilitation Systems
- Respirators and Ventilators
- Surgical Equipment
- Systems and Diagnostic Tests

See the website for more information about this degree

Bachelor of

Renewable Energy Engineering (Honours)

2022 Selection Rank	Duration
80.00 | Median 96.93	4 yrs FT / 10 yrs PT

UAC Code	**Location**
482708	Newcastle – Callaghan
Assumed knowledge	Mathematics (Advanced) (Band 5 or 6) and at least one science-related subject (Biology, Physics or Chemistry preferred)
Recommended studies	Mathematics (Extension 1)

One of the biggest challenges humankind faces is the transition to a renewable energy economy. The success of this evolution depends on the creative solutions of a new generation of renewable energy engineers with specialised skills. Spanning the disciplines of chemical, electrical and mechanical engineering, the Bachelor of Renewable Energy Engineering (Honours) will equip you to work across the whole spectrum of technologies for renewable energy capture, conversion, storage, delivery and management. You'll also choose courses in related areas of climate change policy, law and economics and environmental sciences.

What you will study

Build critical technical skills in:

- Bioenergy
- Energy Storage Systems
- Geothermal, Hydro, Ocean and Hybrid Systems
- Power Electronics and Renewable Energy Systems
- Solar and Wind

Become job-ready through four professional practice courses and diversify your skills with an elective pathway.

Practical experience

All University of Newcastle engineering students must complete 12 weeks of professional practice during their degree. Through your work placement, you'll build important professional networks and put your learning into practice.

Career opportunities

Typical jobs include:

- Energy Accounting/Auditing
- Energy Management Consultant
- Energy Policy Development Officer
- Renewable Energy Engineer
- Renewable Energy Innovation
- Renewable Energy Systems Design

Professional recognition

This program has been granted provisional accreditation through Engineers Australia.

See the website for more information about this degree

Bachelor of

Software Engineering (Honours)

2022 Selection Rank	Duration
80.00 | Median 80.98	4 yrs FT / 10 yrs PT

UAC Code	**Location**
482700	Newcastle – Callaghan
Assumed knowledge	Mathematics (Advanced) (Band 5 or 6) and at least one science-related subject (Physics or Chemistry preferred)
Recommended studies	Mathematics (Extension 1)

Software engineering is behind much of the everyday technology we take for granted – from our iPads, computer software and mobile phones through to digital televisions, computer games and online banking. With the Bachelor of Software Engineering (Honours), you might develop software for digital forensics analysis to help fight crime or work in defence and combat cyber-attacks. You could design wearable health management devices or write software that powers e-commerce websites.

What you will study

Become job-ready through professional practice courses and diversify your skills with an elective pathway. Build critical technical and engineering skills in:

- Database Management Systems
- Enterprise Software Architectures
- Formal Languages and Automata
- Professional Engineering Principles and Practices
- Programming Languages and Paradigms
- Software Architecture and Quality Management
- Software Development
- Web Engineering

Practical experience

All University of Newcastle engineering students must complete 12 weeks of professional practice during their degree. Through your work placement, you'll build important professional networks and put your learning into practice.

Career opportunities

Our graduates enjoy great employment prospects with 94.1% securing jobs within four months of completing their degree. Software engineering is flexible and diverse. Software engineers play a vital role in a wide range of industries such as defence and security, aerospace, computer games and entertainment as well as government and commerce.

Some typical positions include:

- Applications Software Developer
- Information System Manager
- Internet and Web Engineer
- Software Development Manager
- Software Engineer
- System Analyst and Designer

Professional recognition

Professional recognition through Engineers Australia and the Australian Computer Society means graduates will be qualified as professional engineers. Graduates will have greater opportunities for international mobility.

See the website for more information about this degree

Bachelor of
Surveying (Honours)

2022 Selection Rank	Duration
76.00 | Median 81.50	4 yrs FT / 10 yrs PT

UAC Code	Location
482705	Newcastle – Callaghan

Assumed knowledge	Mathematics (Advanced) (Band 5 or 6) and at least one science-related subject
Recommended studies	Mathematics (Extension 1)

Surveyors specialise in the measurement, management, analysis and display of spatial information describing the Earth and its physical features. Surveyors play a vital role for the community and economy, being the only people legally permitted to define land boundaries. The work of surveyors knows no bounds and could see you play an important role both locally and globally. With the Bachelor of Surveying (Honours), you could be involved in projects like creating new land development sites, constructing 3D building models, building new tunnels in urban areas, or mapping of flood areas for disaster preparedness. Your work as a surveyor could even see you involved in the prediction of earthquakes, surveying of the ocean floor or mapping the surface of the moon.

What you will study
Become job-ready through professional practice courses and diversify your skills with an elective pathway. Build critical technical and surveying skills in:

- Geodesy
- Hydrology and Water Engineering
- Industrial and Cadastral Surveying
- Land and Mining Surveying
- Legal Systems and Processes for Land Management
- Modern Surveying Techniques and Computations
- Photogrammetry and Laser Scanning
- Satellite Positioning
- Spatial Data Systems and Remote Sensing
- Town Planning

Practical experience
All University of Newcastle surveying students must complete 12 weeks of professional practice during their degree. Through your work placement, you'll build important professional networks and put your learning into practice.

Career opportunities
Our graduates enjoy great job prospects with 93.8% finding work within four months of completing their degree. Surveyors are involved in the planning of almost all development and mapping of the land and earth. A shortage of surveyors in Australia means employment will be easy to find.

Typical positions include:

- Engineering Surveyor
- Geodesist
- Geographic Information Systems Specialist
- Geospatial Specialist
- Hydrographic Surveyor
- Mining Surveyor
- Photogrammetrist
- Registered Land Surveyor
- Town Planning

Professional recognition
This degree program is accredited by the Council of Reciprocating Surveying Boards of Australia and New Zealand (CRSBANZ) and accepted by the Board of Surveying and Spatial Information of NSW (BOSSI) as a qualification for registration. This degree program is also accredited and recognised by the Land Surveyors Board, Malaysia Board and the Singapore Institute of Surveyors and Valuers (Land Surveying Division).

Combine this degree with
- Bachelor of Business
- Bachelor of Civil Engineering (Honours)

See the website for more information about this degree

Diploma in
Engineering

2022 Selection Rank	Duration
50.00 | Median 58.20	1 yr FT / 4 yrs PT

UAC Code	Location
489920	Newcastle – Callaghan

Recommended studies	Mathematics (Standard or Advanced)

The Diploma in Engineering gives you a taste of engineering specialities to help you choose your engineering pathway. The program has a practical orientation, allowing students to develop their skills for further tertiary studies through real world projects and laboratories. It is also a great way to get into an undergraduate degree if you didn't quite meet the entry requirements. The Diploma in Engineering offers a guaranteed entry pathway into all disciplines of the Bachelor of Engineering (Honours) program where you can receive up to 80 units of credit.

What you will study
The Diploma in Engineering has been designed to deliver a core knowledge base that prepares you with the appropriate academic literacy, research, science, mathematics and introductory engineering skills required for further study. You will complete a short list of core and directed courses, providing you with a taste of one of two discipline areas within our 12 engineering specialisations.

Develop skills in:

- Electrical Engineering
- Engineering Computations and Procedural Programming
- Engineering Mechanics
- Engineering Physics
- Mathematics for Engineering, Science and Technology
- Mechanical Engineering Design
- Professional Engineering

Practical experience
You will connect with industry through projects, guest lectures, and mentoring

Career opportunities
The Diploma in Engineering prepares students for a range of entry level engineering career options; and provides you with a foundation to enable you for further studies associated with a Bachelor of Engineering (Honours) program.

See the website for more information about this diploma

Combined degrees

Bachelor of Chemical Engineering (Honours)/Bachelor of Business
Complement your technical skills with business acumen. Learn how to manage people and projects, start a consulting firm and manage a business. Prepare yourself for a leadership role with this unique package of capabilities.

Bachelor of Chemical Engineering (Honours)/ Bachelor of Mathematics
Deepen your technical skills with advanced maths courses. Mathematics is fundamental to break-through engineering and can open up new, complementary fields like data mining, mathematical modelling, statistics and predictive analysis.

Bachelor of Chemical Engineering (Honours)/Bachelor of Science
Deepen your technical skills with comprehensive chemistry courses which are available in the Bachelor of Science. Chemistry is fundamental to chemical engineering and a deeper knowledge of this science can open up opportunities in toxicology, pharmacy, biochemistry, bio-engineering, forensics and research.

Bachelor of Civil Engineering (Honours)/Bachelor of Business
Complement your technical skills with business acumen. Learn how to manage people and projects, start a consulting firm and manage a business. Prepare yourself for a leadership role with this unique package of capabilities.

Bachelor of Civil Engineering (Honours)/ Bachelor of Environmental Engineering (Honours)
The environmental engineering courses will develop your knowledge of chemistry, geomechanics, hydrology and land surfaces, allowing you to find solutions for complex environmental problems, such as water pollution and soil erosion.

Bachelor of Civil Engineering (Honours)/Bachelor of Mathematics
Deepen your technical skills with advanced maths courses. Mathematics is fundamental to break-through engineering and can open up new, complementary fields like data mining, mathematical modelling, statistics and predictive analysis.

Bachelor of Civil Engineering (Honours)/ Bachelor of Surveying (Honours)
Broaden your engineering expertise to open up a wider range of career opportunities. The surveying courses will allow you to specialise in the measurement, management, analysis and display of spatial information describing the Earth and its physical features.

Bachelor of Computer Systems Engineering (Honours)/ Bachelor of Computer Science
Open up opportunities in fields such as artificial intelligence, robotics, computer graphics, digital forensics, bioinformatics, web development and data security. You'll be the ultimate well-rounded computing professional.

Bachelor of Computer Systems Engineering (Honours)/ Bachelor of Mathematics
Deepen your technical skills with advanced maths courses. Mathematics is fundamental to break-through engineering and can open up new, complementary fields like data mining, mathematical modelling, statistics and predictive analysis.

Bachelor of Computer Systems Engineering (Honours)/ Bachelor of Science
Deepen your technical skills with comprehensive physics courses which are available in the Bachelor of Science. Physics is fundamental to engineering and a deeper knowledge of this science can help you solve more complex engineering problems. This advanced theoretical background will also open up opportunities in research and development.

Bachelor of Electrical and Electronic Engineering (Honours)/ Bachelor of Business
Complement your technical skills with business acumen. Learn how to manage people and projects, start a consulting firm and manage a business. Prepare yourself for a leadership role with this unique package of capabilities.

Bachelor of Electrical and Electronic Engineering (Honours)/ Bachelor of Computer Systems Engineering (Honours)
Broaden your engineering expertise to open up a wider range of career opportunities. Your skills in computer systems engineering will help you to combine creativity with technology to develop both hardware and software for electronic and microprocessor-based systems.

Bachelor of Electrical and Electronic Engineering (Honours)/ Bachelor of Mathematics
Deepen your technical skills with advanced maths courses. Mathematics is fundamental to break-through engineering and can open up new, complementary fields like data mining, mathematical modelling, statistics and predictive analysis.

Bachelor of Electrical and Electronic Engineering (Honours)/ Bachelor of Science
Deepen your technical skills with comprehensive physics courses which are available in the Bachelor of Science. Physics is fundamental to engineering and a deeper knowledge of this science can help you solve more complex engineering problems. This advanced theoretical background will also open up opportunities in research and development.

Bachelor of Environmental Engineering (Honours)/ Bachelor of Science
Chemistry and biology are both fundamental to engineering and a deeper knowledge of these sciences can help you solve more complex engineering problems. This advanced theoretical background will also open up opportunities in research and development.

Bachelor of Mechanical Engineering (Honours)/Bachelor of Business
Complement your technical skills with business acumen. Learn how to manage people and projects, start a consulting firm and manage a business. Prepare yourself for a leadership role with this unique package of capabilities.

Bachelor of Mechanical Engineering (Honours)/ Bachelor of Mathematics
Deepen your technical skills with advanced maths courses. Mathematics is fundamental to break-through engineering and can open up new, complementary fields like data mining, mathematical modelling, statistics and predictive analysis.

Bachelor of Mechanical Engineering (Honours)/ Bachelor of Mechatronics Engineering (Honours)
Broaden your engineering expertise to open up a wider range of career opportunities. Your skills in mechatronics engineering will provide a synergy between electrical, computer and mechanical technologies, allowing you to develop electromechanical solutions to industrial problems.

Bachelor of Mechanical Engineering (Honours)/Bachelor of Science
Deepen your technical skills with comprehensive physics courses which are available in the Bachelor of Science. Physics is fundamental to engineering and a deeper knowledge of this science can help you solve more complex engineering problems. This advanced theoretical background will also open up opportunities in research and development.

Bachelor of Mechatronics Engineering (Honours)/Bachelor of Electrical and Electronic Engineering (Honours)
Broaden your engineering expertise to open up a wider range of career opportunities. Your skills in electrical and electronic engineering will provide expertise in the design and building of systems and machines that generate, transmit, measure, control and use electrical energy essential to modern life.

Bachelor of Mechatronics Engineering (Honours)/ Bachelor of Mathematics
Deepen your technical skills with advanced maths courses. Mathematics is fundamental to break-through engineering and can open up new, complementary fields like data mining, mathematical modelling, statistics and predictive analysis.

Bachelor of Surveying (Honours)/Bachelor of Business
Complement your technical skills with business acumen. Learn how to manage people and projects, start a consulting firm and manage a business. Prepare yourself for a leadership role with this unique package of capabilities.

Health and Medicine

A long and healthy life is something we all strive for. The field of health and medical services is driven by passionate and caring people, motivated to improve, extend, and even save lives. Our ageing population and increasing rate of chronic illness means that we need more health professionals to provide life-changing treatment and preventative care. From researchers in labs, to doctors and nurses in hospitals and clinics, pharmacists, radiographers, physiotherapists and everyone in between – there's a wide range of dynamic, exciting professions to choose from.

Discover Health and Medicine degrees

Ranked 26

in the world - Nursing[1]

93.1%

of undergraduate Medicine graduates found full time employment within four months[2]

Top 10

in Australia for overall satisfaction for undergraduate Physiotherapy and Occupational Therapy students[3]

Degree options

Bachelor of Biomedical Science
Bachelor of Medical Radiation Science (Honours) (Diagnostic Radiography)
Bachelor of Medical Radiation Science (Honours) (Nuclear Medicine)
Bachelor of Medical Radiation Science (Honours) (Radiation Therapy)
Bachelor of Medical Science/Doctor of Medicine (Joint Medical Program)
Bachelor of Midwifery
Bachelor of Nursing
Bachelor of Nutrition and Dietetics (Honours)
Bachelor of Occupational Therapy (Honours)
Bachelor of Oral Health Therapy
Bachelor of Pharmacy (Honours)
Bachelor of Physiotherapy (Honours)
Bachelor of Podiatry
Bachelor of Public and Community Health
Bachelor of Speech Pathology (Honours)

Also consider

Bachelor of Biotechnology
Bachelor of Exercise and Sports Science
Bachelor of Food Science and Human Nutrition
Bachelor of Medical Engineering (Honours)
Bachelor of Psychological Science
Bachelor of Psychological Science (Advanced)

1 ShanghaiRanking's Global Ranking of Academic Subjects 2020.
2 Graduate Outcomes Survey 2019-2021.
3 Student Experience Survey 2019.

"I've had incredible placements where I've really been part of the medical team, working with doctors, nurses and allied health members. For me, being a medical student goes beyond just the hospital, and I'm fortunate to be the President of WakeUp, the global health society. I've even travelled to China as part of the University's Ma and Morley Scholarship Program."

Sam
Bachelor of Medical Science/Doctor of Medicine

"I'm from rural NSW and moved to Newcastle when I got accepted into the Ma and Morley Scholarship program. My favourite part of studying at the University is the lifelong friends that I have made through my degree and scholarship. At the end of my degree, I'll have a world-recognised accreditation rated as 'well above world standard' and look forward to moving overseas to work."

Abby
Bachelor of Medical Radiation Science (Honours) (Diagnostic Radiography)

"My degree links concepts such as cognition, mental health, statistics, and neuroscience to gain a comprehensive understanding of the human mind. I have access to a wealth of hands-on learning, which include participating in experimental lab work and problem-based workshops. This also gives me an opportunity to ask tutors and academics questions to enhance my learning."

Jacob
Bachelor of Psychological Science

Bachelor of

Biomedical Science

2022 Selection Rank	Duration
77.00 | Median 88.60	3 yrs FT / 8 yrs PT

UAC Code	Location
482100	Newcastle – Callaghan

Recommended studies	Mathematics (Standard or Advanced) and Chemistry and at least one of Physics or Biology

Bachelor of Biomedical Science graduates have the knowledge and skills to contribute to the global advancement of medical research, practice and policy. You'll have the opportunity to study a wide range of courses that provide advanced theoretical knowledge in physiology, anatomy, biochemistry, medical genetics and immunology. The range of courses maximises flexibility, enabling you to tailor your degree to your career aspirations in medical research, laboratory medicine or the health professions. Hands-on experience in clinical laboratories and industry environments is a key component of the Bachelor of Biomedical Science.

What you will study

Opportunities to study a wide range of courses are available through face-to-face and online learning. Core courses provide advanced theoretical knowledge in:

- Anatomy
- Biochemistry
- Immunology
- Medical Genetics
- Physiology

Choose from electives in your third year of study to prepare for your career in medical research, laboratory medicine or a clinical health profession.

Practical experience

Hone your skills using the highest quality equipment in our purpose-built $17.3 million multi-storey medical sciences precinct, including innovative laboratories. We also offer hands-on experience in industry environments.

Career opportunities

Graduates from the Bachelor of Biomedical Science can complete further studies in health and medicine, or work in a variety of industries including allied health, pharmaceutical, biotechnology industries, research or academia.

Some typical roles include:

- Clinical Research Coordinator
- Geneticist/Genetic Counsellor
- Laboratory Scientist
- Pharmaceutical Scientist
- Reproductive Medicine/IVF Specialist
- Science Educator

See the website for more information about this degree

Bachelor of

Medical Radiation Science (Honours) (Diagnostic Radiography)

2022 Selection Rank	Duration
95.00 | Median 99.95	4 yrs FT

UAC Code	Location
483355	Newcastle – Callaghan

Assumed knowledge	English (Standard or Advanced) and Mathematics (Standard or Advanced) or Physics

Diagnostic radiography is an important first step to diagnosing, treating and managing injuries and disease. Through the Bachelor of Medical Radiation Science (Honours) (Diagnostic Radiography), you'll learn how to use sophisticated technology to create medical images and analyse and manage patient health. Diagnostic radiographers work in a variety of public and private settings in metropolitan, regional and rural areas. The medical images you produce will allow accurate diagnosis and play an important role in improving patient outcomes in both acute and chronic presentations.

What you will study

This degree has a strong foundation in physical, biomedical and behavioural sciences. You will build essential clinical reasoning and patient management skills using our latest technologies and facilities.

Areas of study include:

- Anatomy and Physiology
- Clinical Education
- Instrumentation
- Physics
- Radiation Protection
- Statistics and Research Methodology

Practical experience

All students will undertake approximately 40 weeks of professional practice over the duration of the program. Placements will be in metropolitan and regional settings along with a mandatory rural placement as part of practical experience. You will also have access to the latest diagnostic radiography technologies on campus in our innovative laboratories at our purpose-built $17.3 million multi-storey medical sciences precinct.

Career opportunities

Our graduates enjoy great employment prospects, with 90% finding work soon after finishing their studies.

Some typical roles include:

- Chief Radiographer
- CT Radiographer
- Diagnostic Radiographer
- Medical Imaging Technologist
- MR Radiographer
- Sonographer

Professional recognition

Once you graduate, you are eligible to apply for registration with the Medical Radiation Practice Board of Australia under the Australian Health Practitioner Regulation Agency (AHPRA).

See the website for more information about this degree

Bachelor of

Medical Radiation Science (Honours) (Nuclear Medicine)

2022 Selection Rank	Duration
77.00 | Median 88.90	4 yrs FT

UAC Code	Location
483365	Newcastle – Callaghan

Assumed knowledge English (Standard or Advanced) and Mathematics (Standard or Advanced) or Physics

As a nuclear medicine scientist, you'll apply advanced medical imaging technologies and radioactive chemical compounds (called radiopharmaceuticals) to image and measure the function or physiology of the body. Nuclear medicine scientists use this knowledge to diagnose, treat and manage injuries and diseases such as sports injuries, cardiovascular disease and cancer in patients across their lifespan.

What you will study

This degree equips you with specialised scientific knowledge and gives you practical medical radiation experience.

Areas of study include:

- Anatomy
- Molecular Imaging
- Nuclear Medicine Instrumentation and Radiopharmacy
- Nuclear Medicine Theory
- Patient Care
- Physiology
- Psychology
- Statistics and Research Methodology

Practical experience

You will complete 42 weeks of clinical placement, supervised and mentored by qualified nuclear medicine scientists in both public and private centres, locally or across Australia. You will have access to world-class facilities and technology, such as our $1.5 million on-campus radiopharmacy laboratory.

Career opportunities

Our graduates are highly sought after and enjoy great job prospects with 89% finding work within four months of completing their degree.

Some typical roles include:

- Nuclear Medicine Scientist
- Nuclear Medicine Application Specialist
- PET/MRI Scientist
- Sonographer

Professional recognition

Our nuclear medicine graduates are eligible to apply for registration with the Medical Radiation Practice Board of Australia under the Australian Health Practitioner Regulation Agency (AHPRA).

See the website for more information about this degree

Bachelor of

Medical Radiation Science (Honours) (Radiation Therapy)

2022 Selection Rank	Duration
77.00 | Median 84.55	4 yrs FT

UAC Code	Location
483375	Newcastle – Callaghan

Assumed knowledge English (Standard or Advanced) and Mathematics (Standard or Advanced) or Physics

Radiation therapy uses specialised radiation technology to target, shrink and destroy cancer cells. The University of Newcastle is a leading radiation therapy trainer and our graduates are sought after worldwide. As a radiation therapist, you'll work in a multidisciplinary team to treat and manage cancer. You'll also have the opportunity to develop new techniques to improve patient outcomes. Studying a Bachelor of Medical Radiation Science (Honours) (Radiation Therapy) will set you on a path to make your mark on the world. The University of Newcastle Radiation Therapy degree boasts the latest Cancer Care technology and equipment and as of 2022, students will have the opportunity to engage with our global clinical partners through the newly established Global Centre for Research and Training in Radiation Oncology.

What you will study

You will gain professional radiation therapy skills through case-based training and interactive teamwork activities, integrating learning into real-life situations.

You will:

- Develop the necessary skills required to operate a linear accelerator to deliver a range of radiation treatment techniques whilst utilising technology such as surface tracking, image-guided RT KV and CBCT
- Use sophisticated software to develop custom radiation treatment plans for various cancer types such as breast, prostate and brain
- Learn how to utilise medical imaging (CT, MRI, X-RAY) to capture and assess treatment information
- Gain skills and experience to create and produce radiation therapy immobilisation equipment e.g. thermoplastic masks

Areas of study include:

- Anatomy and Physiology
- Behavioural Science
- Clinical Methods
- Medical Imaging
- Oncology
- Physics
- Radiation Treatment Technologies
- Research
- Statistics

All University of Newcastle medical radiation science students graduate with Honours, giving you a distinct advantage when seeking employment.

Practical experience

You will complete 42 weeks of a mentored professional placement in metropolitan, regional and rural settings. You will also have access to world-class facilities such as our 3D Virtual Radiation Therapy Simulation Laboratory, use clinical-grade planning software, develop patient immobilisation devices in our 8-bay Simulation space and operate a clinical Linear Accelerator – all located at the University's Callaghan Campus.

Career opportunities

Our graduates enjoy great job prospects, with 100% finding work within four months of completing their degree.

Some typical roles include:

- Academic
- Advanced Practitioner
- Applications Specialist
- Radiation Therapist

Professional recognition

Our Radiation Therapy graduates are eligible to apply for registration with the Medical Radiation Practice Board of Australia under the Australian Health Practitioner Regulation Agency (AHPRA).

See the website for more information about this degree

Bachelor of **Medical Science** and Doctor of **Medicine (Joint Medical Program)**

2022 Selection Rank	Duration
N/A | Median N/A	5 yrs FT

UAC Code	Location
785000	Newcastle – Callaghan Gosford – Central Coast Clinical School
Recommended studies	English (Standard or Advanced)
Entry requirements	There are additional entry requirements for this degree. See website for more information.

Studying to be a doctor is challenging and rewarding. The program provides students with the skills and knowledge to begin a career focused on helping restore, maintain and promote individual and community health in Australia and around the world. The field of medicine is rapidly changing, with advances in technology and research enabling new therapies and improved patient outcomes. Doctors play an important role in multidisciplinary health teams, contributing expertise in the diagnosis and treatment of a range of health conditions. Students also have the option to study at our new state-of-the-art Central Coast Clinical School, our nation-leading medical, nursing and midwifery teaching and education facility.

What you will study

The five-year Joint Medical Program incorporates a staged transition from campus-based learning to clinical placements in a range of healthcare settings. The campus-based teaching in Years 1 and 2 uses an integrated, problem-based curriculum involving self-directed learning and tutorial participation. You will learn about the science underpinning medical practice and develop the basic clinical skills, in preparation for contact with patients. During this phase of the program, you'll have access to early clinical exposure.

Years 3, 4 and 5 of the program focus on applying biomedical knowledge and clinical skills in placements within hospitals, community health services and general practice. You'll encounter increasingly complex clinical problems, and the challenges of clinical decision-making in urban, rural and remote communities.

Practical experience

The Joint Medical Program recognises that the best type of learning in medicine is practical learning. Our partnerships and extensive clinical networks mean students have the opportunity to complete placements in urban, regional and rural settings across Australia. Our clinical teachers are highly skilled and many have national and international recognition as experts in their field. Your clinical experience will begin in the first semester and increase throughout the degree. You will gain a range of professional experiences and an in-depth understanding of the patient journey as you meet with patients and carers, visit hospital wards and outpatient clinics, and spend time with doctors in practice. You will develop an understanding of global health systems and have opportunities to undertake clinical placements and exchanges abroad.

Career opportunities

Our graduates enjoy great job prospects. Following completion of the intern year, a wide range of roles are possible with further postgraduate training. Typical graduate roles include:

- Diagnostic Specialists, e.g. Radiologists, Pathologists
- Emergency Doctors
- General Practitioners (GPs)
- Medical Administrators
- Medical Researchers
- Medical Specialists, e.g. Obstetricians and Gynaecologists, Paediatricians, Psychiatrists, Public Health Physicians, Surgeons

Professional recognition

On successful completion of the Joint Medical Program, graduates are eligible for provisional registration with the Medical Board of Australia under the Australian Health Practitioner Regulation Agency (AHPRA). A period of accredited intern training is then required before general registration as a medical practitioner can be approved.

See the website for more information about this degree

Bachelor of **Midwifery**

2022 Selection Rank	Duration
A+C*	3 yrs FT / 5 yrs PT

UAC Code	Location
483400 489811	Newcastle – Callaghan Gosford – Central Coast Clinical School
Assumed knowledge	English (Band 4 or higher), Mathematics (Standard) plus Biology or Chemistry
Entry requirements	There are additional entry requirements for this degree. See website for more information.

As a midwife, you will work in partnership with women and their families through pregnancy, labour and birth, and the early parenting period. You will work alongside women and families to achieve the best health outcomes for mothers and their babies. Our Midwifery program has been co-designed with industry partners, consumers, and past and present midwifery students, to ensure the content reflects contemporary midwifery knowledge and practice. Our program has a strong research inspired theoretical basis to prepare students for midwifery professional experience placement. Our Midwifery program has a focus on woman-centred care in alignment with the National Standards for the Midwife and the International Confederation of Midwives definition of a midwife.

What you will study

The Midwifery program is designed to sequentially build midwifery knowledge and skills. You will develop your knowledge and skills in:

- The midwifery profession, human bioscience and the normal psychophysiology of pregnancy, birth and early parenting period including the newborn.
- Women who experience more complex psychophysiological needs.
- Progress to beginner level practitioners, consolidating midwifery knowledge and skills and integrating research into practice.

A mix of both face-to-face and online learning is provided to ensure you are able to be with childbearing women when required, including births, which occur at all hours.

Practical experience

Students will complete a minimum of 1104 hours of midwifery professional experience placement that includes:

- Midwifery Professional Experience Placement in an allocated hospital with hands-on experience during the antenatal period, labour and birthing, and the postnatal period.
- Continuity of Care Experiences (CCE) where students develop relationships with childbearing women - a minimum of 10 relationship-based experiences as the on-call clinician for expectant mothers (minimum 200 hours).

Further hours may be required in order to complete minimum requirements for registration and may be completed as rostered hours or continuity of care experiences.

Career opportunities

Our graduates enjoy great job prospects with 98% securing work within four months of completing their degree.

Some typical roles include:

- Clinical Midwife Educator
- Clinical Midwife Specialist
- Midwife Researcher
- Registered Midwife

Professional recognition

Graduates are eligible to apply for registration to practice as a midwife with the Nursing and Midwifery Board of Australia under the Australian Health Practitioner Regulation Agency (AHPRA).

See the website for more information about this degree

* ATAR + other selection criteria.

Bachelor of

Nursing

2022 Selection Rank	Duration
78.00 | Median 83.68	3 yrs FT / 6 yrs PT

UAC Code	Location
483600	Newcastle – Callaghan
483610	Gosford – Central Coast Clinical School
Recommended studies	English (Standard or Advanced), Mathematics (Standard) and Biology

As one of the most trusted professions, nurses make a real difference to the health and wellbeing of the community. Nurses work in a variety of environments, providing excellence in care to individuals, families, and communities. They are a highly employable workforce across Australia and around the world. Whichever career path you choose as a registered nurse, when you study a Bachelor of Nursing, you can be sure that you'll be making an important and meaningful contribution to society. Students also have the option to study at our new state-of-the-art Central Coast Clinical School, our nation-leading medical, nursing and midwifery teaching and education facility.

What you will study

The Bachelor of Nursing mixes face-to-face and online learning with plenty of hands-on nursing experience in simulated learning laboratories and professional placements. Be inspired by our enthusiastic and experienced educators and internationally ranked researchers who bring courses to life and share their love of learning. You will study nursing theory and practice in:

- Aged Care
- Human Bioscience
- Mental Health
- Primary, Secondary and Tertiary Nursing

Students who perform well may undertake a further year of study to obtain an Honours degree.

Practical experience

You will complete 800 hours of compulsory clinical experience.

Clinical placement is conducted in a variety of settings including:

- Community Health and Major Teaching Hospitals
- Acute Care
- Aged-Care Facilities
- International Placement
- Medical-Surgical Facilities
- Mental Health Settings
- Rural and Remote Health Placements

Hands-on clinical experience is also completed in simulation laboratories on campus.

Career opportunities

Our graduates enjoy great job prospects with 90% securing work within four months of completing their studies. Registered nurses can establish careers in diverse areas such as aged care, mental health, community health, critical care, intensive care, oncology, operating theatres and paediatrics.

Career progression roles for a registered nurse include:

- Clinical Nurse Consultant
- Clinical Nurse Specialist
- Nurse Educator
- Nurse Manager
- Nurse Practitioner
- Nurse Researcher

Professional recognition

Nursing graduates are eligible to apply for registration with the Nursing and Midwifery Board of Australia, under the Australian Health Practitioner Regulation Agency (AHPRA).

See the website for more information about this degree

Bachelor of

Nutrition and Dietetics (Honours)

2022 Selection Rank	Duration
75.00 | Median 83.45	4 yrs FT

UAC Code	Location
483650	Newcastle – Callaghan
Recommended studies	Chemistry

Demand for Bachelor of Nutrition and Dietetics (Honours) graduates is growing as diet and nutrition-related diseases – such as heart disease, diabetes and obesity – become increasingly common worldwide. As a student, you'll have access to world-class researchers and educators, and will learn how to use the latest evidence to manage patient health and discover the powerful science of human nutrition. A career in nutrition and dietetics is immensely rewarding, as you help people understand how nutrition and health are intertwined. You'll help prevent disease, improving overall health in your community and worldwide.

What you will study

This degree combines theoretical and scientific knowledge with practical learning to ensure you are well-prepared for a career in nutrition and dietetics. Your areas of study will include:

- Basic and Applied Sciences
- Dietetic Practice
- Food Service and Management
- Medical Nutrition Therapy
- Paediatric Nutrition and Dietetics
- Professional Practice
- Public Health Nutrition
- Social Sciences
- Statistics and Research Methodology

Practical experience

You will complete professional placements and obtain more than 800 hours of supervised professional practice in a variety of settings across NSW including hospitals, outpatient clinics, community health centres and within rural communities.

Career opportunities

The field of nutrition and dietetics is growing swiftly, providing our graduates with an array of interesting and rewarding career options, including:

- Diabetes Educator
- Dietitian
- Food Service Manager
- Health Administrator
- Health Promotion Officer
- Health Writer
- Nutritionist
- Sports Dietitian
- Researcher

Professional recognition

Our students are eligible to apply for Accredited Practising Dietitian status as well as full membership to Dietitians Australia.

See the website for more information about this degree

Bachelor of

Occupational Therapy (Honours)

2022 Selection Rank	Duration
93.00 | Median 97.78	4 yrs FT

UAC Code	Location
483700	Newcastle – Callaghan

Recommended studies Biology and Mathematics (Standard or Advanced)

Do you want to support people and communities to overcome unique challenges and to get the most out of everyday life? The work of an occupational therapist is incredibly broad. With the Bachelor of Occupational Therapy (Honours), you can enable children to reach developmental milestones or improve their occupational participation in all areas of their lives. You could assist people to return to their daily lives after a stroke or hip replacement, or design programs that allow people to return to their jobs after a workplace injury.

What you will study

You will gain theoretical knowledge in biomedical, behavioural and occupational sciences, and learn professional occupational therapy skills through case-based training and interactive teamwork activities.

Areas of study include:

- Anatomy and Physiology
- Biomedical, Behavioural, and Occupational Sciences and Therapy
- Mental Health
- Psychology
- Sociology and Community Development
- Statistics and Research Methodology

Practical experience

You will complete 1,000 hours of professional practice and be supervised by qualified occupational therapy practice educators. During your study, you will have access to interactive, technology-based learning facilities including our specially designed clinical skills laboratories.

Career opportunities

Our graduates enjoy great job prospects with 97% securing work within four months of completing their studies. Embark on a rewarding career as an occupational therapist, working closely with individuals to assess their unique situation, determine goals, and put together a plan for success.

Some typical roles include:

- Disability Services Manager
- Injury Management Advisor
- Lifestyle Coordinator
- Occupational Therapist
- Rehabilitation Consultant

Professional recognition

Accredited by the Occupational Therapy Board of Australia (OTB) under the Australian Health Practitioner Regulation Agency (AHPRA).

See the website for more information about this degree

Bachelor of

Oral Health Therapy

2022 Selection Rank	Duration
96.20 | Median 99.95	3 yrs FT

UAC Code	Location
483750	Central Coast – Ourimbah

Recommended studies Chemistry and Biology

As an oral health therapist, you'll work closely with dental practitioners to provide a range of preventive, periodontal and restorative procedures like oral health advice, supra and subgingival debridement, polishing and x-rays, restorations, and primary extractions. The Bachelor of Oral Health Therapy program provides dual qualifications in dental hygiene and dental therapy, with the scope of practice qualifying you to treat both children and adults. Our program offers an extended restorative scope, not offered elsewhere in NSW.

What you will study

Build your scientific knowledge and clinical skills to provide preventive, periodontal and simple restorative treatments to individuals and communities. Your areas of study will include:

- Clinical Treatment for Diverse Communities
- Dental Therapy
- Human Bioscience and Anatomy
- Oral Pathology
- Periodontology

Practical experience

You will complete a minimum of 500 hours of supervised dental practice, initially in our on-campus oral health clinic and later in clinical placements. Clinical placements could include working in:

- childcare facilities
- community dental clinics
- private dental practices
- public hospital dental clinics
- residential aged care facilities
- specialist dental departments

Career opportunities

Our graduates have great job prospects with 91% securing work within four months of finishing their degree. With dual qualifications in dental hygiene and dental therapy, many University of Newcastle graduates are quickly employed.

Typical roles include:

- Dental Hygienist
- Health Promotion Officer
- Industry Sales Representative
- Oral Health Academic
- Oral Health Therapist
- Public Health practitioner

Professional recognition

Accredited by the Australian Dental Council. Once you graduate, you will be eligible to apply for registration with the Australian Health Practitioner Regulation Agency (AHPRA) as an Oral Health Therapist.

See the website for more information about this degree

Bachelor of

Pharmacy (Honours)

2022 Selection Rank	Duration
92.00 | Median 98.90	4 yrs FT

UAC Code	Location
483800	Newcastle – Callaghan

Assumed knowledge Mathematics (Extension 1 or 2) or Mathematics (Band 5 or 6), English (Advanced), Chemistry and Physics

Pharmacists play an integral role in the provision of healthcare services. As a pharmacist, you'll be on the industry frontline – counselling people on the best use and management of medications. When you study a Bachelor of Pharmacy (Honours), you'll learn how to provide advice on the symptoms and management of common ailments, prepare and formulate medications, and educate the community on a wide range of health and wellbeing matters.

What you will study

You will develop an extensive knowledge of the essential sciences, pharmacotherapeutics and pharmaceutical sciences that are required to practice as a pharmacist. In particular, you will study:

- Chemistry
- Core Biomedical Sciences, Including Pathophysiology
- Dosage Formulations
- Drug Design and Discovery
- Epidemiology
- Pharmacotherapeutics
- Pharmacy Practice

Practical experience

You will undertake over 420 hours of clinical placement in a variety of settings both locally and nationally. This will include community and aged care facilities, hospitals, and rural pharmacies throughout the Hunter, Central Coast, Mid North Coast and the University's Department of Rural Health sites.

Career opportunities

You will discover a range of options that you can choose to pursue in your pharmacy career. You could find yourself working in areas such as investigating drug design, discovery and formulation, to pharmacy practice, personalised healthcare and health technologies assessment. Typical roles include:

- Community Pharmacist
- Hospital Pharmacist
- Industrial Pharmacist
- Pharmaceutical Policy Officer
- Researcher

Professional recognition

Once you graduate, you will need to complete a one-year internship before being registered with the Pharmacy Board of Australia under the Australian Health Practitioner Regulation Agency (AHPRA) requirements. This degree is accredited by the Australian Pharmacy Council.

See the website for more information about this degree

Bachelor of

Physiotherapy (Honours)

2022 Selection Rank	Duration
99.95 | Median 99.95	4 yrs FT

UAC Code	Location
483850	Newcastle – Callaghan

Assumed knowledge Chemistry, English (Advanced) and at least one of Physics or Biology

Bachelor of Physiotherapy (Honours) graduates work with people of all ages to help them stay well and maintain their function, independence and quality of life. You'll study evidence based-physiotherapy clinical skills and develop capabilities in critical thinking, problem-solving, communication and lifelong learning. Physiotherapy graduates work in various public and private settings including hospitals, rehabilitation and community centres, aged care, with sporting teams and in private practice. The Bachelor of Physiotherapy (Honours) integrates academic theory with extensive practical experience to produce graduates who are ready to meet the challenges of the changing healthcare system.

What you will study

You will gain professional physiotherapy skills underpinned by relevant biomedical and behavioural sciences.

Your areas of study will include:

- Advanced Anatomy, Physiology and Pathophysiology
- Clinical Physiotherapy
- Health Promotion and Public Health
- Physiology and Pathophysiology
- Statistics and Research Methodology

Practical experience

You will complete a large amount of supervised clinical practice during the degree. Clinical placements start in first year and continue throughout the degree. Students undertake clinical placements in a wide variety of settings including public and private hospital inpatients, community and rehabilitation centres, hospital outpatients, private practices and aged care.

Career opportunities

Our graduates have great job prospects with 97% securing work within four months of finishing their degree. A physiotherapy qualification from the University of Newcastle will ensure you have the vital skills required to excel as a health professional. Our graduates are employed in public and private health care organisations, aged care, community and workplace settings, as well as with sporting teams and in private practice.

Professional recognition

This degree has full accreditation awarded by the Australian Physiotherapy Council. Graduates are eligible to apply for registration with the Physiotherapy Board of Australia under the Australian Health Practitioner Regulation Agency (AHPRA).

See the website for more information about this degree

* ATAR + other selection criteria.

Bachelor of
Podiatry

2022 Selection Rank
70.00 | Median 84.00

Duration
3 yrs FT

UAC Code
483900

Location
Central Coast – Ourimbah

Assumed knowledge
Chemistry and Mathematics (Standard or Advanced)

The Bachelor of Podiatry is the only three-year, accelerated, undergraduate podiatry degree in Australia. As a podiatrist, you'll help clients get back on their feet by diagnosing, treating and preventing lower leg and foot problems and promoting good health. You could find yourself managing sports injuries and complex lower limb complications in people with chronic disease, addressing developmental issues in children or helping restore a person's independence and mobility. University of Newcastle podiatry graduates are highly employable thanks to our world-class podiatry clinic.

What you will study
You will discover how to identify and analyse complex health problems within podiatry practice and develop multidisciplinary solutions.

Your course topics will include:

- Anatomy
- Pharmacology
- Physiology and Biomechanics
- Podiatric Medicine

Practical experience
Podiatry students complete more than 1,000 hours of practical experience and work alongside experienced podiatrists. Our state-of-the-art teaching facilities include orthoses, clinical skills and research laboratories. We also have a fully equipped university-run clinic where students are given opportunities to learn and practise on real patients at Wyong Hospital.

Career opportunities
Our graduates enjoy great job prospects with 90% securing work within four months of finishing their degree.

Typical roles include:

- Footwear technical representative
- General or specialised podiatry practice e.g. sports podiatry or high risk foot care
- Health Promotion Officer
- Podiatric Surgeon
- Researcher

Professional recognition
After graduating, you will be eligible to apply for registration with the Podiatry Registration Board of Australia under the Australian Health Practitioner Regulation Agency (AHPRA). Accredited by the AHPRA Accreditation Committee.

See the website for more information about this degree

Bachelor of
Public and Community Health

2022 Selection Rank
70.00 | Median 89.80

Duration
3 yrs FT / 8 yrs PT

UAC Code
483860

Location
Central Coast – Ourimbah

Did you know the most common global health issues are largely preventable? If being part of the solution excites you, this degree is the place to start. Public health professionals work to improve the health of communities around the world. They develop policies and health promotion programs to address infectious disease, homelessness, poverty, lifestyle behaviours, and to improve the environments we live in. Issues like rising rates of chronic disease, healthcare costs and an increased need for research on disease prevention mean there's a growing need for skilled public health professionals in the workforce.

What you will study
Choose from interdisciplinary majors including:

- Environmental Health
- Global Health and Equity
- Health Promotion

Practical experience
You'll have many opportunities for Work Integrated Learning (WIL) from the time you commence as part of the program's Professional Pathways courses. This means you will gain valuable experience across the scope of public health and be able to build professional networks to be industry-ready on graduation. In turn, opportunities for employment and research projects emerge. You will also undertake a series of passion projects to explore the areas you're most interested in. In addition, there are many field trips each semester. You will be supported by a network of peers, advisory teachers, expert mentors and community along the way.

Career opportunities
Graduates are employed in non-government organisations, primary care organisations, local and state government, Indigenous health and more.

Typical roles include:

- Community Development Worker
- Community Health Officer
- Environmental Health Officer
- Field Risk Assessment Officer
- Health Administrator
- Health Educator
- Health Promotion Officer
- Project Officer
- Public Health Program Manager
- Public Health Situation Officer
- Surge Workforce, Public Health

See the website for more information about this degree

Bachelor of

Speech Pathology (Honours)

2022 Selection Rank	Duration
82.00 | Median 88.25	4 yrs FT / 10 yrs PT

UAC Code	Location
484150	Newcastle – Callaghan

Recommended studies Biology, Chemistry, Mathematics (Standard or Advanced) and English (Advanced)

Speech pathologists are allied health professionals responsible for the assessment and treatment of children and adults with communication and swallowing disorders across a range of practice areas including speech, language, voice, fluency, swallowing and multimodal communication. When you undertake a Bachelor of Speech Pathology (Honours) at the University of Newcastle, you'll have the opportunity to study with award-winning researchers and gain an understanding of the profession through substantial clinical experience.

What you will study

This degree is an interdisciplinary program. Throughout the degree, you will study linguistics, human bioscience, statistics, psychology as well as speech pathology specific courses. You will develop competencies and skills to confidently assess, diagnose and treat a range of communication and swallowing disorders arising from conditions such as developmental speech and language disorders, cerebral palsy, stroke, head injury, and neurological diseases/disorders.

Practical experience

Develop impressive real-world skills with more than 20 weeks or 80 hours of clinical placement and a comprehensive range of practical experiences. Opportunities exist for placements in local, metropolitan, regional and rural clinics within Australia and internationally. Additionally, some clinical placements are completed within the University of Newcastle's on-campus speech pathology clinic. Students must meet all the Bachelor of Speech Pathology (Hons) requirements including a National Criminal Record Check, NSW Working with Children clearance and meet all the NSW Health Verification requirements. For more information visit the University of Newcastle website.

Career opportunities

The strong practical focus of this degree, and professional accreditation, prepares graduates for immediate professional employment. Diverse work opportunities exist in hospitals, community health centres, schools, private practice and aged care facilities. As well as working as a speech pathologist, there are opportunities for graduates to work in other related roles in health promotion, research and health services. Fluency in other languages enriches the skills and services provided by professional speech pathologists. Concurrent enrolment in the Diploma in Languages unlocks unique opportunities and career pathways in Australia and around the world.

Professional recognition

Accredited by the Speech Pathology Association of Australia. Accreditation is recognised in Canada, the United Kingdom, New Zealand and the United States of America. This degree is also recognised by Ministry of Health, Singapore.

See the website for more information about this degree

Health and Medicine

Combined degrees

Bachelor of Biomedicine/Bachelor of Laws (Honours)

Graduates of the Bachelor of Biomedicine are trained in basic knowledge of the structure and function of living organisms with particular focus on the human. Using this knowledge, together with problem solving skills, critical reasoning and scientific methods taught in the program, the graduate is well prepared to collaborate on scientific investigations. The Bachelor of Laws (Honours) degree meets the academic requirements needed to gain admission to the practice of law in New South Wales. This program fosters understanding of how society functions and develops skills of analytical and logical reasoning.

Humanities and Social Sciences

Are you fascinated by how different people interact, and the way society operates? Maybe you're passionate about art, language, history, Indigenous studies, politics or religion? There's so much to explore in the areas of Humanities and Social Sciences, and even more career pathways for you to follow. You might work to address social challenges in local and global communities. Or maybe you're striving to become a curator, creative director or producer, a translator or journalist, a community development manager or cultural heritage conservationist. The opportunities are vast – and growing every day.

Discover Humanities and Social Science degrees

Top 2

in Australia for student support for undergraduate Social Work graduates[1]

88.2%

of undergraduate Humanities, Culture and Social Sciences students satisfied overall[2]

No. 1

in NSW for learning resources and skills development (Undergraduate Social Work)[3]

Degree options

Bachelor of Aboriginal Studies (Honours)
Bachelor of Arts
Bachelor of Development Studies
Bachelor of Global Indigenous Studies
Bachelor of Social Science
Bachelor of Social Work (Honours)
Diploma in Arts and Social Science
Diploma in Languages

Also consider

Bachelor of Psychological Science
Bachelor of Laws (Honours) Combined
Bachelor of Music and Performing Arts
Bachelor of Communication
Bachelor of Visual Communication Design

1 Student Experience Survey 2019-2020.
2 Course Experience Questionnaire 2020-2021.
3 The Good Universities Guide 2021.

"My time at the University was one of immense self-discovery and extensive learning. What I loved most about my studies was the diversity of courses offered in my degrees. The biggest highlight for me was a month-long trip with Project Everest to Malawi, Africa where I took part in a volunteer internship on a group project to deliver solar power systems to homes lacking electricity."

Liam
Bachelor of Development Studies/Bachelor of Business

"Studying at the University of Newcastle is one of the best decisions I have ever made. These degrees have provided me with a deeper understanding of what is required to achieve long-lasting change in the world. Enrolling in my program's work-integrated learning course also set me on the path to finding my first degree-relevant employment opportunity."

Myles
Bachelor of Development Studies/Bachelor of Business

"Through my Human Geography and Environment major, I've deep-dived into my passions for social justice and sustainability. Learning about the complex interactions between societies and the environment has helped me understand how we can address the causes of climate change. I've already had a recruiter reach out to me because of the skills I've developed – and I'm only in my second year."

Claire
Bachelor of Arts

Bachelor of

Arts

2022 Selection Rank	Duration
67.00 | Median 79.53	3 yrs FT / 8 yrs PT

UAC Code	Location
482010	Newcastle – Callaghan
482040	Online

Recommended studies English (Advanced) (for all majors) and Mathematics (Standard or Advanced) (for Psychology Studies major)

If you want to expand your knowledge of the world and human culture, hone your critical thinking skills, and be inspired by creativity, communication, and knowledge in the past and the present, then a Bachelor of Arts is for you. Be guided by scholars of international standing as you develop a collaborative research project or use your writing skills to interpret and analyse language and culture – spanning literary, audiovisual, and other forms. With a broad range of majors, minors and learning streams, this degree allows you to test out your interests and design a program best suited to what you want to study and where you want to go in life.

What you will study

Explore diverse areas of study and tailor your degree to suit your interests and ambitions.

Choose from the following majors:

- English and Writing
- Film, Media and Cultural Studies
- French Studies
- German
- Global Indigenous Studies
- History
- Human Geography and the Environment
- Japanese Studies
- Linguistics
- Politics and International Relations
- Psychology Studies
- Sociology and Anthropology

Minors are available in the above majors as well as:

- Ancient History
- Chinese
- Education
- Gender and Sexuality Studies
- Information Technology
- Studies of Religion
- Violence Studies
- Writing Studies

Practical experience

You will gain detailed knowledge and skills and enjoy opportunities to apply your learning through relevant work experience programs – developing key employability skills useful to a range of careers. Choose from Work Integrated Learning (WIL) courses, independent projects or placements to help you reach your career goals.

Career opportunities

Our graduates enjoy great employment prospects with over 80% securing jobs upon completion of their degree. Employment options for graduates are linked with your chosen areas of specialisation and may include roles in local, state and national public service, non-government organisations, higher education, media and communications, arts and cultural organisations, as well as other diverse sectors which are increasingly calling for employees possessing skills developed by the Bachelor of Arts.

Combine this degree with

- Bachelor of Innovation and Entrepreneurship Combined
- Bachelor of Laws (Honours) Combined
- Bachelor of Music and Performing Arts
- Bachelor of Science

See the website for more information about this degree

Bachelor of

Development Studies

2022 Selection Rank	Duration
79.00 | Median 90.20	3 yrs FT / 8 yrs PT

UAC Code	Location
482550	Newcastle – Callaghan

Development, poverty, inequality and environmental sustainability are some of the most important issues in the world today. You'll focus on key global issues in local, national or international contexts. You could find yourself employed by the Federal Department of Foreign Affairs and Trade helping developing countries improve their trade relations or with the UN improving responses to disasters. On a local level, you could work with Indigenous communities on community development or to develop new ways of living sustainably on Country. You could be working on environmental sustainability, contributing to the emerging circular economy. Or you could work in urban and regional planning at a local, state or national scale. No matter your focus, when you study a Bachelor of Development Studies you'll go on to make a positive difference in the world.

What you will study

Choose from one of the following majors:

- Cultures and Citizenship
- Environmental Sustainability
- Globalisation and Economic Development
- Urban and Regional Development

Practical experience

This degree places a strong focus on both field trips and work placement. Your fieldwork, in places like the historically significant and sacred Aboriginal Baiame Cave in the Upper Hunter, will give you the chance to develop research skills by interpreting the local environment. You can choose to develop your expertise in community development with an 80 hour work placement as part of your degree. The opportunity for a global experience is also available with international work placement in countries such as Ecuador, the Philippines, South Korea, Singapore, India, Japan, China, Malaysia, South Africa or Sweden.

Career opportunities

The Bachelor of Development Studies will prepare you with a range of skills and knowledge needed to help you on your career path.

Some typical roles include:

- Aboriginal Cultural Educational Officer
- Aid Worker
- Community Development Worker
- Multicultural Community Liaison Officer
- Urban Planner
- Youth Worker

Combine this degree with

- Bachelor of Business
- Bachelor of Communication
- Bachelor of Global Indigenous Studies
- Bachelor of Laws (Honours) Combined
- Bachelor of Social Science

See the website for more information about this degree

Bachelor of

Global Indigenous Studies

2022 Selection Rank	Duration
67.00 | Median N/A	3 yrs FT / 8 yrs PT

UAC Code	Location
482001	Newcastle – Callaghan
482002	Online

Do you want to work effectively with local and global communities using Indigenous knowledge systems to respond to ecological, social and economic challenges? The Wollotuka Institute within the University of Newcastle is committed to the advancement of Indigenous education at a local, national and international level. You could find yourself in a range of vocations that require social innovation and digital excellence, utilising critical Indigenous knowledge to address pressing global issues. This degree is designed to deliver culturally aware and innovative social advocates and is open to all students. Some selected majors are available fully online.

What you will study

The Bachelor of Global Indigenous Studies delivers a core focus on ensuring a strong student understanding of culture, history and politics.

You will choose from the following majors:

- Entrepreneurship and Innovation
- Film, Media and Cultural Studies
- Global Indigenous Studies
- Human Geography and the Environment
- Human Resource Management
- Human Services
- Politics and International Relations
- Sociology and Anthropology

Minor studies are available in:

- Gender and Sexuality Studies
- Information Technology
- Writing Studies

Practical experience

A placement course will allow you to apply your theoretical knowledge in a practical setting. This degree is delivered through combined online and face-to-face learning – providing a flexible study program.

Career opportunities

The Bachelor of Global Indigenous Studies opens doors for jobs in a range of areas in both Indigenous and non-Indigenous organisations internationally. Graduates will pursue rewarding careers in Indigenous affairs and beyond. Some typical roles include:

- Community Development Worker
- Cultural Heritage Conservationist
- Digital Media Content Producer
- Global Development Worker
- Organisational Cultural Diversity Practitioner
- Policy and Research Officer
- Program Innovation Consultant
- Social Enterprise Founder
- Startup Entrepreneur

Combine this degree with

- Bachelor of Development Studies
- Bachelor of Laws (Honours) Combined

See the website for more information about this degree

Bachelor of

Social Science

2022 Selection Rank	Duration
67.00 | Median 74.10	3 yrs FT / 8 yrs PT

UAC Code	Location
484050	Newcastle – Callaghan
484060	Central Coast – Ourimbah

Recommended studies	English (Advanced) and Mathematics (Standard or Advanced) (for Psychology Studies majors)

Are you interested in society and the inner workings of humanity? Social science is the study of social relationships, structures and issues. Make your mark by crafting strategies and solutions to various social challenges, develop your cultural understanding, ethical awareness and knowledge of the constructs that make the world go round. Pursue what interests you and choose your specialisation from 11 diverse areas of study. This degree empowers you to design and determine your own future. Explore the exciting complexities of the social world in which we exist.

What you will study

Specialise in one of the following majors:

- Criminology
- Global Indigenous Studies
- History
- Human Geography and the Environment
- Human Resource Management and Industrial Relations
- Human Services
- Linguistics
- Politics and International Relations
- Psychology Studies
- Sociology and Anthropology
- Tourism and Event Management

Graduate with Honours – for one extra year of study at the end of your degree. You can refine your practical research skills and enhance your career prospects by completing the Honours program.

Practical experience

As part of this degree you will have the option to complete an 80-hour work placement with organisations involved in social research, education, human resources or community service. The placement is compulsory for students who major in Human Services.

Career opportunities

Our graduates enjoy great job prospects with 86% finding work upon completion of their studies. Whatever your preferred path, you will graduate with work-ready skills for a career such as:

- Aboriginal Cultural Educational Officer
- Case Manager/Worker
- Corrections Officer
- Criminologist
- Cultural Development Officer
- Demographer
- Foreign Affairs and Trade Officer
- Health Promotion Officer
- Historian
- Linguist
- Police Officer
- Social Scientist
- Tourist Information Officer

Combine this degree with

- Bachelor of Development Studies
- Bachelor of Laws (Honours) Combined
- Bachelor of Psychological Science

See the website for more information about this degree

Bachelor of

Social Work (Honours)

2022 Selection Rank	Duration
75.00 | Median 79.00	4 yrs FT / 10 yrs PT

UAC Code	Location
484100	Newcastle – Callaghan
484110	Central Coast – Ourimbah

Recommended studies At least one of English (Standard or Advanced), Society and Culture, Community and Family Studies or Languages

A Bachelor of Social Work (Honours) leads to a wide variety of rewarding professional career opportunities in health, welfare, policy and advocacy work and enables you to make a difference to individuals, families, groups, organisations and communities. There is a strong demand for qualified social workers in an ever-expanding number of fields and job opportunities are broad and rewarding. Social work fosters a strong commitment to human rights and social justice, enabling graduates to encourage social change, tackle structural disadvantage, and create opportunities for others to achieve their goals.

What you will study

The Bachelor of Social Work (Honours) at the University of Newcastle is an experience-based learning degree. This degree integrates theory and evidence with social work values and skills for practice. You will undertake a program that includes a combination of workshop-based teaching, small group and hands-on, active Work Integrated Learning (WIL).

Core units of study in the program include:

- Aboriginal Studies
- Law For Social Work
- Psychology
- Social Policy and Planning
- Social Work
- Social Work Ethics
- Sociology

Practical experience

Your work readiness will be strengthened by industry experience throughout your program of study including:

- a minimum of 1,000 hours of supervised field education placements
- industry-engaged simulation learning, project-based and research with industry partners
- opportunities for collaborative cross-disciplinary learning and community engagement such as the Law on the Beach clinic

Students must meet all the Bachelor of Social Work (Honours) placement requirements including a National Criminal Record Check, NSW Working with Children clearance and meet all the NSW Health Verification requirements. For more information visit the University of Newcastle website.

Professional recognition

Accredited by the Australian Association of Social Workers (AASW).

Career opportunities

Social work offers a diverse career pathway with graduates of this degree enjoying high rates of success in securing employment. 89.5% of our Social Work graduates are employed within four months of graduating and Australian graduates are highly sought after internationally (overall employment rate – Graduate Outcomes Survey 2019). In Australia, social workers practise in a number of fields including:

- Aged Care
- Child Protection
- Community Development
- Disability
- Education
- Family and Relationship Counselling
- Health
- Income Support and Housing
- Juvenile Justice or Youth Research
- Mental Health and Substance Use
- Refugees and Asylum Seekers
- Social Policy

See the website for more information about this degree

Diploma in

Arts and Social Science

2022 Selection Rank	Duration
50.00 | Median 55.65	1 yr FT / 4 yrs PT

UAC Code	Location
489816	Newcastle – Callaghan
489817	Central Coast – Ourimbah

There is so much to explore in arts and social science, and even more career pathways for you to follow. Find your special interests or develop diverse skills across a broad range of subjects including Indigenous studies, communication, criminology, sociology and anthropology, geography, history, linguistics, human services and international studies. Whether you want to become a journalist, community development manager, anthropologist, or cultural heritage conservationist, the Diploma in Arts and Social Science will help you get there.

What you will study

The Diploma in Arts and Social Science has been designed to give you a core knowledge base where you'll learn academic literacy, research and discipline-specific skills needed for further study. You'll complete a short list of directed courses, providing you with a taste of discipline areas within our Bachelor of Arts, Bachelor of Communication, Bachelor of Criminology, Bachelor of Global Indigenous Studies or Bachelor of Social Science degrees.

Course content includes:

- Arts
- Communication
- Criminology
- Development Studies
- Global Indigenous Studies
- Humanities
- Social Science
- Society and Culture
- Sociology

Why study with us?

- Guaranteed degree entry – complete the Diploma in Arts and Social Science and receive a guaranteed entry into the Bachelor of Arts, the Bachelor of Communication, the Bachelor of Criminology, the Bachelor of Development Studies, the Bachelor of Global Indigenous Studies or the Bachelor of Social Science.
- Receive credit – receive up to 80 units credit towards an undergraduate degree.
- No extra time or cost – depending on which degree you would like to move into after the Diploma, it may be possible to complete your degree in the standard, minimum timeframe. Also, for any courses for which you receive credit, you don't have to pay for those again once you get into your degree.
- Extensive Support – gain additional support through pathways courses which develop foundational degree skills in smaller class sizes. The support offered in a Diploma helps students transition into larger classes alongside undergraduate students and experience study as you would in an undergraduate degree program.
- Real-world insights – connect with industry through projects, guest lectures and mentoring.
- Diversify your skills and knowledge – get a taste of the different arts and social science disciplines with our directed course list.

Career opportunities

The Society and Culture study area is large and diverse with employment opportunities in local, state and commonwealth public service, non-government organisations, higher education, media and communications and in arts and cultural organisations.

See the website for more information about this diploma

Diploma in

Languages

2022 Selection Rank	Duration
50.00 | Median N/A	2 - 6 yrs PT
UAC Code	**Location**
489981	Newcastle – Callaghan

Learning one or more foreign languages develops in-demand skills and opens many doors to diverse careers, travel and other unique opportunities. The Diploma in Languages is available to Australian students and is studied as a stand-alone degree, or in conjunction with an undergraduate degree, which means you'll finish with two qualifications in less time.

What you will study

Proficiency in another language will enrich your personal growth and skill set. You can focus on just one language, or select multiple languages:

• Chinese • French • German • Japanese

AUSLAN and Indigenous language courses available as Directed or Elective options.

Practical experience

Our program offers courses that cover a range of language competencies, including speaking, listening, reading and writing in formal and informal contexts. In-country language courses and overseas study experiences are also available.

Career opportunities

In today's increasingly competitive and multicultural job market, our graduates enjoy unique opportunities, advantages and broader career options. Language study enhances travel opportunities and is an unrivalled way to gain cross-cultural understanding. You may find yourself promoted to lead a company's largest business deal because of your language skills, or perhaps influence government legislation because of a deeper understanding of migrant communities and their differences.

See the website for more information about this diploma

Humanities and Social Sciences

Combined degrees

Bachelor of Arts/Bachelor of Innovation and Entrepreneurship Combined

Broaden your understanding of how innovation and entrepreneurship is applied within a wider context. This combination will complement your innovative mindset with an enhanced understanding of how society functions.

Bachelor of Arts/Bachelor of Laws (Honours) Combined

Broaden your understanding of legal issues by seeing them within a wider context. This combination will complement your legal knowledge with an awareness of the social context of the law.

Bachelor of Arts/Bachelor of Music and Performing Arts

This combination gives you the opportunity to acquire skills of analysis, research and logic, coupled with specialised skills in music, preparing you to confidently perform at a professional standard.

Bachelor of Arts/Bachelor of Science

Combine your inquisitive mind and creative passion to make a positive difference in the world. You could contribute to a variety of arenas including technology, research and development, agriculture, health and more.

Bachelor of Development Studies/Bachelor of Business

This combined program builds on interdisciplinary understandings of uneven development and business practice. It also encompasses a practical angle, with students learning from case studies and real business situations in Australia and internationally.

Bachelor of Development Studies/Bachelor of Communication

Focus on key global issues in local, national or international contexts, while also pushing your creative boundaries, and gaining practical skills with access to the latest media technologies including our multi-camera television studio and radio and sound recording studios.

Bachelor of Development Studies/Bachelor of Global Indigenous Studies

Development Studies focuses on real-world issues such as globalisation, environmental change, sustainable development and social justice. Combining this degree with a Bachelor of Global Indigenous Studies will prepare you for employment in fields related to Indigenous affairs, immigration and citizenship or community development.

Bachelor of Development Studies/Bachelor of Laws (Honours) Combined

Law complements a range of professions where a passion for justice and attention to detail are key. By combining this degree with a Bachelor of Development Studies, you will be able to advocate for change and make a real difference in issues like development, poverty and inequality.

Bachelor of Development Studies/Bachelor of Social Science

Social science focuses on social relationships, structures and issues. By combining this degree with the Bachelor of Development Studies, you will be able to use your knowledge of development, poverty, inequality and environmental sustainability to make a positive impact on global issues.

Bachelor of Global Indigenous Studies/ Bachelor of Laws (Honours) Combined

You will develop an understanding of the social, political and justice issues impacting the Indigenous community of Australia and use your skills to solve legal challenges in Indigenous affairs and beyond.

Bachelor of Social Science/Bachelor of Laws (Honours) Combined

The Bachelor of Social Science combination is ideal if you are interested in improving social justice, anti-discrimination and human rights.

Law

If you're passionate about justice and want to understand more about creating real change through legislation and policy – law is the career for you. You'll learn about the principles underlying the Australian legal system while also advocating for legal rights on local, national and global issues. As Australia's leading clinical law school, the University of Newcastle Law School's Legal Centre provides you with the practical legal training and supervised clinical legal experience needed to practice as an Australian lawyer without any further study.

Discover Law degrees

No. 1

in Australia for overall satisfaction for undergraduate Law and Paralegal Studies students[1]

No. 2

in Australia for learning resources satisfaction for undergraduate Law and Paralegal Studies students[1]

89.2%

of undergraduate Law and Paralegal Studies graduates found employment within four months[2]

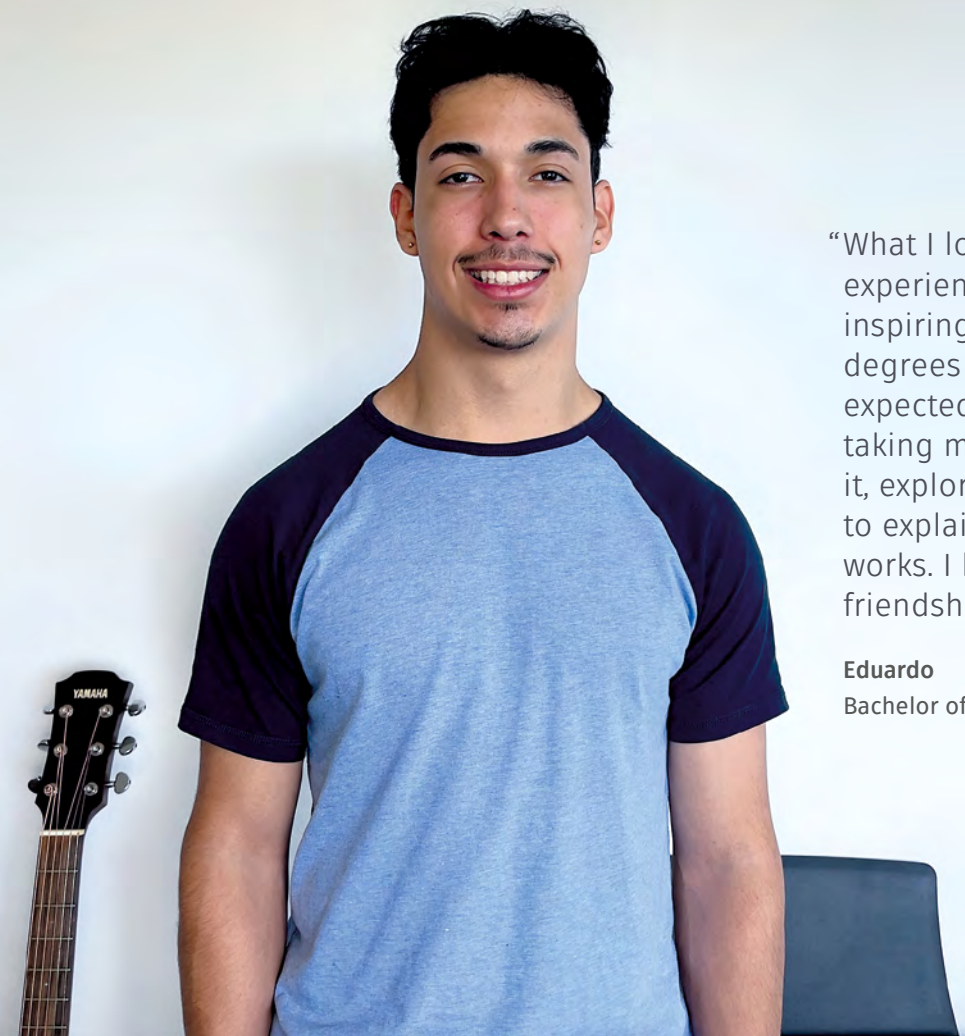
Degree options

Bachelor of Criminology
Bachelor of Laws (Honours) Combined

1 Student Experience Survey 2019-2020.
2 Graduate Outcomes Survey 2019-2021.

"Studying law at the University has provided me with more opportunities than I could have ever imagined. Having a smaller cohort than Sydney universities means that the Law School can invest in you and your individual path. Through my degree I've had the opportunity to study overseas and work in four countries, at places such as the National High Court of Brazil and the United Nations."

Kelsey
Bachelor of Laws (Honours)



"What I love the most about my university experience is discovering new and inspiring ideas. The content of my degrees goes well beyond what I ever expected. I am majoring in Economics and taking many finance electives alongside it, exploring concepts and theories to explain how the world and society works. I have also made some invaluable friendships – hopefully to last a lifetime."

Eduardo
Bachelor of Commerce/Bachelor of Laws

Bachelor of
Criminology

2022 Selection Rank	Duration
67.00 | Median 74.40	3 yrs FT / 8 yrs PT

UAC Code	Location
484895	Newcastle – Callaghan

Recommended studies English (Advanced) and Mathematics (Standard or Advanced) (for Psychology Studies major)

The job market for related professions in criminology is projected to grow more than 10 per cent in the next five years. This practical, hands-on degree will qualify you to work in criminal justice and allied fields, including careers in law enforcement, courts and corrections, policy, victim advocacy, human welfare and more. The Bachelor of Criminology draws on criminology, psychology and legal studies to give you an in-depth understanding of crime, with a strong focus on social justice.

What you will study
This is a practical program that will provide you with the knowledge and skill set to work in criminal justice and allied fields. You will develop a foundational knowledge of Criminology through core courses that will introduce you to all aspects of crime, including criminal justice, victimology, power relationships between institutions of the state and citizens, and criminal psychology, as well as placement courses to gain practical experience.

Majors offered:

- Legal Studies
- Psychology Studies

Practical experience
Practical learning is embedded into every stage of the Bachelor of Criminology, from case studies in class to guest lectures and work placements. All students will have the opportunity to undertake a core placement course in their third year with a host institution relevant to their career aspirations. For students wishing to get additional experience in a workplace, there is an extension course that will provide you with more placement hours, and the option of gaining experience in more than one career pathway.

Career opportunities
The Bachelor of Criminology will offer a clear and attractive degree pathway for students looking to move into careers such as:

- Courts and Corrections
- Human Welfare
- Law Enforcement
- Policy
- Victim Advocacy

Combine this degree with
- Bachelor of Laws (Honours) Combined
- Bachelor of Psychological Science

See the website for more information about this degree

Bachelor of
Laws (Honours) Combined

2022 Selection Rank	Duration
90.00 | Median 96.98	5 yrs FT

UAC Code	Location
483100	Newcastle – Callaghan and City campus

Our Bachelor of Laws (Honours) Combined degree is your entry to a career as a lawyer, and a range of other professions where a passion for justice and attention to detail are key. This degree is offered as a combined program, which means you'll undertake your degree in conjunction with another degree and receive two qualifications in only five years of study. Newcastle Law School runs a unique practice program that integrates the academic study of law with hands-on clinical experience and practical training. Students work with real clients under the supervision of legal practitioners at the University of Newcastle Legal Centre.

What you will study
When you study a Bachelor of Laws (Honours) degree at the University of Newcastle you will graduate with a Bachelor of Laws (Honours) and a second Bachelor level degree in just five years of full-time study. You can also complete the Diploma of Legal Practice within your 5 year degree through our very own Legal Centre, which is the path towards being admitted to practice by the time you graduate.

You will graduate with skills and experience in:

- Advanced Research
- Advocacy
- Analytical Problem Solving
- High-Level Task Management
- Negotiation
- Oral and Written Communication

You will learn and develop these skills by studying courses in various aspects of law including:

- Administrative Law
- Contract Law
- Criminal Law and Procedure
- Equity and Trusts
- Evidence
- Property Law

You will receive in-depth training in legal research techniques and be equipped with advanced skills suitable for high-level legal research work or further academic study.

Practical experience
The Newcastle Law School is Australia's leading clinical law school and has a strong focus on experiential learning. You'll have the opportunity to:

- work with clients in the University of Newcastle Legal Centre
- undertake work placements
- complete an international immersion tour
- work at the Legal Centre's renowned annual summer clinic, Law on the Beach
- take part in public interest clinics in social justice and environmental law

Career opportunities
Career options available to graduates of a Bachelor of Laws:

- Barrister
- Compliance Officer
- Corporate Lawyer
- Judge's Associate
- Law Clerk/Paralegal
- Legal Aid Lawyer
- Mediator
- Political Advisor
- Solicitor

Professional recognition
Our Bachelor of Laws and Diploma of Legal Practice are accredited by the Legal Profession Admission Board (LPAB) of New South Wales. Students who choose to complete the Diploma of Legal Practice while studying their combined Law degree complete all of the academic study, practical legal training and supervised workplace experience necessary to apply to practice as a lawyer, subject to the 'fit and proper person' test. For more details on that test, see the Legal Profession Admission Board's 'Guide for Applicants', or for specific inquiries please contact the LPAB.

Combine this degree with
- Bachelor of Arts
- Bachelor of Business
- Bachelor of Biomedicine
- Bachelor of Coastal and Marine Science
- Bachelor of Commerce
- Bachelor of Communication
- Bachelor of Criminology
- Bachelor of Development Studies
- Bachelor of Global Indigenous Studies
- Bachelor of Innovation and Entrepreneurship
- Bachelor of Psychological Science
- Bachelor of Science
- Bachelor of Social Science

See the website for more information about this degree

Combined degrees

Bachelor of Science/Bachelor of Laws (Honours)

Apply your scientific knowledge to a range of legal contexts including industry, agriculture and the information revolution.

Bachelor of Arts/Bachelor of Laws (Honours)

Broaden your understanding of legal issues by seeing them within a wider context. This combination will complement your legal knowledge with an awareness of the social context of the law.

Bachelor of Biomedicine/Bachelor of Laws (Honours)

Graduates of the Bachelor of Biomedicine are trained in basic knowledge of the structure and function of living organisms with particular focus on the human. Using this knowledge, together with problem solving skills, critical reasoning and scientific methods taught in the program, you will be well prepared to collaborate on scientific investigations.

Bachelor of Business/Bachelor of Laws (Honours)

Experience in law is a valuable asset within the business sector. Develop your skills and forge a career as a corporate or in-house lawyer.

Bachelor of Commerce/Bachelor of Laws (Honours)

Combine your background in commerce with a degree in law to improve your knowledge of important legislation that is relevant to accounting, finance and economics.

Bachelor of Communication/Bachelor of Laws (Honours)

Some of the most powerful and influential forces within our society are the media and communication technologies. Combine this degree with law and be at the forefront of constantly developing laws and regulations that impact the communication and media industries.

Bachelor of Criminology/Bachelor of Laws (Honours)

Graduates of this combined program can analyse and explain crime and criminality from multiple disciplinary perspectives, and use high level problem-solving and communication skills to act as advocates in the criminal justice system. Having completed placements and work-integrated learning in diverse contexts, they are work-ready and equipped to advocate for a range of stakeholders, and to address legal and social issues that shape the administration of justice in criminal law and related institutions.

Bachelor of Criminology/Bachelor of Psychological Science

Students will apply knowledge of human behaviour to a wide range of fields within the criminal justice area, but will also enable students to continue their professional training in psychology. This program prepares for a career as a psychologist or to specialise in such areas as forensic psychology, clinical psychology and other accredited psychology postgraduate pathways.

Bachelor of Development Studies/Bachelor of Laws (Honours)

Law complements a range of professions where a passion for justice and attention to detail are key. By combining this degree with a Bachelor of Development Studies, you will be able to advocate for change and make a real difference in issues like development, poverty and inequality.

Bachelor of Global Indigenous Studies/Bachelor of Laws (Honours)

You will develop an understanding of the social, political and justice issues impacting the Indigenous community of Australia and use your skills to solve legal challenges in Indigenous affairs and beyond.

Bachelor of Innovation and Entrepreneurship/ Bachelor of Laws (Honours)

This combination is for people who are interested in turning big ideas into new ventures, with the added understanding of the surrounding legal environment.

Bachelor of Psychological Science/Bachelor of Laws (Honours)

Within this combined degree program, students study a combination of psychological science and law courses over a period of five years full-time.

Bachelor of Social Science/Bachelor of Laws (Honours)

The Bachelor of Social Science combination is ideal if you are interested in improving social justice, anti-discrimination and human rights.

Science and the Environment

There's no one type of scientist. Career opportunities are exciting and always evolving. You might work in a lab, discovering life-changing scientific breakthroughs. You could work in science education, sharing your passion and knowledge 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 and make an impact through the pathway that's right for you.

Discover Science and the Environment degrees

Ranked 25

in the world - Sports Science[1]

No. 1

in NSW for learning resources[2]

93.3%

of undergraduate Agriculture and Environmental Studies students satisfied with learning resources[3]

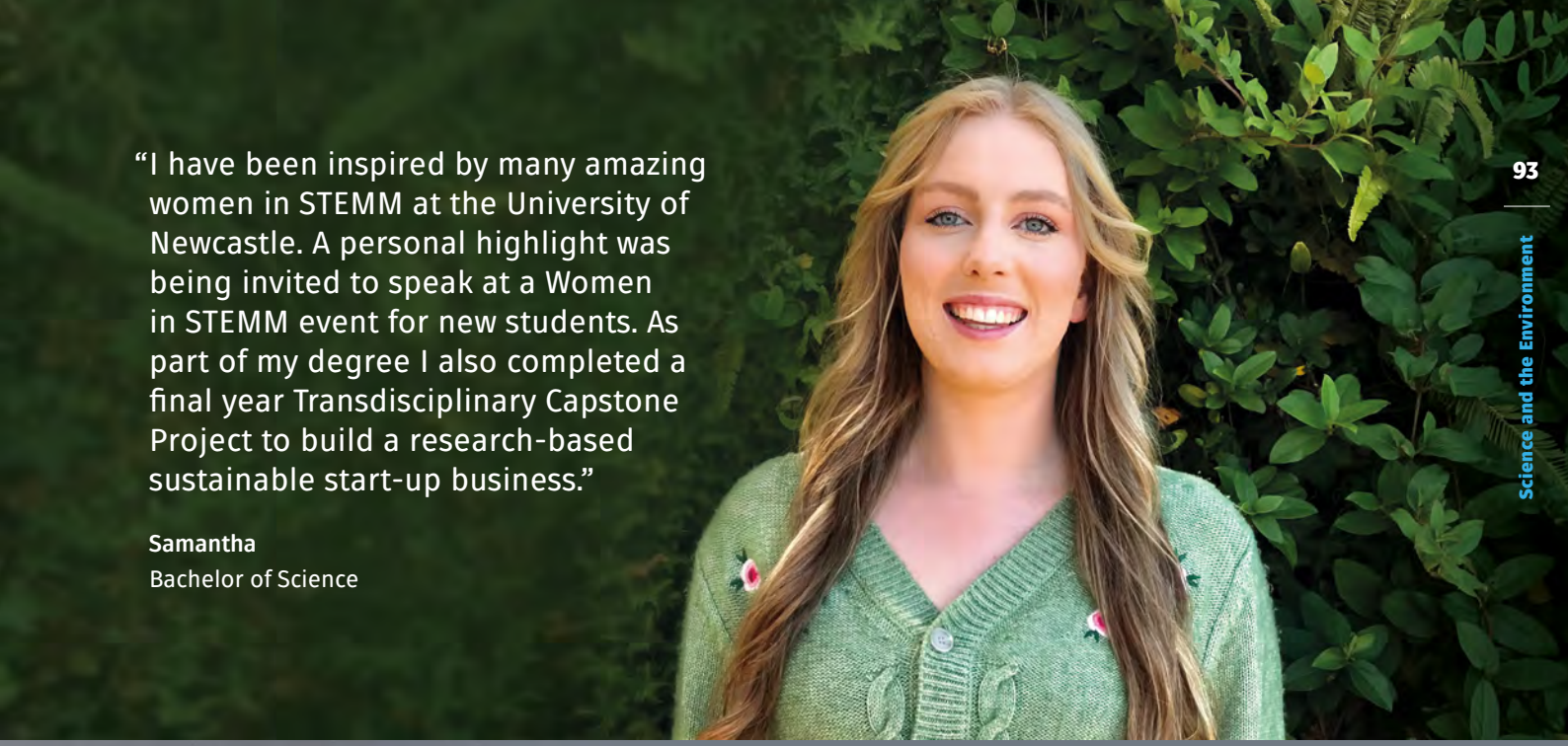
Degree options

Bachelor of Biotechnology
Bachelor of Climate Science and Adaptation
Bachelor of Coastal and Marine Science
Bachelor of Environmental Science and Management
Bachelor of Exercise and Sport Science
Bachelor of Food Science and Human Nutrition
Bachelor of Psychological Science
Bachelor of Psychological Science (Advanced)
Bachelor of Science
Bachelor of Science (Advanced)
Diploma in Environmental Science
Diploma in Science

Also consider

Bachelor of Chemical Engineering (Honours)
Bachelor of Environmental Engineering (Honours)
Bachelor of Medical Engineering (Honours)
Bachelor of Renewable Energy Engineering (Honours)
Bachelor of Development Studies

1 ShanghaiRanking's Global Ranking of Sport Science Schools and Departments 2020.
2 The Good Universities Guide 2021.
3 Student Experience Survey 2019-2020.



"I have been inspired by many amazing women in STEMM at the University of Newcastle. A personal highlight was being invited to speak at a Women in STEMM event for new students. As part of my degree I also completed a final year Transdisciplinary Capstone Project to build a research-based sustainable start-up business."

Samantha
Bachelor of Science

"I started volunteering at a research lab at the University about halfway through my degree, which is something I really recommend – the experience I gained will go a long way to help getting me a job related to psychology. Other volunteering opportunities I participated in also led to me getting a paying job while I finished my studies."

Bill
Bachelor of Psychological Science

"Being a student at the University has allowed me to participate in a range of work-integrated learning opportunities including amazing fieldwork trips and work placements in companies I aspire to one day work in. I have also been fortunate enough to broaden my knowledge on a global scale through completing a virtual internship with the University of Malaysia."

Alex
Bachelor of Environmental Science and Management

Bachelor of
Biotechnology

2022 Selection Rank	Duration
67.00 | Median 76.48	3 yrs FT / 8 yrs PT

UAC Code	Location
482150	Newcastle – Callaghan

Assumed knowledge	Mathematics (Advanced) and Chemistry
Recommended studies	Biology and Physics

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'll help to develop technologies that improve our communities and the health of our planet. You might even be the researcher that develops a super crop that can survive harsh climates and feed the hungry. The products of biotechnology are all around us and you can be at the forefront of scientific development and discovery.

What you will study
Our academics are internationally recognised as leaders in their fields and are working to solve real-world problems. Under their leadership, you will focus on the application of DNA and cell technologies on human health, plant and animal agriculture and the environment.

Core studies include:

- Biochemistry
- Biomolecules
- Cellular Biotechnology
- Laboratory Skills in Biological Systems
- Microbiology
- Molecular Biology
- Molecular Genetics
- Statistics for the Sciences

Practical experience
Embark on a global experience – develop a global mindset, diversify your skill set and build your international network with virtual study options or travel abroad and undergo a semester exchange, short course, internship or study tour to enhance your program. This degree offers a 10-week full-time industrial placement. A feature of this degree is the separate courses focusing on laboratory skills, which provide students with hands-on experience.

Career opportunities
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 go into a career as a:

- Biochemist
- Biotechnologist
- Clinical Research Coordinator
- Geneticist
- IVF Embryologist
- Laboratory Analyst
- Microbiologist
- Pharmaceutical Scientist
- Research Scientist
- Scientific Patent Examiner/ Technical Advisor
- Tissue Culture Technician

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

See the website for more information about this degree

Bachelor of
Climate Science and Adaptation

2022 Selection Rank	Duration
67.00 | Median 81.00	3 yrs FT / 8 yrs PT

UAC Code	Location
484875	Newcastle – Callaghan

Assumed knowledge	Mathematics (Standard)
Recommended studies	At least one of Biology, Chemistry, Earth and Environmental Science or Physics

The Bachelor of Climate Science and Adaptation is a specialised degree which will allow you to turn your passion into practice. It will provide you with fundamental tools to tackle the many challenges associated with quantifying and dealing with climate-related risks. You will learn how to assess the impacts of climate variability and change. You will also learn how to develop adaptation strategies (e.g. infrastructure, planning policy) that not only reduce the economic, environmental, and social costs of climate hazards, but are also optimal and robust across a range of plausible futures.

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 and Energy
- Climate Change and Resource Management
- Earth Processes (including Climatic, Hydrological, Coastal, Soil)
- Environmental Sustainability
- Human Geography
- Risk, Vulnerability, Adaptation, and Resilience
- Spatial Science
- Statistics
- Water, Energy and Food Security

Practical experience
Through our partnerships with external industries and government agencies, you'll also have the opportunity to engage in work – and research – integrated learning when you apply your studies to complete a major transdisciplinary capstone project in the final year.

Career opportunities
Great projected career growth – nationally, jobs for natural and physical science professionals are projected to grow 10.7% from 2019 to 2024, and 12.5% for environmental scientists[1].

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

See the website for more information about this degree

1 Labour Market Information Portal 2020.

Bachelor of

Coastal and Marine Science

2022 Selection Rank	Duration
65.00 | Median 75.83	3 yrs FT / 8 yrs PT

UAC Code	Location
484026	Newcastle – Callaghan
484036	Central Coast – Ourimbah
Assumed knowledge	Mathematics (Standard)
Recommended studies	At least one of Biology, Chemistry or Earth and Environmental Science

Are you a lover of the ocean? A passionate conservationist who wants to make sure our marine environment is sustained for years to come? Australia is home to some of the most unique and diverse coastlines and marine ecosystems in the world and we need to make sure they remain protected. By understanding the conservation and management issues they face – such as climate change, pollution and overfishing – we can help find solutions to these problems. When you study a Bachelor of Coastal and Marine Science, you'll be learning from experts in marine, coastal and ecological fields – giving you practical skills to make a difference in our world. Through professional pathways, students can tailor their program to meet their career aspirations.

What you will study

You can choose to study in areas such as:

- Animal Biology
- Biodiversity and Conservation
- Cell and Molecular Biology
- Chemistry
- Coastal and Surface Processes
- Communication
- Education Studies
- Environmental Regulation
- Environmental Science
- Environmental Toxicology and Health
- Food Science
- Geography
- Indigenous Environmental and Community Practice
- Microbiology
- Plant Biology
- Public and Community Health
- Riparian Restoration and Sustainability
- Social Science
- Sustainability
- Tourism and Event Management
- Water and Resource Management

Practical experience

You'll have access to world-class facilities and participate in lab work to help develop your analytical, research and communication skills. You'll have the opportunity to engage in Work Integrated Learning (WIL) and gain recognised certifications such as a boat licence, radio operator licence, and drone and remotely operated vehicle operation. Together this learning will ensure you have skills that are highly sought after by industry and government.

Career opportunities

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

- Animal Biologist
- Botanist
- Coastal and Marine Park Governance
- Compliance Officer
- Conservationist/Ecologist
- Ecotourism
- Fisheries Technician or Research Assistant
- Geographer
- Marine Biologist
- Marine Scientist
- Oceanographer
- Sustainability Officer
- Waterways and Coastal Officer

Combine this degree with

- Bachelor of Laws (Honours) Combined

See the website for more information about this degree

Bachelor of

Environmental Science and Management

2022 Selection Rank	Duration
67.00 | Median 79.25	3 yrs FT / 8 yrs PT

UAC Code	Location
482750	Newcastle – Callaghan
482760	Central Coast – Ourimbah
Assumed knowledge	Mathematics (Advanced) and at least one of Chemistry, Biology or Earth and Environmental Science

If you want to contribute to solving 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 of Newcastle is centrally situated to give you hands-on experience in areas of vast environmental diversity, from terrestrial landscapes, to wetlands and coastal zones. We offer the perfect environment for you to gain an understanding of the critical issues placing a growing strain on the Earth's natural resources and develop tactics to combat them.

What you will study

Students will explore concepts such as environmental systems and practices, and related ethics, values and legislation.

Develop skills in:

- Biological and Earth Processes
- Environmental Planning and Impact Assessment
- Environmental Remote Sensing and Computer-Based Mapping
- Environmental Sampling and Data Analysis
- Environmental Values, Sustainability and Ethics
- Land Management
- Social Development and the Environment

Students also choose from one of the following majors study areas to specialise in:

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

Practical experience

This degree has a strong focus on field and lab work in a range of settings and environments. You will learn and build your skills in a number of key environmental locations, including mining areas, national parks, urban developments, major waterways and coastal zones. Your fieldwork is complemented by practical lab work where you have the opportunity to use professional equipment found in the workplace. In the final year of your degree you will undertake research or Work Integrated Learning (WIL) experience in a private sector, government or community organisation.

Career opportunities

Graduates of the Bachelor of Environmental Science and Management can go on to develop regional solutions for a sustainable future and work in a diverse range of areas including conservation and ecology, environmental science, laboratory and research work, or urban and regional planning. Some typical positions include:

- Botanist/Plant Scientist
- Climatologist
- Coastal Management Officer
- Environmental Consultant
- Environmental Health Officer
- Geologist
- Marine Scientist
- Oceanographer
- Science Teacher
- Scientific Park Ranger
- Water Resource Management Specialist
- Zoologist

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, Australian Society of Herpetology.

Combine this degree with

- Bachelor of Business

See the website for more information about this degree

Bachelor of

Exercise and Sport Science

2022 Selection Rank	Duration
68.00 | Median 76.03	3 yrs FT / 8 yrs PT

UAC Code	Location
482800	Central Coast – Ourimbah

Assumed knowledge	At least two of Biology, Chemistry, Mathematics (Advanced) or Physics
Recommended studies	Personal Development, Health and Physical Education (PDHPE)

People use exercise for a whole range of reasons, from staying fit and healthy, managing disease and health conditions as well as competing in recreational and elite sports. Exercise and sport science is an inspiring and rapidly evolving field that explores how best to prescribe and deliver exercise for health and performance benefits. You could find yourself leading a team of research scientists to discover a new link between brain function and diet or developing a new format of exercise that produces greater results. At the University of Newcastle, we have a globally recognised Bachelor of Exercise and Sport Science program that encompasses all aspects of physical health delivered through a combination of online and face-to-face teaching.

What you will study

This degree addresses both sport and health aspects in its comprehensive approach to the study of exercise and biological sciences. Some of the courses you will complete focus on:

- Biomechanics
- Clinical Exercise Testing and Prescription
- Exercise Physiology
- Growth, Development and Ageing
- Sports Nutrition

Practical experience

This degree is offered at our Central Coast (Ourimbah) campus where you have access to world-class facilities including high quality laboratories, the latest testing equipment and a state-of-the-art gym.

You will be provided with opportunities to gain valuable work experience in the sport and fitness industry through our professional placement program. In addition to placement with clinics and hospitals, we also have strong ties with the Central Coast Mariners Football Club, the Newcastle Jets Football Club and the Newcastle Knights Rugby League Club to ensure interesting and dynamic placement opportunities.

Career opportunities

Our graduates have great employment prospects with 90% securing employment within four months of finishing their degree. A wide range of career opportunities are available with some typical roles including:

- Exercise Rehabilitation/Injury Management Advisor
- Exercise Scientist
- Player Development Manager
- Research Scientist
- Sports Administrator
- Sports Development Officer

Professional recognition

Graduates are eligible for accreditation with Exercise and Sport Science Australia (ESSA).

See the website for more information about this degree

Bachelor of

Food Science and Human Nutrition

2022 Selection Rank	Duration
67.00 | Median 78.45	3 yrs FT / 8 yrs PT

UAC Code	Location
482900	Central Coast – Ourimbah

Recommended studies	Chemistry, Biology and Mathematics (Advanced)

As an increasingly health conscious society drives change, the specialty areas of food science and human nutrition require people with a passion for innovative thinking. As a food and nutrition scientist, you could work with fresh or processed foods, developing new products, or analysing existing ones, to ensure that they are nutritionally balanced, safe to eat, environmentally friendly, and desirable to purchase. With a Bachelor of Food Science and Human Nutrition, you'll stay up-to-date on the latest scientific developments and be equipped with the specialist knowledge and skills needed for a successful career in the food science, health and nutrition industries.

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:

- Biology and Biochemistry
- Biomedical Science
- Chemistry
- Essential Nutrients
- Food Analysis
- Food Marketing and Consumer Behaviour
- Food Product Development
- Food Safety and Microbiology
- Food Technologies
- Food Trends and Innovation
- Nutrition In Health and Disease
- Plant and Animal Food Products

Practical experience

Offered from our Central Coast campus (Ourimbah), you will train in the University's Food Innovation Kitchen and Laboratory. You will design, test and analyse food products throughout the degree including labelling, marketing, nutritional and chemical composition, food safety and sensory analysis. There are also opportunities for work placement and field trips that enable you to apply real-life experiences to your studies and give you a competitive edge.

Career opportunities

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
- Flavorist
- Food Product Developer
- Food Safety and Quality Management
- Food Scientist Technologist
- Food Service and Food Plant Management
- Government and Food Industry Regulation
- Health Promotion Officer
- Nutrition Consultant (Sport Nutritionist)
- Nutrition Education and Research
- Nutritionist

Professional recognition

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

Graduates will also be able to register as an Associate Nutritionist (ANutr), a register of Nutritionists established by the NSA, and apply for Registered Nutritionist status (RNutr) following sufficient industry experience.

Combine this degree with

- Bachelor of Business

See the website for more information about this degree

Bachelor of

Psychological Science

2022 Selection Rank	Duration
65.00 | Median 72.65	3 yrs FT / 8 yrs PT

UAC Code	Location
483970	Newcastle – Callaghan
483980	Central Coast – Ourimbah
Assumed knowledge	Mathematics (Advanced)
Recommended studies	Biology

Psychological science is a fascinating area which examines the cause of human behaviour. This understanding is then used to solve practical problems that will positively impact the lives of others. The Bachelor of Psychological Science can be applied in a broad range of industry sectors, enabling you to choose the career path that's right for you.

What you will study

- Clinical and Abnormal Behavior
- Cognition and Information Processing
- Developmental Psychology
- Neuroscience
- Perceptual Processes and Learning Theory
- Psychological Research Methodology
- Psychopharmacology
- Social Psychology and Personality
- Statistics

Depending on your marks throughout your degree you will have the option to study an Honours year in psychology. Honours gives you a good research base to progress on to postgraduate study in psychology and can also boost your employment prospects. This degree gives you a better chance to pursue higher positions and salaries after you graduate.

Practical experience

This degree includes a professional strand of courses each year, which will help you develop workplace skills. You will have access to psychology labs and the psychology clinic to enhance your practical skills and theoretical studies.

Career opportunities

Our graduates enjoy great job prospects with 92% securing work soon after graduating.

Examples of roles that your degree could apply to include:

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

Professional recognition

This degree is accredited by the Australian Psychology Accreditation Council and approved by the Psychology Board of Australia. Upon completion of an APAC accredited undergraduate degree, students who go on to complete the Honours in psychology will be eligible 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.

Combine this degree with

- Bachelor of Business
- Bachelor of Communication
- Bachelor of Criminology
- Bachelor of Laws (Honours) Combined
- Bachelor of Social Science

See the website for more information about this degree

Bachelor of

Psychological Science (Advanced)

2022 Selection Rank	Duration
95.00 | Median 99.50	3 yrs FT / 8 yrs PT

UAC Code	Location
483975	Newcastle – Callaghan
483985	Central Coast – Ourimbah
Assumed knowledge	Mathematics (Advanced)
Recommended studies	Biology

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 with opportunities to participate in Work Integrated Learning (WIL), you'll develop valuable connections with industry and other professionals to improve employment outcomes when you graduate. This fascinating and evolving field will prepare you to work in a broad range of industries where you can positively impact the lives of others.

What you will study

The Bachelor of Psychological Science (Advanced) covers a wide range of subject areas. In your first year you will examine the influences on behaviour and personality plus the mechanisms of behaviour such as emotions, perception, learning and memory. Second year expands on all core areas with a focus on mental health and interventions, while in third year you will study core topics with a focus on applications of theory.

Throughout the degree you will learn about:

- Clinical and Abnormal Behaviour
- Cognition and Information Processing
- Developmental Psychology
- Neuroscience
- Perceptual Processes and Learning Theory
- Psychopharmacology
- Research Methodology
- Social Psychology and Personality
- Statistics

High achieving students who receive the required marks throughout their degree will have the option to study Honours.

Practical experience

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.

If you choose to do a fourth year of Honours you will conduct a major research project on a specific area of psychology. This gives you practical, hands-on research experience – an essential part of the psychology discipline.

Career opportunities

Our graduates enjoy great job prospects with 92% securing work soon after graduating.

Examples of roles that your degree could apply to include:

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

Professional recognition

This degree is accredited by the Australian Psychology Accreditation Council and approved by the Psychology Board of Australia. Upon completion of an APAC accredited undergraduate degree, students who go on to complete the Honours psychology will be eligible 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.

See the website for more information about this degree

Bachelor of

Science

2022 Selection Rank	Duration
67.00 | Median 74.05	3 yrs FT / 8 yrs PT

UAC Code	Location
484020	Newcastle – Callaghan
484030	Central Coast – Ourimbah
Assumed knowledge	Mathematics (Advanced)
Recommended studies	At least one of Biology, Chemistry, Physics or Earth and Environmental Science

The immense 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. The Bachelor of Science will provide you with a new way of learning and a new path to discovery. Develop practical business and communication skills that will complement and enhance your science knowledge. The network you build and the communication skills you develop will make you a highly-skilled and employable science graduate who will contribute solutions to the scientific challenges we are facing.

What you will study

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
- Earth Science
- Geography
- Mathematics
- Physics
- Psychology
- Statistics

Practical experience

Students will have access to world-class facilities including our nanoscience and chemistry laboratories and mathematics grid room. Throughout your degree you'll participate in lab work to help develop your analytical, research and communication skills. From the first week of your degree you will be in the field, as we use the campus as our personal living laboratory. You will also take part in field trips, seminar presentations and workshops to enhance classroom theory and apply it to real-life situations.

Career opportunities

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

- Chemist
- Climatologist
- Conservationist/ Ecologist
- Geographer
- Marine Biologist
- Mathematician
- Microbiologist
- Neuroscientist
- Oceanographer
- Physicist

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.

Combine this degree with

- Bachelor of Arts
- Bachelor of Chemical Engineering (Honours)
- Bachelor of Computer Systems Engineering (Honours)
- Bachelor of Electrical and Electronic Engineering (Honours)
- Bachelor of Environmental Engineering (Honours)
- Bachelor of Innovation and Entrepreneurship Combined
- Bachelor of Laws (Honours) Combined
- Bachelor of Mathematics
- Bachelor of Mechanical Engineering (Honours)

See the website for more information about this degree

Bachelor of

Science (Advanced)

2022 Selection Rank	Duration
95.00 | Median 99.95	3 yrs FT / 8 yrs PT

UAC Code	Location
484025	Newcastle – Callaghan
484035	Central Coast – Ourimbah
Assumed knowledge	Mathematics (Advanced)
Recommended studies	At least one of Biology, Chemistry, Physics or Earth and Environmental Science

Gone are the days of the stereotypical scientist – 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'll 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:

- Biodiversity and Conservation
- Biological Sciences
- Chemistry
- Earth Science
- Geography
- Mathematics
- Physics
- Psychology
- Statistics

Practical experience

Students will have access to world-class facilities including our nanoscience and chemistry laboratories. Throughout your degree you'll participate in lab work to help develop your analytical, research and communication skills. You will also take part in field trips, seminar presentations and workshops to enhance classroom theory and apply it to real-life situations.

Career opportunities

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

- Chemist
- Climatologist
- Conservationist/ Ecologist
- Geographer
- Marine Biologist
- Mathematician
- Microbiologist
- Neuroscientist
- Oceanographer
- Physicist

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.

See the website for more information about this degree

Diploma in
Environmental Science

2022 Selection Rank	Duration
50.00 | Median 52.95	1 yr FT / 4 yrs PT

UAC Code	Location
489829	Newcastle – Callaghan
489830	Central Coast – Ourimbah

If you have a passion for science, sustainability and want to play a part in solving the environmental problems facing our society, then the Diploma in Environmental Science is a great place to start. You'll learn to understand and combat the critical issues placing a growing strain on the earth's natural resources such as climate change, human impacts, and the biodiversity crisis. Choose to study across a range of disciplines including ecosystems, human geography, oceans and environmental values and ethics.

What you will study

The Diploma in Environmental Science has been designed to give you a core knowledge base where you'll learn academic literacy, research and discipline-specific skills needed for further study. You'll complete a short list of directed courses, providing you with a taste of discipline areas within our Environmental Science and Management, Climate Science and Adaptation or Coastal and Marine Science degrees. The Diploma in Environmental Science offers a guaranteed entry pathway into the Bachelor of Environmental Science and Management, the Bachelor of Climate Science and Adaptation, or the Bachelor of Coastal and Marine Science.

Course content includes:

- Climate Science
- Coastal and Marine Science
- Environmental Science
- Science and the Environment

Why study with us

- Guaranteed degree entry – complete the Diploma in Environmental Science and receive a guaranteed entry into the Bachelor of Climate Science and Adaptation, the Bachelor of Coastal and Marine Science, the Development Studies, or the Bachelor of Environmental Science and Management.
- Receive credit – receive up to 80 units credit towards an undergraduate degree.
- No extra time or cost – depending on which degree you would like to move into after the Diploma, it may be possible to complete your degree in the standard, minimum timeframe. Also, for any courses for which you receive credit, you don't have to pay for those again once you get into your degree.
- Extensive Support – gain additional support through pathways courses which develop foundational degree skills in smaller class sizes. The support offered in a Diploma helps students transition into larger classes alongside undergraduate students and experience study as you would in an undergraduate degree program.
- Real-world insights – connect with industry through projects, guest lectures and mentoring.
- Diversify your skills and knowledge – get a taste of the different environmental science disciplines with our directed course list.

Career Opportunities

Professionals in Science work in a large range of areas including:

- Earth Sciences (including Geology)
- Environmental Health and Sustainability
- Environmental Impact and Assessment
- Environmental Science
- Laboratory and Research Work
- Marine Biology
- Mining and Exploration
- Teaching
- Urban and Regional Planning
- Writing

See the website for more information about this diploma

Diploma in
Science

2022 Selection Rank	Duration
50.00 | Median 57.05	1 yr FT / 4 yrs PT

UAC Code	Location
489822	Newcastle – Callaghan
489823	Central Coast – Ourimbah

If you have a passion for science and want to explore your interests further and make an impact, then the Diploma in Science is a great place to start. Through fieldwork and lab work you'll have plenty of opportunities to help make life-changing discoveries. Choose to study across a range of disciplines including biodiversity and conservation, biology, biotechnology, chemistry, food science, geography, earth science and psychology.

What you will study

The Diploma in Science has been designed to give you a core knowledge base where you'll learn academic literacy, research and discipline-specific skills needed for further study. You'll complete a short list of directed courses, providing you with a taste of discipline areas including biodiversity and conservation, biology, biotechnology, chemistry, food science, geography, earth science and psychology. The Diploma in Science offers a guaranteed entry pathway into the Bachelor of Science, the Bachelor of Biotechnology, the Bachelor of Food Science and Human Nutrition, or the Bachelor of Psychology.

Course content includes:

- Biology
- Biotechnology
- Chemistry
- Environmental Science
- Food Science
- Nutrition
- Physics
- Plant Science
- Psychological Science
- Psychology
- Science

Why study with us

- Guaranteed degree entry – complete the Diploma in Science and receive a guaranteed entry into the Bachelor of Biotechnology, the Bachelor of Food Science and Human Nutrition, the Bachelor of Science, or the Bachelor of Psychological Science.
- Receive credit – receive up to 80 units credit towards an undergraduate degree.
- No extra time or cost – depending on which degree you would like to move into after the Diploma, it may be possible to complete your degree in the standard, minimum timeframe. Also, for any courses for which you receive credit, you don't have to pay for those again once you get into your degree.
- Extensive Support – gain additional support through pathways courses which develop foundational degree skills in smaller class sizes. The support offered in a Diploma helps students transition into larger classes alongside undergraduate students and experience study as you would in an undergraduate degree program.
- Real-world insights – connect with industry through projects, guest lectures and mentoring.
- Diversify your skills and knowledge – get a taste of the different science disciplines with our directed course list.

Career Opportunities

There's no one type of scientist and career opportunities are always evolving. You might work in a lab, discovering life-changing scientific breakthroughs. You could work in science education, sharing your passion and knowledge with the next generation. Maybe you see yourself using science to shape government policy, or something else entirely. Science gives you the flexibility to explore a path that's right for you.

See the website for more information about this diploma

Combined degrees

Bachelor of Arts/Bachelor of Science

Through the sciences you will be inspired to build new knowledge and discover new things. Through the arts you will explore ideas, theories and records of how people process the human experience through society, culture, and more.

Bachelor of Chemical Engineering (Honours)/Bachelor of Science

Deepen your technical skills with comprehensive chemistry courses which are available in the Bachelor of Science. Chemistry is fundamental to chemical engineering and a deeper knowledge of this science can open up opportunities in toxicology, pharmacy, biochemistry, bio-engineering, forensics and research.

Bachelor of Computer Systems Engineering (Honours)/ Bachelor of Science (Physics major)

Deepen your technical skills with comprehensive physics courses which are available in the Bachelor of Science. Physics is fundamental to engineering and a deeper knowledge of this science can help you solve more complex engineering problems. This advanced theoretical background will also open up opportunities in research and development.

Bachelor of Electrical and Electronic Engineering (Honours)/ Bachelor of Science (Physics major)

Deepen your technical skills with comprehensive physics courses which are available in the Bachelor of Science. Physics is fundamental to engineering and a deeper knowledge of this science can help you solve more complex engineering problems. This advanced theoretical background will also open up opportunities in research and development.

Bachelor of Environmental Engineering (Honours)/ Bachelor of Science (Earth Sciences major)

Deepen your technical skills with comprehensive chemistry or biology courses which are available in the Bachelor of Science. Chemistry and biology are both fundamental to engineering and a deeper knowledge of these sciences can help you solve more complex engineering problems. This advanced theoretical background will also open up opportunities in research and development.

Bachelor of Environmental Science and Management/ Bachelor of Business

A combined Bachelor of Environmental Science and Management/ Bachelor of Business (BESM/BBus) degree allows students to undertake and match business skills with their interest in environment and sustainability, a synergy that will raise awareness of commercial and entrepreneurial opportunities in the environmental space and maximise graduate employability.

Bachelor of Mathematics/Bachelor of Science

The Bachelor of Mathematics/Bachelor of Science combined program is for those who are interested in understanding the world around us and how it works. This degree is for those who are inspired to build new knowledge and discover new things.

Bachelor of Mechanical Engineering (Honours)/ Bachelor of Science (Physics major)

Deepen your technical skills with comprehensive physics courses which are available in the Bachelor of Science. Physics is fundamental to engineering and a deeper knowledge of this science can help you solve more complex engineering problems. This advanced theoretical background will also open up opportunities in research and development.

Bachelor of Science/Bachelor of Innovation and Entrepreneurship

The Bachelor of Science/Bachelor of Innovation and Entrepreneurship combined program is for those who are interested in understanding the world around us, and in creating innovative futures that influence markets, communities and societies. This program is for those who are inspired to build new knowledge and discover new things.

Bachelor of Science/Bachelor of Laws (Honours)

Students completing this combined degree program will meet the academic requirements to practice law in NSW. Students also have the skills and knowledge to contribute to scientific development in many areas of technology, industry, agriculture or the information revolution.

The University of Newcastle reserves the right at all times to withdraw or vary degrees listed within this publication. Entry schemes are also subject to change. In the event that a degree within this publication has to be changed or withdrawn, applicants will be advised by mail to the address specified by them on their UAC application.

Selection ranks are indicative only, and are based on Semester 1 2022 offers made in UAC January Round 2 2022, but is subject to change as degree content is reviewed and updated. For the most up-to-date information visit **newcastle.edu.au**

Employment rates are from the QILT Graduates Outcomes Survey 2019 - 2021 (qilt.edu.au). Future career and industry projections are sourced from Australian Government Job Outlook (joboutlook.gov.au).

Newcastle campus, Callaghan

newcastle.edu.au/signup

1300 ASK UON (1300 275 866)

University of Newcastle

Newcastle Campus
Callaghan
University Drive,
Callaghan NSW 2308

Newcastle City Campuses
NUspace
Corner Hunter and Auckland Streets,
Newcastle NSW 2300

Q Building
Corner of Honeysuckle Drive
and Worth Place,
Newcastle NSW 2300

Central Coast Campuses
Ourimbah
Chittaway Road,
Ourimbah NSW 2258

Central Coast Clinical School
Holden Street,
Gosford NSW 2250

Open Days

Each year we invite you to spend the day with us at our annual Open Days. These events give you the chance to explore our campuses and experience a taste of life at university. You can chat to current students and staff about student support services as well as degrees and study options. If you can't make it to an Open Day, you can always check out our Open Days Online site where we've put together webinars and on-demand videos to help you find all the information you're looking for.

Discover Open Days Online

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