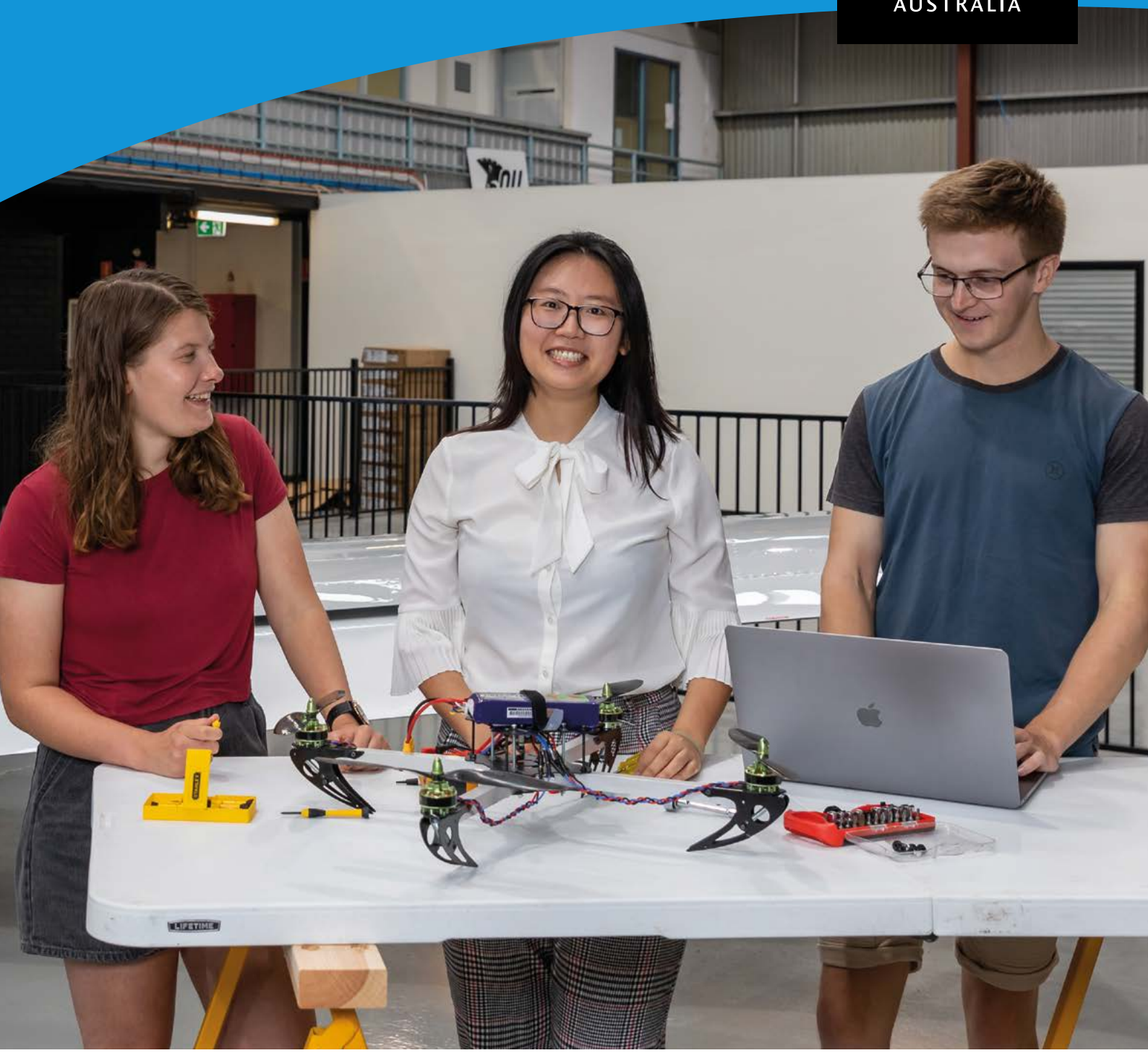
Industry Snapshot

Engineering

UNIVERSITY OF NEWCASTLE AUSTRALIA



ENGINEERS AUSTRALIA

Washington Accord

INTERNATIONAL ENGINEERING ALLIANCE

newcastle.edu.au/intl-eng

Develop world-changing solutions

Studying Engineering at the University of Newcastle sets you up for a future of creative and challenging opportunities. You will gain hands-on experience and develop world-changing solutions, unlocking exciting career prospects that make a real difference in a supportive and vibrant environment.

Why study Engineering

The role of an Engineer is ever-changing, adapting to new advancements such as artificial intelligence, renewable energy, and smart infrastructure. Students will gain the skills to design and build solutions that address global challenges, from sustainable energy to advanced medical technologies.

Engineering offers diverse career opportunities across industries like aerospace, robotics, telecommunications, and environmental systems. With a focus on critical thinking, creativity, and collaboration, an Engineering degree equips students with the expertise to shape the future, drive technological progress, and make a lasting impact on society.

Plus, engineers are in high demand with advertised vacancies for Engineering jobs in Newcastle, Australia having increased 34% in the last five years to May 2024[1].

As a global leader in engineering education, including being ranked **2nd in Australia and 41 in the world for Automation and Control Engineering**[2], the University of Newcastle is the place to develop world-changing solutions.

1 Internet Vacancies Index, Jobs and Skills Australia
2 ShanghaiRanking Global Ranking of Academic Subjects, 2024

Newcastle and Hunter Region Snapshot

Future growth and development for the region[1]

The Hunter region is experiencing significant growth through several key engineering projects that will enhance its economic landscape:

- **Development of Advanced Manufacturing, Defence, and Aerospace Hubs:** these hubs will leverage engineering expertise to foster innovation and create high-skilled jobs, positioning the region as a leader in these sectors.
- **Diversification and Growth in the Energy Sector:** the focus on energy-efficient and renewable technologies will help the Hunter region become a major hub for next-generation power, particularly in renewable hydrogen generation, storage, and use.
- **Hydrogen Economy Development:** with its strong energy industries and research base, the Hunter region is set to benefit economically from the establishment of a hydrogen economy, leading to job creation and industry growth.
- **World-Class Research:** the broader Hunter area excels in research related to agricultural productivity, renewable energy, and mining services, supported by a skilled workforce in science, technology, and engineering.

The region's strategic growth areas include advanced manufacturing, creative industries, defence and aerospace, food and agribusiness, medical technology and pharmaceuticals, mining equipment and services, and renewable energy.

Local Engineering organisations

With engagement being one of the University's core values, the University has cultivated industry and community partnerships that not only benefit students and staff, but also ensure they are central in the regions' growth and prosperity.

NORTHROP GRUMMAN
aurecon
GLENCORE
WSP
Stantec
Jacobs
GHD
ORICA
AECOM
AMPCONTROL®
SMEC
Member of the Surbana Jurong Group

2nd

largest city in NSW, Australia

70,000

Over 70,000 more homes by 2036[1]

1.27M

New international airport 1.27 million passengers a year[2]

427,000

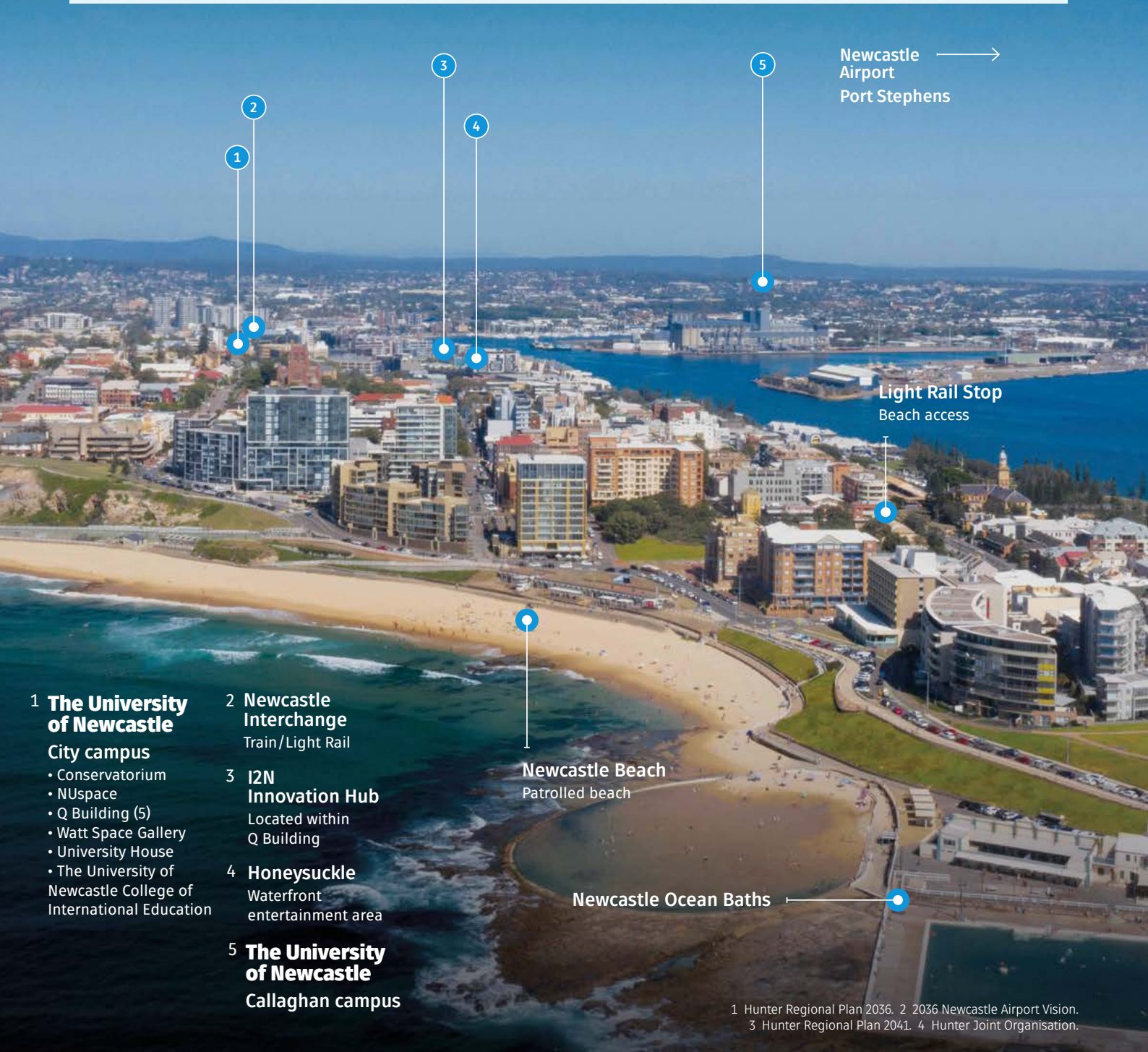
Over 427,000 jobs and growing[3]

25%

Population growth over the next 20 years[3]

28%

of regional NSW's total economic output[4]



1 **The University of Newcastle**
City campus
- Conservatorium
- NUspace
- Q Building (5)
- Watt Space Gallery
- University House
- The University of Newcastle College of International Education

2 **Newcastle Interchange**
Train/Light Rail

3 **I2N Innovation Hub**
Located within Q Building

4 **Honeysuckle**
Waterfront entertainment area

5 **The University of Newcastle**
Callaghan campus

1 Hunter Regional Plan 2036. 2 2036 Newcastle Airport Vision.
3 Hunter Regional Plan 2041. 4 Hunter Joint Organisation.

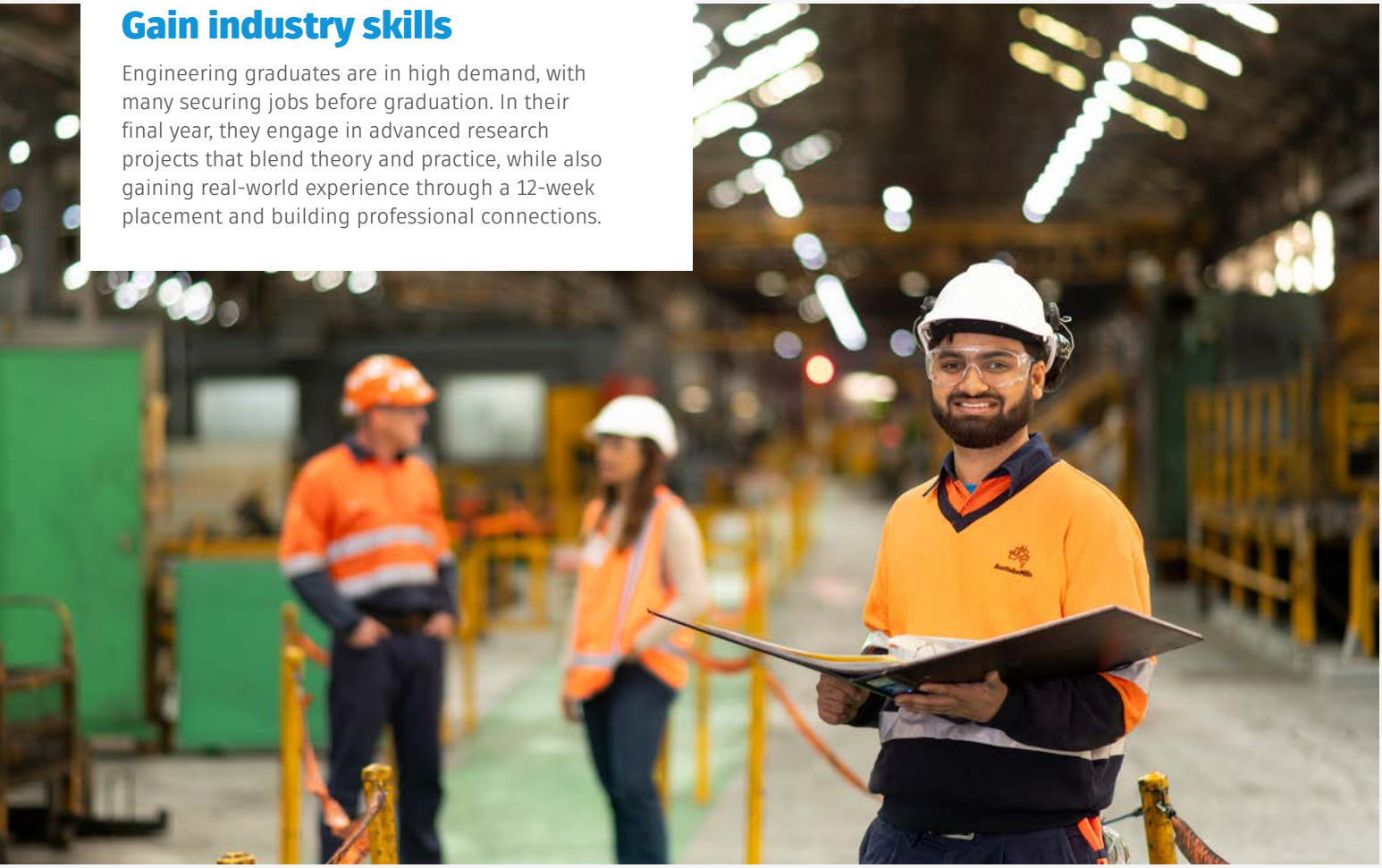
What the university of Newcastle can offer

Our world-class facilities and programs are designed to provide students with meaningful, real-life experience. From state-of-the-art laboratories to collaborative project environments and industry placements, students are immersed in practical learning that reflects the realities of modern engineering.

This approach ensures that graduates leave with more than just theoretical knowledge. Students will possess the hands-on skills, critical thinking, and adaptability needed to succeed in a constantly evolving engineering landscape.

Gain industry skills

Engineering graduates are in high demand, with many securing jobs before graduation. In their final year, they engage in advanced research projects that blend theory and practice, while also gaining real-world experience through a 12-week placement and building professional connections.



NU Teams

Our engineering teams compete at the highest level in prestigious competitions, providing an exceptional opportunity for students. These teams consist of undergraduate students from all years studying Mechanical, Mechatronics, Chemical, Aerospace Systems, and Electrical/Electronic engineering. Participants demonstrate remarkable dedication, skill, and enthusiasm as they tackle real-world problems, gaining invaluable experience that prepares them for successful careers in the industry. This hands-on involvement not only enhances their learning but also sets them apart in the job market.

Ranked 2

in Australia and 41 in the world for Automation and Control Engineering[2]

Ranked 2

in Australia for skills development[2]

Top 200

for Civil and Structural Engineering[3]

School Research

Our School of Engineering emphasises research and features experts across various fields, ensuring students learn the latest concepts from leaders in engineering and technology. Many faculty members have real-world experience and are internationally recognised, sharing their practical knowledge with students.

Laureate Professor Behdad Moghtaderi
School of Engineering

1 ShanghaiRanking's Global Ranking of Academic Subjects 2024 2 Student Experience Survey 2021 and 2022 - Undergraduate Engineering
3 QS World University Rankings by Subject 2025

Careers and skills

Lucy, Australia
Bachelor of Software Engineering (Honours)

An Engineering degree opens the door to a wide range of exciting career paths across numerous industries.

During their studies, students will learn important skills to succeed and adapt to changes, ensuring a flexible and impactful career in engineering.

Top 10

university in Australia for Graduate Employability[1]

Top skills in demand[2]

Top in-demand Engineering jobs (Newcastle)

- Civil Engineer
- Mechanical Engineer
- Electrical Engineer
- Engineering Manager
- CAD Designer / Draughtsperson
- Mining Engineer
- Water / Wastewater Engineer
- Electrical and Electronics Technician
- Maintenance / Service Supervisor
- Industrial Engineer

Top 10 specialised skills (National and Hunter)

- Project Management
- Electrical Engineering
- Civil Engineering
- Project Engineering
- Mechanical Engineering
- Construction
- Engineering Design Process
- Continuous Improvement Process
- AutoCAD
- Construction

Top baseline skills (National)

- Communication
- Management
- Planning
- Operations
- Leadership
- Problem-solving
- Mentorship
- Innovation
- Detail Oriented
- Coordinating

1 Graduate Outcomes Survey 2019-2021 2 Graduate Outcomes Survey 2020-2022.

Career-ready placements

Industrial Experience provides an opportunity to gain valuable hands-on training and experience in real world situations. Additionally, through exposure to current practice, students can reflect on and appreciate the link between curriculum and practice.

Industrial Experience is a requirement for the Bachelor of Engineering (Honours) and Master of Professional Engineering* degrees which are accredited by Engineers Australia (EA). Students will complete a total of 12 weeks of career-ready placement experiences.

Scan to learn more about Career-ready Placements.

Benefits of a career-ready placement

One of the greatest benefits of undertaking a career-ready placement is the impact it has on employability.

Career-ready placements provide students with opportunities to:

- Become job-ready
- Learn from sector-leading professionals
- Build professional contacts and networks
- Develop discipline-specific skills and knowledge through hands on exposure in the workplace
- Explore future career options
- Gain insights into the professional attitudes and attributes necessary for the jobs of the future
- Develop a competitive edge in the global employment marketplace.

1 Department of Home Affairs 2023.

Build your career

Recognising the rapidly changing environment our students will enter upon graduation, our education experience will prioritise developing life-ready graduates who are community-minded, resilient, and work-ready.

Scan to learn more about our Career Connect service.

Post-study work opportunities

are available in Australia after successful completion of study[2]

92%

of undergraduate Engineering students employed within four months of graduating[1]

95.6%

of postgraduate students employed within four months of graduating1

Develop practical skills

Industrial experience offers valuable hands-on, practical skills in real-world situations, allowing you to reflect on and appreciate the connection between your curriculum and current practices.

Career support

University services like Career Connect link you with over 100 extra-curricular experiences that will help you build additional skills that employers are looking for, such as Communication, Enterprise, Leadership and Teamwork.

Clubs and societies

Get involved with the clubs and societies across our campuses and develop your interpersonal and teamwork skills to stand out from other job candidates. Some of the clubs include the Newcastle University Women in Engineering, NU Brewing, NU Racing, The MedMarkets, NU Marine, NU Rocketry, Australasian Institute of Mining and Metallurgy and Newcastle University Engineering Society.

Careers service

Whether it is career counselling, finding job opportunities, job application assistance or interview preparation, the University's Cavreers Service is here to help. You can also take advantage of CareerHub online, where employers post opportunities for graduate employment, part-time experience, and paid internships.

1 Graduate Outcomes Survey 2022-2024 2 Department of Home Affairs 2023.

Roy Zhao, China
Maitland City Council (Graduate Program)

Connect with industry

There are so many ways to connect with industry and expand your networks while you study. Attend career exhibitions and industry events and meet graduate recruiters to help you transition into the professional world. Access networking opportunities such as iLEAD and make use of the University's strong partnerships with industry. Tap into the University's global alumni network and build relationships to elevate your career.

"This degree offered me hands-on, practical experience in typical civil engineering problems by providing opportunities to perform experiments in the university civil labs."

Dheeraj Kumar, India
Bachelor of Civil Engineering

Part-time work opportunities

Jobs on campus

Working at the University is a great way to earn money and develop your employability skills in a professional workplace. The Jobs on Campus page on the University website advertises a wide range of paid roles throughout the year.

Finding work in Australia

The Finding Work in Australia program is aimed at supporting international students to develop self-awareness, identify opportunities and improve their employability in the Australian market. The program is delivered through a series of three workshops and accompanying online resources. If you join, you will also be invited to book an individual follow-up career consultation to discuss career goals and strategies.

Growing specialties

Australia is facing a shortage of experienced engineers, with job openings at their highest in ten years[1]. This demand is driven by investments in public infrastructure, renewed interest in minerals, and the global shift towards clean energy and climate change adaptation.

Engineering jobs are highly sought after, with the number of rewarding positions in Australia growing every day. The University of Newcastle provides a variety of Engineering degrees and industry placements, addressing some of the country's most in-demand engineering specialities.

Thanmai, India
Master of Professional Engineering (Electrical and Electronic)

Software Engineering

A software engineer's main job is to manage the entire software development process, which includes analysis, design, testing, and development. At the University of Newcastle, our unique Bachelor of Software Engineering (Honours) program helps students become accredited professional software engineers. Students can also choose four elective courses from different areas of study, allowing them to broaden their knowledge and skills. This program prepares students for a successful career in the technology and engineering industry.

Electrical Engineering

At the University of Newcastle, we train electrical engineers who design and manage new electrical systems. These engineers are responsible for creating innovative electrically powered systems and overseeing their installation and testing. With a Bachelor of Electrical and Electronic Engineering (Honours), students can tackle some of the world's biggest challenges and work in various fields, including power systems, renewable energy technologies, industrial electronics, robotics, control and automation systems, Industry 4.0, and telecommunication systems.

Civil Engineering

Civil engineers are responsible for planning, developing, and maintaining important infrastructure projects like buildings, bridges, and highways. At the University of Newcastle, our Bachelor of Civil Engineering (Honours) program prepares students to tackle future global challenges. Students will learn how to design energy-efficient buildings using the latest materials and technologies. Students could play a key role in developing sustainable and resilient infrastructure in developing countries, making a positive impact on communities around the world.

Chemical Engineering

Chemical engineers develop new chemical substances and understand various chemical properties. At the University of Newcastle, our Bachelor of Chemical Engineering (Honours) program enables students to apply essential principles of physics and chemistry, along with specialised fields like biotechnology and nanotechnology, to address important community challenges. You will learn to analyse and design processes, plants, and control systems that focus on productivity, safety, and sustainability.

1 National employment projections for engineering (Jobs and Skills Australia)

Fastest-growing engineering jobs

The engineering job market is evolving; advances in automation and technology present both opportunities and challenges for engineers and companies as they prepare for the future.

Australia[1]

Career	Desired skills
Energy Director	Renewable Energy, Stakeholder Engagement, Project Finance
Platform Engineer	Terraform, Amazon Web Services (AWS), Continuous Integration and Continuous Delivery (CI/CD)
Integration Engineer	IT Integration, Amazon Web Services (AWS), Python
Engineering Officer	Engineering Management, Program Management, Contract Management
Electrical Design Engineer	Power Distribution, AutoCAD, Electrical Wiring
Data Engineer	Extract, Transform, Load (ETL), Apache Spark

China[2]

Career	Desired skills
Smart Manufacturing Engineer	Automation systems, robotics, Internet of Things (IoT) integration, manufacturing execution systems (MES)
New Energy Vehicle (NEV) Engineer	Battery technology, electric powertrain systems, vehicle control systems, and familiarity with automotive industry standards
Big Data Engineer	IT Integration, Amazon Web Services (AWS), Python
Engineering Officer	Data mining, data warehousing, Hadoop ecosystem, Spark, Java, Scala, or Python

India[3]

Career	Desired skills
Product Security Engineer	Product Security, Application Security, Threat Modelling
Building Information Modelling Technician	Building Information Modelling (BIM), Revit, Navisworks
Product Security Engineer	Product Security, Application Security, Threat Modelling
Building Information Modelling Technician	Building Information Modelling (BIM), Revit, Navisworks
Customer Success Engineer	Linux, Amazon Web Services (AWS), Customer Support
Drone Pilot	Drone Piloting, Drone Photography, Drone Mapping

Middle East, Africa[4]

Career	Desired skills
Data Engineer	Extract, Transform and Load (ETL), Data Warehousing, Python
Back End Engineer	Node.js, JavaScript, Git, Laravel, PHP
Presales Engineers	Cisco Systems Products, Networking, Telecommunications
Quality Assurance Automation Engineer	Test Automation, Selenium, API Testing
DevOps or Platform Engineer	Kubernetes, Jenkins, Docker Products
Machine Learning Engineer	Deep Learning, Machine Learning, Natural Language Processing (NLP)

Southeast Asia[5]

Career	Desired skills
Cloud (Software) Engineer	Amazon Web Services (AWS), Microsoft Azure, Terraform
Machine Learning Engineer	Deep Learning, Machine Learning, Natural Language Processing (NLP)
Data Engineer	Data Engineering, Load (ETL), Python (Programming Language)
DevOps Engineer	DevOps, Amazon Web Services (AWS), Kubernetes

1 LinkedIn Jobs on the Rise 2024: 25 Australian in-demand roles 2 China's industrial upgrades spur surge in hi-tech job opportunities (English.gov.cn)
3 LinkedIn Jobs on the Rise 2022 - 2024: The 25 most in-demand roles in India
4 LinkedIn Jobs on the Rise 2023-2024: The Top (Saudi and UAE, South Africa and Egypt) roles that are growing in demand
5 LinkedIn Jobs on the Rise 2023: The 45 roles in Southeast Asia that are growing in demand

International scholarships

We are proud to offer both affordable tuition fees alongside competitive scholarships to support students in their studies. Scholarships can reduce the cost of tuition making the University of Newcastle one of the more affordable options to study in Australia.

Find out more about scholarships.

20% Scholarship tuition fee waiver*

International Excellence Scholarship

The International Excellence Scholarship* celebrates academic excellence and supports your journey to success with ongoing financial assistance.

The scholarship is awarded annually, based on 20% of the gross international tuition fee, and is calculated per course under a standard full-time study load (80 units), with the unit value varying depending on your specific program.

"Being financially stable allows me further to create a balance between my studying, work and social time. I can now designate more time towards studying and researching as well as interacting with different social groups at the university,"

Ngoc Bao Ngan Huynh, Vietnam
Bachelor of Civil Engineering (Honours)

*See full terms and conditions on the scholarship webpage.

Average Industry Salaries

Australia is an ideal place for prospective engineers with various specialisations across industries and sectors. As the world is changing engineering professions are becoming more critical to promote innovation and progress.

According to CDR, engineering is one of the highest-paying professions in Australia, with an average annual salary of $112,358, especially for those who combine technical skills, strategic thinking, and leadership abilities[2]. This makes engineering a rewarding career choice for those looking to excel in their field.

Chemical

Role	Salary Average (AUD)
Metallurgist	$108,888[1]
Materials Engineer	$156,988[1]
Chemical Engineer	$156,988[1]
Chemical Plant Operator	$160,264[1]
Geological Engineer	$102,024[1]
Chemical Plant Operator	$160,264[1]

Civil, Mechanical and Structural

Role	Salary Average (AUD)
Civil Engineer	$102,024[1]
Structural Engineer	170,800[1]
Industrial Engineer	$125,528[1]
Mechanical Engineering Associate	$95,576[1]
Mechanical Engineer	$125,528[1]
Engineering Tradespersons – Mechanical	$98,280[1]

Electrical and Electronic

Role	Salary Average (AUD)
Telecommunications Engineer	$118,508[1]
Electrical Engineer	$109,512[1]
Aircraft Maintenance Engineer	$98,280[1]
Electronics Engineer	$130,104[1]

Energy production and Water systems

Role	Salary Average (AUD)
Marine Engineer	$110,396[1]
Environmental Engineer	$112,060[1]
Agricultural Engineer	$112,060[1]
Mining Engineer	$162,136[1]
Naval Architect	$112,060[1]
Geological Engineer	$102,024[1]

Health and Medical

Role	Salary Average (AUD)
Operating Theatre Technician	$60,268[1]
Biomedical Technician	$79,000[2]
Biomedical Engineer	$112,060[1]
Field Clinical Engineer	$110,000[2]

Mechatronics, Software and Computer Systems

Role	Salary Average (AUD)
Systems Engineer	$104,156[1]
Computer Engineer	$105,092[1]
Machine Learning Engineering	$90,428[1]
Platform Engineering	$82,472[1]
Robotics Engineer	$125,528[1]
Mechatronic Engineer	$125,528[1]
Site Reliability Engineer	$160,784[1]

1 The Good Careers Guide, 2024 2 Highest Paying Jobs in Australia 2024: Best Career Options (CDR For Australia)
Salary figures were accurate at the time of publication. Actual compensation may vary based on role, location, and market conditions

Degrees to help you reach your full potential

Visit this study area

At the University of Newcastle, our degrees in engineering are designed to give you the knowledge and understanding needed for your future career. These degrees will equip you with the in-demand skills to make you more employable, and create opportunities for you to apply what you have learnt in real-world settings, with experts from our region.

Xuan Anh, Vietnam
Bachelor of Electrical and Electronic Engineering

1 THE World University Rankings by Subject 2025. 2 ShanghaiRanking's Global Ranking of Academic Subjects 2024.

Bachelor of Chemical Engineering (Honours)

CRICOS code	111298J
Duration	4 years full-time
Locations	Newcastle – Callaghan
Indicative annual fee	2026 A$46,645 2027 A$48,977
IELTS	IELTS overall minimum – 6.0 IELTS section minimum – 6.0
Intake	S1, S2

Course overview

Civil engineers are responsible for the physical infrastructure that allows society to function. Your studies will cover the three main civil specialisations in structural, water and geotechnical engineering.

You will learn about materials used for construction; how to design buildings to be structurally safe, how to design foundations - shallow or deep - to support bridges or buildings, hydrology and how to manage water resources.

Professional recognition

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

Learn more ›

Bachelor of Civil Engineering (Honours)

CRICOS code	111301H
Duration	4 years full-time
Locations	Newcastle – Callaghan
Indicative annual fee	2026 A$46,695 2027 A$49,030
IELTS	IELTS overall minimum – 6.0 IELTS section minimum – 6.0
Intake	S1, S2

Course overview

Civil engineers are responsible for the physical infrastructure that allows society to function. Your studies will cover the three main civil specialisations in structural, water and geotechnical engineering.

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Professional recognition

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Learn more ›

Bachelor of Computer Systems Engineering (Honours)

CRICOS code	111305D
Duration	4 years full-time
Locations	Newcastle – Callaghan
Indicative annual fee	2026 A$45,690 2027 A$47,975
IELTS	IELTS overall minimum – 6.0 IELTS section minimum – 6.0
Intake	S1, S2

Course overview

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, mining and energy, telecommunications, e-health, space and aviation, and civic infrastructure, which are the building blocks of modern society.

Professional recognition

Full professional recognition through Engineers Australia. You will be qualified as a professional engineer who can work almost anywhere in the world.

Learn more ›

Bachelor of Electrical and Electronic Engineering (Honours)

CRICOS code	111310G
Duration	4 years full-time
Locations	Newcastle – Callaghan
Indicative annual fee	2026 A$46,575 2027 A$48,904
IELTS	IELTS overall minimum – 6.0 IELTS section minimum – 6.0
Intake	S1, S2

Course overview

Electrical and electronic engineers design and build systems and machines that automate, control, generate, transmit, measure, and use electrical energy essential to modern life. These include systems for electricity generation and distribution, electronic automation and control of various processes, as well as the transmission and reception of electromagnetic signals.

Professional recognition

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

Learn more ›

For a full list of Engineering degrees, combined degree options and programs offering end on honours **see page 19.**

Bachelor of Environmental Engineering (Honours)

CRICOS code	111338F
Duration	4 years full-time
Locations	Newcastle – Callaghan
Indicative annual fee	2026 A$47,010 2027 A$49,361
IELTS	IELTS overall minimum – 6.0 IELTS section minimum – 6.0
Intake	S1, S2

Course overview

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. Environmental engineers apply their knowledge of chemistry, geomechanics, hydrology and land surface processes to find solutions to complex environmental problems. Study at one of only three Australian member institutions of the Global Engineering Education Exchange Program (Global e3).

Professional recognition

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

Learn more ›

Bachelor of Mechanical Engineering (Honours)

CRICOS code	111339E
Duration	4 years full-time
Locations	Newcastle – Callaghan
Indicative annual fee	2026 A$46,380 2027 A$48,699
IELTS	IELTS overall minimum – 6.0 IELTS section minimum – 6.0
Intake	S1, S2

Course overview

Mechanical engineers design, manufacture and optimise specialist machines and processes. They solve important problems using robotics, new advanced materials, the fundamental laws of energy generation and transmission and computer control of physical systems.

Professional recognition

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

Learn more ›

Bachelor of Mechatronics Engineering (Honours)

CRICOS code	111375A
Duration	4 years full-time
Locations	Newcastle – Callaghan
Indicative annual fee	2026 A$46,470 2027 A$48,794
IELTs	IELTS overall minimum – 6.0 IELTS section minimum – 6.0
Intake	S1, S2

Course overview

Mechatronics engineering involves the synergy of electrical, computer and mechanical technologies that lead to new solutions to industrial problems. Students study a diverse range of courses like technical design, automation, and operational performance of electromechanical systems. Mechatronics engineers work in industries such as defence, advanced manufacturing, mining and health.

Professional recognition

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

Learn more ›

Bachelor of Medical Engineering (Honours)

CRICOS code	111378J
Duration	4 years full-time
Locations	Newcastle – Callaghan
Indicative annual fee	2026 A$46,255 2027 A$48,568
IELTS	IELTS overall minimum – 6.0 IELTS section minimum – 6.0
Intake	S1, S2

Course overview

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. As a medical engineer, you will strive to make medical treatment more effective, efficient, safer and affordable. You will be uniquely placed to save and improve lives.

Professional recognition

This program has been granted provisional accreditation through Engineers Australia.

Learn more ›

Bachelor of Renewable Energy Engineering (Honours)

CRICOS code	111379H
Duration	4 years full-time
Locations	Newcastle – Callaghan
Indicative annual fee	2026 A$46,570 2027 A$48,899
IELTS	IELTS overall minimum – 6.0 IELTS section minimum – 6.0
Intake	S1, S2

Course overview

Spanning the disciplines of chemical, electrical and mechanical engineering, this degree will equip you to work across the whole spectrum of technologies for renewable energy capture, conversion, storage, delivery and management.

Professional recognition

This program has been granted full accreditation through Engineers Australia.

Learn more ›

Bachelor of Software Engineering (Honours)

CRICOS code	111380D
Duration	4 years full-time
Locations	Newcastle – Callaghan
Indicative annual fee	2026 A$44,420 2027 A$46,641
IELTS	IELTS overall minimum – 6.0 IELTS section minimum – 6.0
Intake	S1, S2

Course overview

With the Bachelor of Software Engineering (Honours), you might develop software for web applications, digital health, digital forensics, work in defence, combat cyber-attacks or many other domains. Software engineers focus on analysing clients' needs and designing high-quality software solutions. Develop, integrate and test solutions to meet client requirements.

Professional recognition

Professional recognition through Engineers Australia and the Australian Computer Society means graduates will be qualified and recognised as professional engineers globally.

Learn more ›

Master of Materials Science and Engineering

CRICOS code	0100265
Duration	2 years full-time
Locations	Newcastle – Callaghan
Indicative annual fee	2026 A$51,020 2027 A$53,571
IELTS	IELTS overall minimum – 6.5 IELTS section minimum – 6.0
Intake	S1, S2

Course overview

This program offers you the opportunity to participate in both coursework and research. You will have the opportunity to use state-of-the-art infrastructure. This is available at the world-renowned Global Innovative Centre for Advanced Nanomaterials (GICAN).

Learn more ›

Master of Professional Engineering (Civil)

CRICOS code	113848A
Duration	2 years full-time
Locations	Newcastle – Callaghan
Indicative annual fee	2026 A$50,650 2027 A$53,183
IELTS	IELTS overall minimum – 6.5 IELTS section minimum – 6.0
Intake	S1, S2

Course overview

The Master of Professional Engineering (Civil) will help you develop the strategic and technical skills required to help build the physical infrastructure that enables our societies to thrive and grow. You will deepen your technical knowledge in your area of specialisation, learn about engineering practice in the Australian context and develop professional skills in project management and complex problem solving.

Professional recognition

This program has been granted provisional accreditation through Engineers Australia.

Learn more ›

Master of Professional Engineering (Electrical and Electronic)

CRICOS code	113849M
Duration	2 years full-time
Locations	Newcastle – Callaghan
Indicative annual fee	2026 A$50,985 2027 A$53,534
IELTS	IELTS overall minimum – 6.5 IELTS section minimum – 6.0
Intake	S1, S2

Course overview

This program will help you develop management expertise, specialise and deepen your technical skills and be equipped to lead projects and move into more senior roles. Gain advanced capabilities in emerging electrical engineering technologies, which are currently transforming modern society.

Professional recognition

This program has been granted provisional accreditation with Engineers Australia.

Learn more ›

Master of Professional Engineering (Geospatial Engineering and Surveying)

CRICOS code	092850G
Duration	2 years full-time Accelerated options available
Locations	Newcastle – Callaghan
Indicative annual fee	2026 A$49,045 2027 A$51,497
IELTS	IELTS overall minimum – 6.5 IELTS section minimum – 6.0
Intake	S1, S2

Course overview

If you are looking to launch or advance your career in the field of surveying and spatial information, this program will help you develop management expertise, specialise and deepen your technical skills and be equipped to lead projects and move into more senior roles.

Learn more ›

Master of Professional Engineering (Mechanical)

CRICOS code	113850G
Duration	2 years full-time
Locations	Newcastle – Callaghan
Indicative annual fee	2026 A$49,940 2027 A$52,437
IELTS	IELTS overall minimum – 6.5 IELTS section minimum – 6.0
Intake	S1, S2

Course overview

Specialise your technical skills and develop professional attributes to provide innovative solutions to society's needs. You will gain project management and complex problem-solving skills and learn how to apply design thinking and systems engineering principles.

Professional recognition

This program has been granted provisional accreditation with Engineers Australia.

Learn more ›

Engineering

Undergraduate programs

	CRICOS	Duration (Years, semesters or trimesters)	Location	Intakes	IELTS Overall Minimum / Section Minimum	2026 indicative annual fee A$	2027 indicative annual fee A$
Bachelor of Chemical Engineering (Honours)	111298J	4 years	N	S1, S2	6.0/6.0	**$46,645**	**$48,977**
Bachelor of Chemical Engineering (Honours) / Bachelor of Business	111299H	5 years	N	S1	6.0/6.0	**$44,630**	**$46,862**
Bachelor of Chemical Engineering (Honours) / Bachelor of Mathematics	111300J	5 years	N	S1	6.0/6.0	**$45,090**	**$47,345**
Bachelor of Civil Engineering (Honours)	111301H	4 years	N	S1, S2	6.0/6.0	**$46,695**	**$49,030**
Bachelor of Civil Engineering (Honours) / Bachelor of Business	111462B	5 years	N	S1	6.0/6.0	**$45,115**	**$47,371**
Bachelor of Civil Engineering (Honours) / Bachelor of Environmental Engineering (Honours)	111302G	5 years	N	S1	6.0/6.0	**$47,060**	**$49,413**
Bachelor of Civil Engineering (Honours) / Bachelor of Mathematics	111303F	5 years	N	S1	6.0/6.0	**$45,515**	**$47,791**
Bachelor of Computer Systems Engineering (Honours)	111305D	4 years	N	S1, S2	6.0/6.0	**$45,690**	**$47,975**
Bachelor of Computer Systems Engineering (Honours) / Bachelor of Computer Science	111306C	5 years	N	S1	6.0/6.0	**$45,075**	**$47,329**
Bachelor of Computer Systems Engineering (Honours) / Bachelor of Mathematics	111307B	5 years	N	S1	6.0/6.0	**$44,835**	**$47,077**
Bachelor of Electrical and Electronic Engineering (Honours)	111310G	4 years	N	S1, S2	6.0/6.0	**$46,575**	**$48,904**
Bachelor of Electrical and Electronic Engineering (Honours) / Bachelor of Business	111332A	5 years	N	S1	6.0/6.0	**$44,370**	**$46,589**
Bachelor of Electrical and Electronic Engineering (Honours) / Bachelor of Computer Systems Engineering (Honours)	111309M	5 years	N	S1	6.0/6.0	**$45,990**	**$48,290**
Bachelor of Electrical and Electronic Engineering (Honours) / Bachelor of Mathematics	111333M	5 years	N	S1	6.0/6.0	**$46,190**	**$48,500**
Bachelor of Environmental Engineering (Honours)	111338F	4 years	N	S1, S2	6.0/6.0	**$47,010**	**$49,361**
Bachelor of Mechanical Engineering (Honours)	111339E	4 years	N	S1, S2	6.0/6.0	**$46,380**	**$48,699**
Bachelor of Mechanical Engineering (Honours) / Bachelor of Business	111371E	5 years	N	S1	6.0/6.0	**$44,445**	**$46,667**
Bachelor of Mechanical Engineering (Honours) / Bachelor of Mathematics	111373C	5 years	N	S1	6.0/6.0	**$44,905**	**$47,150**
Bachelor of Mechanical Engineering (Honours) / Bachelor of Mechatronics Engineering (Honours)	111374B	5 years	N	S1	6.0/6.0	**$46,615**	**$48,946**
Bachelor of Mechatronics Engineering (Honours)	111375A	4 years	N	S1	6.0/6.0	**$46,470**	**$48,794**
Bachelor of Mechatronics Engineering (Honours) / Bachelor of Electrical and Electronic Engineering (Honours)	111376M	5 years	N	S1	6.0/6.0	**$46,480**	**$48,804**
Bachelor of Mechatronics Engineering (Honours) / Bachelor of Mathematics	111377K	5 years	N	S1	6.0/6.0	**$45,590**	**$47,870**
Bachelor of Medical Engineering (Honours)	111378J	4 years	N	S1, S2	6.0/6.0	**$46,255**	**$48,568**
Bachelor of Renewable Energy Engineering (Honours)	111379H	4 years	N	S1, S2	6.0/6.0	**$46,570**	**$48,899**
Bachelor of Software Engineering (Honours)	111380D	4 years	N	S1, S2	6.0/6.0	**$44,420**	**$46,641**

KEY FOR LOCATIONS

NC Newcastle – City
N Newcastle – Callaghan
CC Central Coast – Ourimbah
G Central Coast - Gosford
S Sydney

KEY FOR INTAKES

S1 Semester 1
S2 Semester 2
T1 Trimester 1
T2 Trimester 2
T3 Trimester 3
MID Midyear Session

\# Accelerated degree options available based on individual student backgrounds.
• This program is an honours only program. Please visit the University website for admission requirements.
* End-on Honours is a separate and additional year of study following the completion of a bachelor degree. This is a very different experience to the earlier years of study. There are fewer formal classes and more individual work. Honours can be course work based, research based, or a combination of the two. Admission requirements for End-On Honours vary by program, but often require a minimum GPA.
> Depending upon admission qualification - duration of program will alter.

Engineering

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Postgraduate programs							
Master of Materials Science and Engineering	0100265	4 semesters	N	S1, S2	6.5/6.0	**$51,020**	**$53,571**
Master of Professional Engineering (Civil)	098283G	6 semesters	N	S1, S2	6.5/6.0	**$50,685**	**$53,219**
Master of Professional Engineering (Civil)	113848A	4 semesters	N	S1, S2	6.5/6.0	**$50,650**	**$53,183**
Master of Professional Engineering (Electrical and Electronic)	098284F	6 semesters	N	S1, S2	6.5/6.0	**$50,580**	**$53,109**
Master of Professional Engineering (Electrical and Electronic)	113849M	4 Semesters	N	S1, S2	6.5/6.0	**$50,985**	**$53,534**
Master of Professional Engineering (Geospatial Engineering and Surveying)#	092850G	4 Semesters	N	S1, S2	6.5/6.0	**$49,045**	**$51,497**
Master of Professional Engineering (Mechanical)	098285E	6 Semesters	N	S1, S2	6.5/6.0	**$49,955**	**$52,453**
Master of Professional Engineering (Mechanical)	113850G	4 Semesters	N	S1, S2	6.5/6.0	**$49,940**	**$52,437**

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KEY FOR INTAKES

S1 Semester 1
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T1 Trimester 1
T2 Trimester 2
T3 Trimester 3
MID Midyear Session

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How to apply

Apply early to secure your place. Late applications will be deferred to the next available intake. Start your journey at the University of Newcastle in just a few easy steps. Scan the QR code to find out more.

1 Find your agent

The University of Newcastle has a list of education agents that are located around the world and are able to assist you with your application.

Students from some regions are required to lodge their applications via education agents as direct applications will not be accepted.

2 Program handbook

Check out the program handbook for your preferred degree.

3 Review what you need to apply

4 Check key dates

5 Register on the portal and complete the online form.

If applying without an agent, upload coloured copies of all supporting documentation.

6 Assessment

Your application will be assessed to determine if you meet the academic, English proficiency and any other relevant requirements for admission to the University and your desired program.

7 Outcome

You will be notified of the outcome of your application via email. If your application is successful, you will receive an offer letter from the University.

Conditional offer letter – upload the outstanding documents on the action item to meet the conditions of your offer.

8 Accept your offer

Log in to the portal to accept your offer, upload your signed acceptance form, and pay the deposit using the link provided in your offer letter.

9 Receive your CoE

You will receive an email confirming your acceptance, along with instructions to activate your student account. This email will also include your Confirmation of Enrolment (CoE), which you will need to apply for your student visa.

10 Apply for your visa

Newcastle Callaghan Campus

University Drive,
Callaghan NSW 2308

Newcastle City Campus

NUspace

Corner Hunter and
Auckland Streets,
Newcastle NSW 2300

Q Building

16B Honeysuckle Drive,
Newcastle NSW 2300

Conservatorium of Music

Corner Auckland and
Laman Streets,
Newcastle NSW 2300

Central Coast Campus

Ourimbah

Chittaway Road,
Ourimbah NSW 2258

Gosford Hospital

77 Holden Street,
Gosford NSW 2250

Gosford Central

305 Mann Street,
Gosford NSW 2250

Sydney City Campus

55 Elizabeth Street,
Sydney NSW 2000

Singapore Campus

#13-01/02
National Library Building
Singapore 188064

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University of Newcastle

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