



THE UNIVERSITY OF
NEWCASTLE
AUSTRALIA

TOP 3%
IN THE
WORLD*

Research 2015/16 PhD and Masters

newcastle.edu.au/phd



welcome

The University of Newcastle is recognised as a world-class research intensive university with a reputation for excellence and a strong and vibrant research culture. Our research work is recognised for its impact and relevance to the region, the nation and the international community.

Our proud history is reflected in our consistent ranking in the top ten Australian universities for research effort and outcomes. There are areas of research excellence across the breadth of the University's disciplines and we are best known for our research strengths in science and technology, engineering, biological and biomedical sciences, and medicine and health sciences. We are engaged in multi and interdisciplinary research and innovation precincts and hubs of scale and impact with industry and academic partners from Australia, Asia, South America, USA and the European Union addressing issues of global significance.

The single most important factor in the success of the University's research is our people.

We value our research candidates as important contributors to our research standing and provide a supportive environment to achieve excellent outcomes. The high standards set by the University ensure that our research higher degrees are respected and valued throughout the world. Establishing and strengthening partnerships with local and global industries is a key driver in our research success.

As a research higher degree candidate, the University will support you to the utmost of its ability. When you accept an offer of a place at Newcastle, you can be sure that you will be accepted into our research community and you will be given quality supervision consistent at all times with the various stages of your development towards being an independent researcher.

Please take the time to read through this prospectus and to understand the advantage you will have, should you choose Newcastle as your university. We are confident that you will find much to encourage your application for admission.

Professor Kevin Hall
Deputy Vice Chancellor
Research and Innovation

THE UNIVERSITY OF NEWCASTLE IS RANKED IN THE TOP 3 PER CENT OF UNIVERSITIES IN THE WORLD, ACCORDING TO TWO GLOBAL INDEPENDENT RANKING SYSTEMS¹. THIS MEANS OUT OF MORE THAN 9,000 UNIVERSITIES IN THE WORLD WE ARE IN THE TOP 300.

**TOP
300**

universities in
the world¹

**AUSTRALIA'S
No.1**

university under
50 years of age²



Five star university
for research³

**EQUAL
7th**

in Australia for
research 'well
above world
standard'⁴

**TOP
10**

in Australia for
research income ⁵

**OVER
90%**

of our research is
'at' or 'above world
standard'⁴

Front Cover: Gary Crowfoot, PhD (Nursing) candidate, who took out the 2014 University of Newcastle Three Minute Thesis competition title from an impressive field with his presentation "The influence of healthcare pathways upon the outcomes and experiences of people with Transient Ischaemic Attack (TIA)". newcastle.edu.au/3minutethesis

¹ Times Higher Education World University Rankings 2013 & QS World University Rankings 2013

¹ QS World University Rankings 2013 and Times Higher Education World University Rankings 2013 ² Times Higher Education '100 Under 50' 2014

³ QS Stars 2013

⁴ Excellence in Research Australia 2012

⁵ Higher Education Research Data Collection



Solving the world's greatest challenges

The University of Newcastle is a research intensive university known for its outstanding success in solving some of the world's greatest challenges. From inventing de-extinction technology that resurrected the vanished gastric-brooding frog, to being a global authority in reproductive medicine, our researchers collaborate with peers, nationally and internationally, addressing issues that have far-reaching impact.

When undertaking a PhD or Masters degree at the University of Newcastle, you will be inspired by our globally renowned researchers who will expose you to new ideas, encourage analytical thinking and intrinsic problem solving - the perfect environment to start your research career.

The pursuit of knowledge through research is a journey of discovery, a journey that will challenge you and enable you to achieve something significant. It will help you to develop transferable life and employability skills such as project management, high-level writing, public speaking, proposal development and specialist knowledge. You will also have the opportunity to engage with professionals in both the public and private sectors across the globe giving you a significant advantage in the job market.

Whatever your chosen field of research, the University of Newcastle will help you succeed in your research journey.

***Pictured:** Professor Jennifer Gore - School of Education. Leading the charge towards a new era of teacher education and professional development.*

Join the next generation of **world-class researchers**

The University of Newcastle is a research-intensive university which has a vibrant research culture and registers on the global stage through collaboration with research peers, industry, government and the community. Choose to study with us and you will join a university that is known for outstanding success, a strong research reputation and has networks that will open doors all around the world.

newcastle.edu.au/researchers

World-class research

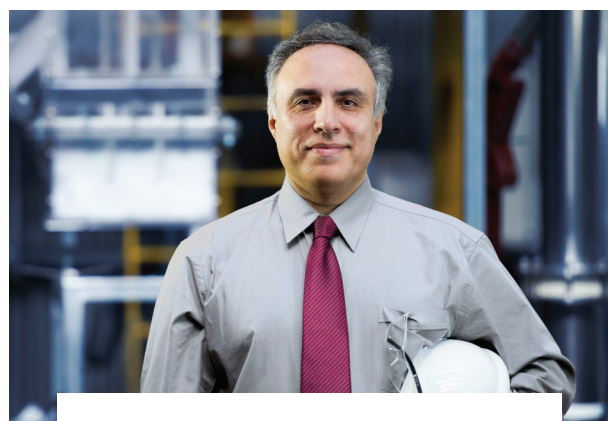
The University of Newcastle:

- Is the only university in Australia to achieve a top rating for social work research and is one of only two universities in the country to achieve a 5 star rating in applied mathematics, biochemistry and cell biology, civil engineering and mechanical engineering research⁶
- Has an annual external research income of \$92.38 million⁷
- Has \$13.68 million new Australian Research Council funding commencing in 2014
- Has \$18.62 million new National Health and Medical Research Council funding commencing in 2014
- Is an associate member of the Group of Eight (Go8) Deans of Engineering and Associates⁸
- Leads an Australian Research Council Centre of Excellence in Geotechnical Science and Engineering.
- Hosts large national and international research projects including:
 - Australian Longitudinal Study on Women's Health
 - Australia New Zealand Breast Cancer Trials Group
 - WorkCover NSW Research Centre of Excellence

Research Centres

The University of Newcastle hosts 15 Priority Research Centres, securing investment from government, industry and from our own resources, to provide a focal point for research strengths. Our research centres bring together our top researchers and promote cross-faculty and cross-disciplinary research to achieve research outcomes that have significant impact on society - nationally and internationally.

newcastle.edu.au/centres



PROFESSOR BEHDAD MOGHTADERI

School of Engineering (Chemical Engineering)

Reducing global greenhouse gas emissions.

The Newcastle Institute for Energy and Resources (NIER)

NIER addresses the challenges of the rapidly emerging issues of resource sustainability, productivity and competitiveness associated with energy and resources infrastructure. NIER engages with major international, government and industry partners bringing researchers across the social sciences, health, engineering and science disciplines together to deliver multidisciplinary projects which address the energy reform agenda.

newcastle.edu.au/nier

Hunter Medical Research Institute (HMRI)

HMRI is a partnership between the University and Hunter New England Health (HNEH). HMRI has a particular translational research agenda; to move research discoveries from the bench to the bedside for the benefit of the regional, national and international communities. The \$90m HMRI research facility, opened in 2012, hosts more than 1,200 university and HNEH researchers working in seven research programs.

hmri.com.au

⁶ Excellence in Research Australia 2012

⁷ 2013 Higher Education Research Data Collection

⁸ Associate members were invited to join the Go8 Deans of Engineering in recognition of the outstanding quality of their engineering research, teaching and scholarship.

Research degrees

The PhD and Research Masters' degrees provide a unique opportunity to follow a specific interest, in a particular area of research. We have a strong research presence across our disciplines and have over 150 research degrees from our 17 Schools: Aboriginal Studies; Architecture and Built Environment; Biomedical Sciences and Pharmacy; Business; Creative Arts; Design, Communication and Information Technology; Education; Electrical Engineering and Computer Science; Engineering; Environmental and Life Sciences; Health Sciences; Humanities and Social Sciences; Law; Mathematical and Physical Sciences; Medicine and Public Health; Nursing and Midwifery; and Psychology.

To view a full listing of research degrees please refer to:

newcastle.edu.au/research-degrees

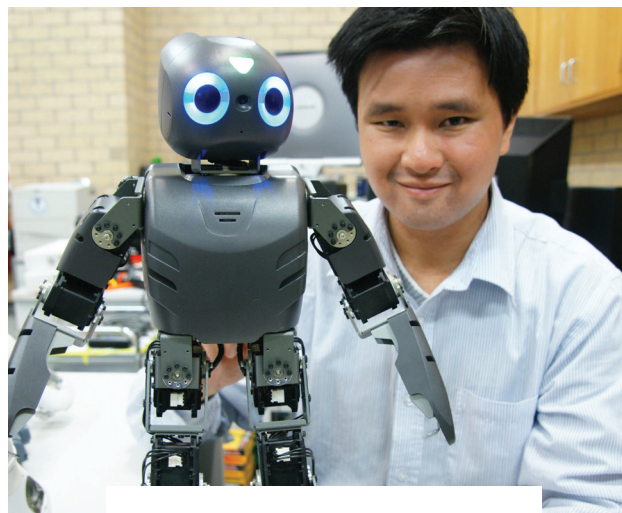
Dedicated support

From the moment you accept your offer, you'll have access to a range of international student support services, including our **International Student Advisors**. Whether it's making sure you have the right university documentation for your visa, or helping you travel to the university once your plane lands - they're here to take the worry out of your experience, so you can focus only on the things you need to. They'll continue to be there for you, right throughout your studies, to helping you prepare for your return home.

Find out about all the great ways we help our international students at newcastle.edu.au/international-support

A World-Class City

Situated on the sunny Easy Coast of Australia, Newcastle is one of the world's most beautiful coastal cities. It boasts moderate winters and long playful summers, mixing a great outdoor lifestyle with a vibrant city culture. It's the perfect balance of study and lifestyle, and is enjoyed by over 6,000 international students who come to study with the University of Newcastle from over 100 countries.



AARON WONG
PhD (Computer Science) candidate

Aaron Wong's latest work is breaking new ground in companion robot technology. The cutting edge development will enable a robot to connect with a human user based on shared emotional experiences.

Our Campuses

The University of Newcastle has several campus locations each with its own lively character and a range of specialised facilities and services.

Newcastle (Callaghan) – a wonderful mix of award winning, architecturally designed buildings and state-of-the-art facilities scattered over 140 hectares of natural bushland, only 12 kilometres from the beaches and the heart of Newcastle.

Newcastle City Precinct – home to the Newcastle Business School, the Newcastle Legal Centre and the Conservatorium of Music; plus the 24-hour student info hub, accessible to all UON students. Be right in the heart of this bustling harbourside city, near all amenities and just a short walk to the beach. The perfect balance of study and lifestyle.

Central Coast – Conveniently located half way between Sydney and Newcastle, this picturesque multi-sector campus is set on 80 hectares of beautiful bushland, and is only a short drive from the ocean. It offers state-of-the-art facilities in exercise sports science, nursing, oral health, podiatry and food science and human nutrition.



Expectations and eligibility

for PhD and Research Masters degrees

Doctor of Philosophy (PhD)

The PhD is a degree awarded for research that demonstrates that the candidate has the capacity to conduct research independently with a high level of originality and quality. A PhD should uncover new knowledge either by the discovery of new facts, the formulation of theories or the innovative re-interpretation of known data and established ideas. Candidates are expected to complete their degree within four years of full-time study or eight years of part-time study.

Master of Philosophy (Research Masters)

The Research Masters is a degree awarded for research that demonstrates a thorough understanding of the relevant techniques in the field, demonstrated both by application and an extensive review of the literature. Candidates are expected to complete their degree within two years of full-time study or four years of part-time study.

Entry requirements

An Australian honours degree with Class 1 or Class 2-Division 1. For international students, a four year bachelor degree including a significant research training component attained at a high standard, is commonly considered equivalent to an Australian honours degree.



PROFESSOR PHILIP MORGAN

**School of Education
(Human Movement and Sports Science)**

Designed world-first Healthy Kids, Healthy Dads obesity prevention program.



Additional postgraduate research training such as a Masters degree with a significant research component may also be considered.

The University assesses all applications on a case-by-case basis. Applicants whose first language is not English are required to demonstrate meeting the University's English proficiency policy. The most common method of meeting this is an IELTS score of 6.5 overall and no subtest below 6.0. In addition to academic eligibility, offers of admission are made dependent upon there being appropriate supervisory capacity to oversee the proposed research and resources to support it.

Time commitment

Full-time students are expected to dedicate a minimum of 40 hours per week to their research study and part-time students around 20 hours. International candidates are required to be enrolled full-time whilst on a student visa. Full-time enrolment is also a requirement for scholarship holders.

On-campus versus off-campus

Research candidates who wish to be enrolled as an off-campus student need to demonstrate that they have the resources and ability to satisfactorily undertake their program without the face-to-face supervision and facilities that on-campus enrolment provides. Scholarship holders and international candidates generally have to be on-campus. To apply for off-campus enrolment, complete the candidature variation form and attach to your application.

Commencing your PhD or Research Masters

Once enrolled, you will be advised of the compulsory induction programs that you need to undertake. These will provide further information regarding intellectual property, research ethics and safety, confirmation and progress reporting.



Scholarships and costs

Scholarships

The University of Newcastle provides a wide range of generous scholarships to support students with a proven capacity for research.

Scholarships are awarded on the basis of academic merit and through a highly competitive process. Candidates normally have Honours Class I and a high undergraduate Grade Point Average (GPA). The award of research scholarships may also take into account areas of research strength across the University.

International scholarship applicants also often have at least one peer reviewed research publication and a Masters degree with a significant research component.

Scholarships vary in value and duration and may include a stipend to assist with living costs, tuition fee costs, overseas health cover and/or travel allowances or other research costs.

Applicants may also be eligible to apply for other scholarships funded from external sources (e.g. research grants). Visit our website for more information:

newcastle.edu.au/phd-scholarships

**OVER
\$18
MILLION**
offered in scholarships
in 2014

Costs

The fee structures for PhD and Research Masters vary for domestic and international candidates.

Domestic Students - Research Training Scheme (RTS)⁹

All eligible candidates are granted places under the RTS, which provides an exemption from contributions normally payable by students under the Higher Education Loan Program. Funding is limited to:

- Four years full-time enrolment (or part-time equivalent) if a PhD candidate
- Two years full-time enrolment (or part-time equivalent) if a Research Masters' candidate
- All students are required to complete their degree within the RTS entitlement period.

International Students

To view the costs for an international PhD or Research Masters degree visit:

newcastle.edu.au/international-fees

Student Services and Amenities Fee (SSAF)

All domestic and international students are required to pay a nominal fee, which provides the University the means to deliver an outstanding experience for students across our campuses and online. Note that this fee is not covered by any scholarship.

⁹ The Federal Government has indicated that from 1 January 2016, universities are able to introduce student contributions up to a maximum annual amount of \$3,900 (equivalent full-time student). Subject to legislation.

Apply now

1. FIND A SUPERVISOR

Applicants are encouraged to consult with academics in the chosen research field at the University prior to submitting an application for admission.

newcastle.edu.au/supervisors

2. RESEARCH PROPOSAL

When preparing an application for entry into a PhD or Research Masters, it is necessary to supply a research proposal which is a clear statement describing the proposed area of research, the aims, methodology, expected outcomes, significance or rationale and a timeline.

newcastle.edu.au/research-proposal

3. SCHOLARSHIPS

The University of Newcastle offers scholarships to domestic and international candidates. If you are seeking a scholarship, apply by:

- International applicants: 31 August
- Australian applicants: 31 October

newcastle.edu.au/phd-scholarships

4. APPLY NOW

Apply online for admission any day of the year, visit:

newcastle.edu.au/phd



**ASSOCIATE PROFESSOR
SARAH JOHNSON**

**School of Electrical Engineering and
Computer Science
(Electrical and Computer Engineering)**

Protecting information with cryptography

Key dates

31 AUGUST 2014

Scholarship closing date for international applicants commencing in 2015.

1 OCTOBER 2014

Closing date for admission into the PhD (Clinical Psychology) program for 2015. There are additional entry requirements. Visit our website for further information.

31 OCTOBER 2014

Scholarship closing date for domestic applicants commencing in 2015.

19 DECEMBER 2014

Scholarship outcomes will be advised for Commonwealth Government Scholarships.

23 FEBRUARY 2015

Semester one officially commences, however research candidates can start at any time from 5 January 2015 until 5 December 2015.

MARCH 2015

Induction for semester one commencing students.
Date to be confirmed.

31 MARCH 2015 - Semester one census date

Any coursework enrolments must be finalised by this date or changes in load, leave of absences or transfers of program for semester one.

27 JULY 2015

Semester two officially commences, however research candidates can start at any time from 5 January 2015 until 5 December 2015.

31 AUGUST 2015 - Semester two census date

Any coursework enrolments must be finalised by this date or changes in load, leave of absences or transfers of program for semester two.

SEPTEMBER 2015

Induction for semester two commencing students.
Date to be confirmed.

Stay connected

newcastle.edu.au/phd

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CRICOS Provider Code 00109J

OFFICE OF GRADUATE STUDIES

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