

Higher degree  
research 2021



MACQUARIE  
University  
SYDNEY · AUSTRALIA

(YOU)<sup>us</sup>

When your potential is multiplied  
by a university built for collaboration,  
anything can be achieved.

*That's **YOU** to the power of us*



**PHOTOS:** Joanne Stephan, Robert Harcourt, Chris Stacey

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# Discovery driven by human-powered innovation

## RESEARCH AT MACQUARIE

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### RESEARCH WITH IMPACT

Our Strategic Research Framework 2015–2024 *World-Leading Research; World-Changing Impact* is brought to life by our renowned researchers, whose intrepid solutions to issues of global significance benefit the world we live in.

Recognised globally for our pre-eminence in key research disciplines, we pursue excellence in a broad range of research areas, including in those that are cross-disciplinary.

### REAL-WORLD BENEFITS

In applying our research, our discoveries translate into real improvements for local, national and global communities. Discoveries such as wi-fi, which our researchers co-developed with CSIRO, have world-changing impact. Our discoveries yet to come, such as cures for motor neurone disease and Parkinson's disease, will change the world.

### FUTURE FOCUSED

In looking to the future, we have developed five research priorities that provide a focal point for the cross-disciplinary research approach that is at the heart of our ethos. These priorities are Healthy People, Resilient Societies, Prosperous Economies, Secure Planet and Innovative Technologies.

### OUTSTANDING ON THE WORLD STAGE

We are ranked among the highest-performing research universities in Australia. In the 2018 Excellence in Research for Australia (ERA) evaluation, we achieved the highest rating of 5 – outstanding performance well above world standard – in agricultural and veterinary sciences, biological sciences, environmental sciences and physical sciences. In total, 100 per cent of our research activity at the two-digit level was rated as performing at world standard or higher.

Macquarie is also ranked among the top 50 institutions in the world for linguistics and philosophy, and in the top 100 for accounting and finance, earth and marine sciences, education, geography, performing arts and psychology (QS World University Rankings by Subject, 2019).

### SEEK INTREPID SOLUTIONS

By undertaking a research degree at Macquarie, you'll have the opportunity to make an important contribution to the development of new knowledge while working alongside world-leading researchers and using some of the region's most outstanding facilities.



Find out more  
[mq.edu.au/research](https://mq.edu.au/research)



# The exponential power of our collective

## MACQUARIE AT A GLANCE



**5**

future-shaping  
research priorities



**14**

research themes and  
69 research streams



**\$200 MILLION**

in research funding received  
from 2014 to 2016



**\$1 BILLION**

invested in infrastructure and  
facilities in recent years



**\$116 MILLION**

invested in higher degree research  
scholarships from 2015 to 2017



**FIRST**

university in Australia to  
introduce the Master of Research



**MORE THAN 30**

researchers in the top 1% of  
scientific authors in the world



**LEAD INSTITUTION**

for two ARC Centres of Excellence  
and a major node in two



**MORE THAN 2800**

institutions have benefited from research  
collaborations with Macquarie since 2013



**MORE THAN 160**

researchers have published  
research that is in the top 1% of  
publications worldwide



**1 OF ONLY 2**

universities in Australia rated at the  
highest level for environmental sciences  
research in all four ERA evaluations



**1 OF ONLY 5**

universities in Australia rated at the  
highest level for physical sciences  
research in all four ERA evaluations



# A hub of connectivity

## STUDY IN SYDNEY

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### THE ULTIMATE PLACE TO LIVE AND STUDY

Sydney is a destination like no other and has something for everyone – from the iconic Sydney Harbour and more than 100 beaches to picturesque mountains, and arts and cultural festivals.

Ranked as the fourth best student city in the world – and home to the regional headquarters of around 500 multinational companies – Sydney is the ultimate place to live and study.

Under Sydney's sunny skies, you can enjoy being outside almost any day of the year. The climate is warm, with the coldest months (June and July) averaging a maximum of 17°C. January and February are the hottest, with an average maximum of 26°C, though summer days can sometimes reach 40°C.

### EXPLORE THE GREAT OUTDOORS

To the east of Macquarie, you'll find more than 70 postcard-worthy beaches. To the west is the breathtaking Blue Mountains. You can explore pristine national parks, escape to the famous vineyards of the Hunter Valley or take a road trip to the Snowy Mountains, with Sydney as your vantage point.

### EAT WELL

You'll eat well in Sydney. Foodies are spoiled for choice, with an assortment of restaurants and cafés serving up Indian, Thai, Italian, Mexican, Chinese, Spanish and Vietnamese cuisines, to name a few. Our small bar scene is also booming, with plenty of intimate drinking spots – some hidden, others with international recognition.

Check out *Urban List*, *Concrete Playground* and *Time Out* for inspiration.

### SHOP WELL

Get your shopping list ready, because Macquarie University is right across the road from the Macquarie Centre shopping complex and a short ride to Westfield Chatswood.

Sydney offers everything from bustling malls to market stalls, and you can find tucked-away boutiques, top artisans and designer brands to add to your itinerary on Sydney.com's fashion and shopping page.

### FEEL SAFE

Sydney is regarded as the seventh safest city in the world, according to *The Economist's Safe Cities Index 2017* report.



Find out more  
[mq.edu.au/studying-in-sydney](https://mq.edu.au/studying-in-sydney)





# Make a real-world impact

## WORLD-RENOWNED RESEARCH TRAINING

### KICK START YOUR RESEARCH CAREER

By undertaking a research degree at Macquarie, you'll have the opportunity to make an important contribution to the development of new knowledge in society, work alongside some of the world's leading researchers and access some of the region's most outstanding facilities.

### INTENSIVE RESEARCH PREPARATION

Most students wishing to undertake a PhD at Macquarie complete our renowned Master of Research first. The Master of Research – regarded by the Australian Council of Learned Academies as the most innovative newly developed research entry pathway – provides you with intensive research preparation before you begin doctoral study. Consistent with the internationally recognised Bologna model, the program prepares you to complete a Doctor of Philosophy (PhD) in three years – well short of the national average.

### EXCHANGE PROGRAM

The Master of Research Exchange Program provides you with opportunities to undertake international experiences during your studies. If you continue on to a PhD, opportunities include research collaboration with international universities under our cotutelle and joint PhD programs.

### PROGRAM STRUCTURE

The two-year program is available in all of Macquarie's research areas, allowing you access to a variety of disciplines, so you can construct a program relevant to your specific interests – subject to academic approval.

In the first year, you'll undertake advanced coursework units, including the study of research frontiers in your area of interest. If you successfully complete Year 1 and decide not to continue, you can exit the program with a Bachelor of Philosophy.

The second year is a master-level postgraduate research training program. You'll specialise in research preparation and focus on a specific research topic. You're required to submit a thesis of 20,000 words for completion.

### ADMISSION REQUIREMENTS

You must have a bachelor degree from a recognised institution at a specified level of performance – usually the equivalent of a credit average (65 per cent) in your final year (or 300 level). Some disciplines may have extra admission requirements, such as a portfolio of work or a higher level of performance of bachelor study. If you hold an honours degree or a master degree, you may apply for recognition of prior learning (RPL) of up to 32 credit points (Year 1). This may allow you to complete the Master of Research in less than two years.



Find out more  
[mq.edu.au/research/master-of-research](http://mq.edu.au/research/master-of-research)



<b>Master of Research: Pathway to the Doctor of Philosophy</b>		
<b>DEGREE</b>	<b>MAJOR</b>	<b>DOCTOR OF PHILOSOPHY*</b>
<b>Master of Research (Arts)</b> <a href="https://courses.mq.edu.au/MResArts">courses.mq.edu.au/MResArts</a>	This degree requires you to choose a major from the following disciplines: Ancient History; Anthropology; Cyber, Policing, Intelligence, Counter Terrorism, Security Studies and Criminology; English; Geography and Planning; Indigenous Studies; International Studies; Law; Modern History; Music, Media, Communication and Cultural Studies; Philosophy; Politics and International Relations; Sociology.	Ancient History; Anthropology; English; Geography and Planning; Indigenous Studies; International Studies; Law; Media, Music, Communication and Cultural Studies; Modern History, Politics and International Relations; Philosophy; Security Studies and Criminology; Sociology.
<b>Master of Research (Business and Economics)</b> <a href="https://courses.mq.edu.au/MResBusEc">courses.mq.edu.au/MResBusEc</a>	This degree requires you to choose a major from the following disciplines: Accounting and Corporate Governance, Actuarial Studies and Business Analytics, Applied Finance, Economics, Management, Marketing.	Accounting and Corporate Governance, Applied Finance, Actuarial Studies and Business Analytics, Economics, Marketing and Management.
<b>Master of Research (Human Sciences)</b> <a href="https://courses.mq.edu.au/MResHumSc">courses.mq.edu.au/MResHumSc</a>	This degree requires you to choose a major from the following disciplines: Cognitive Science, Educational Studies, Linguistics, Psychology.	Cognitive Science, Educational Studies, Linguistics, Psychology.
<b>Master of Research (Medicine and Health Sciences)</b> <a href="https://courses.mq.edu.au/MResMedHealthSc">courses.mq.edu.au/MResMedHealthSc</a>	This degree requires you to choose a major from the following disciplines: Biomedical Science, Clinical Medicine, Health Innovation, Health Profession, Health Systems and Population.	Biomedical Sciences, Clinical Medicine, Health Innovation, Health Professions, Health Systems and Populations.
<b>Master of Research (Science and Engineering)</b> <a href="https://courses.mq.edu.au/MResScEng">courses.mq.edu.au/MResScEng</a>	This degree requires you to choose a major from the following disciplines: Anatomy and Chiropractic, Biology, Chemistry and Biomolecular Science, Computing, Earth and Planetary Science, Engineering, Mathematics, Physics and Astronomy, Statistics.	Biological Sciences, Chiropractic, Computing, Earth and Environmental Sciences, Engineering, Mathematics and Statistics, Molecular Sciences, Physics and Astronomy.

\*Example Doctor of Philosophy disciplines

# Shape our collective future

## DOCTOR OF PHILOSOPHY AND MASTER OF PHILOSOPHY

### DOCTOR OF PHILOSOPHY

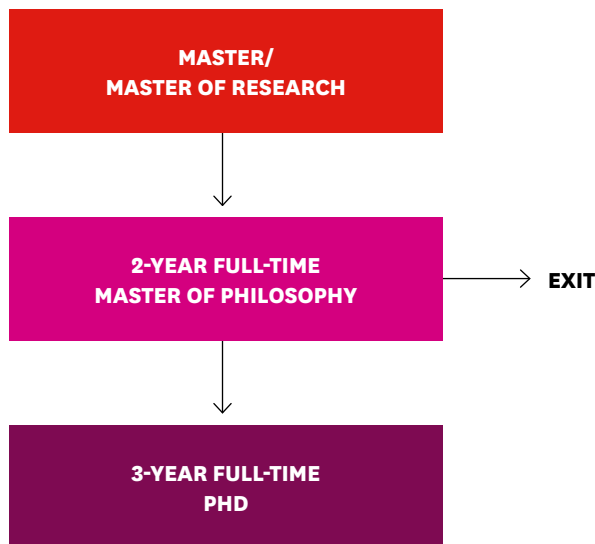
The Doctor of Philosophy (PhD) enables you to undertake extensive independent research that forms a distinct contribution to the knowledge of your chosen subject. Your work should afford evidence of coherence and originality shown by the discovery of new facts.

Successful progression to the PhD from the Master of Research is conditional upon availability of appropriate supervision and resources, submission of a PhD research proposal and your suitability to undertake higher degree research.

### MASTER OF PHILOSOPHY

The Master of Philosophy is awarded for research that contributes to knowledge in a particular field of study by presenting new facts or by demonstrating an independent critical ability to evaluate existing material in a new light. You may be eligible to upgrade from the Master of Philosophy to a PhD, with time spent on the Master of Philosophy counting towards the total candidature of the PhD.

For either program, your research will be supervised by at least two academics and will normally be carried out on campus. There is, however, provision for you to carry out some of your program off campus with academic approval.



Find out more  
[mq.edu.au/research-degrees](https://mq.edu.au/research-degrees)



## Direct entry admission requirements and program snapshot

### DOCTOR OF PHILOSOPHY

[mq.edu.au/doctor-of-philosophy](http://mq.edu.au/doctor-of-philosophy)

1. Completed Macquarie's Master of Research with at least 75 per cent in Year 2  
or
2. Completed a Master of Philosophy  
or
3. Completed a master degree (at least two years) from another institution, with a major research component (approximately 50 per cent thesis, 20,000 words) at distinction level (75 per cent or greater).

Additionally, all other peer-reviewed research output may be taken into consideration under Macquarie's Higher Degree Research Rules.

If you haven't completed the Master of Research and do not meet the above criteria, you may be asked to undertake the degree as a research training pathway to the PhD. If you've previously studied at bachelor honours or master level, you may receive credit towards the Master of Research of up to 50 per cent of the program.

The period of candidature is three years, full-time equivalent.

Depending on your area of study, you're required to submit a thesis of 75,000 to 100,000 words.

### MASTER OF PHILOSOPHY

[mq.edu.au/master-of-philosophy](http://mq.edu.au/master-of-philosophy)

1. Completed Macquarie's Master of Research with at least 65 per cent in Year 2  
or
2. Completed a master degree (at least two years) from another institution, with a major research component (approximately 50 per cent thesis, 20,000 words) at credit level (65 per cent or greater).

Additionally, all other peer-reviewed research output may be taken into consideration under Macquarie's Higher Degree Research Rules.

If you haven't completed the Master of Research and do not meet the above criteria, you may be asked to undertake the degree as a research training pathway to the Master of Philosophy. If you've previously studied at bachelor honours or master level, you may receive credit towards the Master of Research of up to 50 per cent of the program.

The period of candidature is two years, full-time equivalent.

You're required to submit a thesis of 50,000 words.

# Partnered for limitless potential

## COTUTELLE AND JOINT PHD

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### OUR GLOBAL PERSPECTIVE

Macquarie is proud to have high-quality research training partnerships with universities in Asia, the United Kingdom, Europe, the United States and South America. We have hosted more than 350 cotutelle and joint PhD candidates from more than 110 universities across 35-plus countries.

### JOINTLY SUPERVISED PHD PROGRAMS

Macquarie participates in two modes of international co-enrolment – cotutelles and joint degrees – with universities whose research activity strongly aligns with ours. Under both joint supervision models, you're enrolled at two universities with a principal supervisor at each. You'll spend around 50 per cent of your candidature at each university.

### INTERNATIONAL FUNDING OPPORTUNITIES

Macquarie's global perspective – executed through partnership and collaboration – has created funding opportunities with some of the world's leading funding bodies, including:

- **ANII:** National Research and Innovation Agency of Uruguay
- **BOLASHAK:** JSC Center for International Programs, Kazakhstan
- **CONACYT:** National Council on Science and Technology, Mexico
- **CONICYT:** National Commission for Scientific and Technological Research, Chile
- **CSC:** China Scholarship Council
- **DAAD:** German Academic Exchange Service
- **European Commission:** Erasmus+ Programme
- **HEC:** Higher Education Commission, Pakistan
- **VIED:** Vietnam International Education Development



Find out more  
[mq.edu.au/cotutelle-and-joint-phd](http://mq.edu.au/cotutelle-and-joint-phd)



# Forge invaluable connections

## INTERNSHIPS, SUPPORT AND DEVELOPMENT

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### INTERNSHIPS

#### INDUSTRY MENTORING NETWORK IN STEM

Macquarie has engaged with the Industry Mentoring Network in STEM (IMNIS) program since 2017 under two streams: MedTech-Pharma and Energy-Minerals.

IMNIS is an award-winning industry-led initiative of the Australian Academy of Technology and Engineering. IMNIS connects motivated PhD candidates (mentees) in science, technology, engineering and mathematics (STEM) with outstanding high-level industry leaders (mentors) in a one-year industry mentoring program.

[imnis.org.au](http://imnis.org.au)

#### APR. INTERN

Macquarie works closely with the APR.Intern program, which supports the industry-based training of PhD candidates to increase employability and broaden business and university collaborations.

With an emphasis on gender equity, this not-for-profit program encourages the placement of domestic, regional, Indigenous and disadvantaged PhD candidates into STEM internships.

Information for candidates

[aprintern.org.au/student-info](http://aprintern.org.au/student-info)

Information for academic mentors

[aprintern.org.au/universities/academic-mentor](http://aprintern.org.au/universities/academic-mentor)

### SUPPORT AND DEVELOPMENT

Macquarie's Higher Degree Research (HDR) Support and Development team offers flexible, diverse and candidate-driven research training. Our initiatives will assist you to enhance your professional, research communication and leadership skills through access to mentoring and development opportunities.

#### HDR MENTORS PROGRAM

Enhances, through peer-to-peer mentoring, your research quality, capability and experience.

[students.mq.edu.au/training-support/mentoring](http://students.mq.edu.au/training-support/mentoring)

#### HDR LEARNING SKILLS

Provides a range of support and training to equip you with essential research skills.

[students.mq.edu.au/training-support/learning-skills](http://students.mq.edu.au/training-support/learning-skills)

#### HDR PROFESSIONAL DEVELOPMENT

Assists you to develop your professional and employability skills, and to gain industry experience.

[students.mq.edu.au/training-support/professional-development](http://students.mq.edu.au/training-support/professional-development)

#### RESEARCHER DEVELOPMENT CALENDAR

Provides you with access to development opportunities at Macquarie. The calendar lists events that support a range of research activities, such as research writing, methods, funding, project management, publishing, partnerships, commercialisation, wellbeing and career management.

[MyRDC.mq.edu.au](http://MyRDC.mq.edu.au)

# Funding your potential

## HIGHER DEGREE RESEARCH SCHOLARSHIPS

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### **ACKNOWLEDGING RESEARCH EXCELLENCE**

We value our higher degree research candidates and recognise the vital contribution our research candidates make to the University, to the nation and to the world. One way we show our appreciation to you is through our research excellence scholarship program.

### **BACHELOR OF PHILOSOPHY AND MASTER OF RESEARCH SCHOLARSHIPS**

First-year full-time domestic candidates receive a tax-free scholarship stipend of \$4000 in Session 1 if they meet the scholarship requirements of an overall average grade of 75 or above. To receive a further \$4000 in Session 2, a grade of 75 or above for Session 1 must be obtained. Eligibility for a Year 2 stipend will be determined through a competitive ranking process based on performance in all Year 1 units. Newly commencing direct-entry Year 2 Master of Research candidates are also competitively ranked for scholarship.

Macquarie also offers a limited number of scholarships to international Master of Research candidates through the International Research Training Program (RTP) and the International Macquarie University Research Excellence Scholarship (IMQRES) round each year. Successful applicants may receive a tailored bundle that includes entry to the Master of Research program and a provisional offer for a PhD.

On successful completion of the Master of Research program, domestic and international candidates are competitively ranked based on performance. Three-year full-time PhD scholarships are awarded to the highest-rated candidates.

### **PHD SCHOLARSHIPS**

#### **MACQUARIE UNIVERSITY RESEARCH EXCELLENCE SCHOLARSHIP (MQRES)**

A tax-free stipend at the Research Training Program (RTP) rate is available to domestic candidates for up to three years full-time on-campus study.

#### **INTERNATIONAL MACQUARIE UNIVERSITY RESEARCH EXCELLENCE SCHOLARSHIP (IMQRES)**

A tax-free stipend at the Research Training Program (RTP) rate will be matched with tuition fees coverage for international candidates for up to three years full-time on-campus study.


#### **CO-FUNDED IMQRES**

An individually packaged scholarship is available to China Scholarship Council award holders and other externally funded award holders. Cotutelle and joint PhD candidate packages include a return economy airfare between partner universities, a tax-free stipend while at Macquarie and up to three years tuition funding.



Find out more  
[mq.edu.au/research-scholarships](https://mq.edu.au/research-scholarships)





“Many stars in our galaxy are part of a binary system, in which two stars orbit a common centre of mass. These binary systems undergo some of their most dramatic changes at the end of their lives. Current observations have revealed the presence of high-velocity outflows of gas, commonly referred to as jets, from dying stars that are interacting with a companion star. My research is investigating the origin and dynamics of these high-velocity outflows, which have a significant impact on the system as a whole.”

**Dylan Bollen**

COTUTELLE PHD CANDIDATE  
DEPARTMENT OF PHYSICS AND ASTRONOMY,  
MACQUARIE UNIVERSITY AND KU LEUVEN, BELGIUM  
INTERNATIONAL MACQUARIE UNIVERSITY  
RESEARCH EXCELLENCE SCHOLARSHIP RECIPIENT

# Invest in your future

## TUITION FEES

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### **DOMESTIC CANDIDATE FEES – MASTER OF RESEARCH**

Commonwealth supported places are available for the first year of the program. If you continue into the second year, you'll be supported by the Australian Government through the Research Training Program (RTP).

### **DOMESTIC CANDIDATES – PHD AND MASTER OF PHILOSOPHY**

All eligible domestic higher degree research candidates are granted places under the Research Training Program (RTP), which provides an exemption from tuition fees.

The RTP guidelines require that you submit your thesis within the RTP-funded period – three years full-time study (or part-time equivalent) for the PhD and two years full-time study (or part-time equivalent) for the Master of Philosophy. If you're transferring from another university in Australia or you have an incomplete research degree, you'll have your prior study period in the research degree deducted from your total program enrolment period at Macquarie.

### **INTERNATIONAL CANDIDATES**


All international candidates undertaking the Master of Research, the Master of Philosophy or the PhD are required to pay tuition fees. If you're a scholarship holder with a tuition component as part of your award, you're exempt from paying tuition fees for the period of your scholarship. Refer to your offer letter for details of the duration of your tuition component.

As an international candidate, you're also required by the Australian Government to purchase Overseas Student Health Cover for your entire visa period in Australia.



Find out more  
[mq.edu.au/research-degrees-fees](https://mq.edu.au/research-degrees-fees)





“The many physical and mental health benefits of physical activity have been well documented, yet one third of adults and four-fifths of adolescents worldwide fail to meet the recommended level of physical activity. The growing popularity of online social networks, mobile health and smart devices has given rise to exciting research opportunities and I’m interested in how social features in mobile health can be used to promote physical activity. I believe my research will facilitate the delivery of public health programs and provide an innovative direction for the development of next-generation health informatics.”

**Huong Ly Tong**

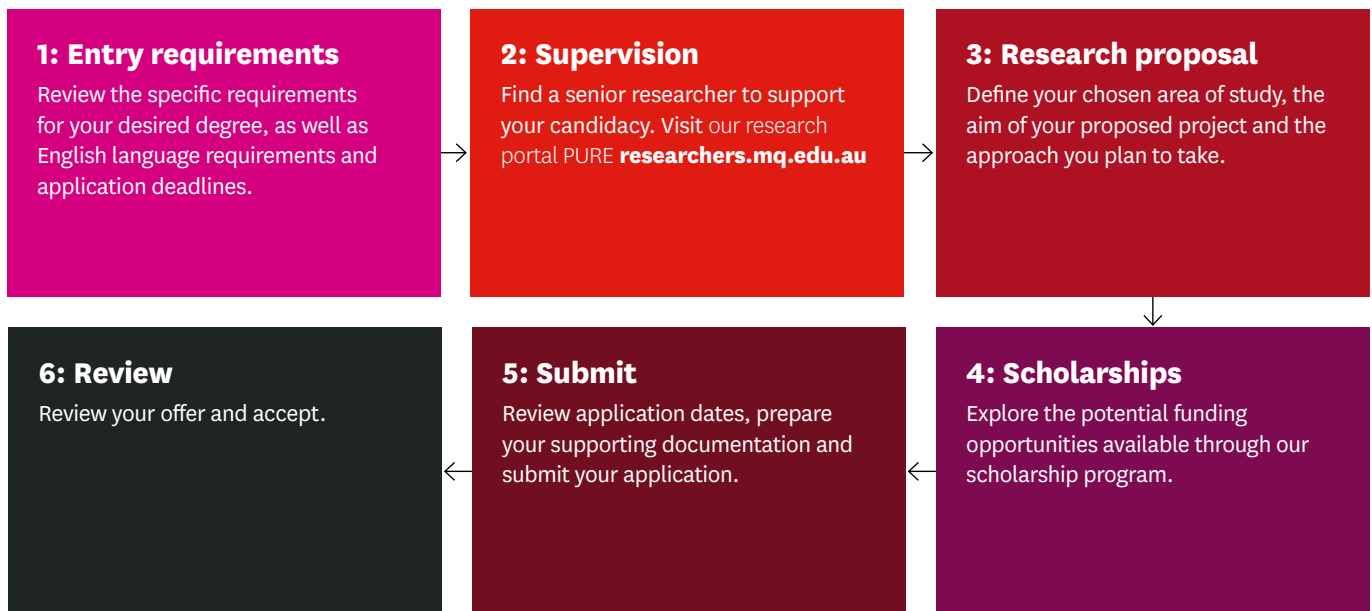
MASTER OF RESEARCH GRADUATE AND PHD CANDIDATE  
AUSTRALIAN INSTITUTE OF HEALTH INNOVATION  
INTERNATIONAL MACQUARIE UNIVERSITY  
RESEARCH EXCELLENCE SCHOLARSHIP RECIPIENT  
VIETNAM

# World-leading research starts with you

## HOW TO APPLY

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Whether you wish to undertake the Master of Research, Master of Philosophy or Doctor of Philosophy, or a cotutelle or joint PhD, start your next study journey with confidence, using this simple how-to-apply guide.



Find out more  
[mq.edu.au/information-about/how-to-apply](https://mq.edu.au/information-about/how-to-apply)

# CONTACTS

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The Office of HDR Training and Partnerships is responsible for managing candidature and scholarships for domestic and international candidates.

**ADDRESS**

Office of HDR Training and Partnerships  
Level 3 East, 17 Wally's Walk  
Macquarie University  
NSW 2109 Australia  
T: +61 (2) 9850 7987

**HDR GENERAL ENQUIRIES**

E: [hdrconnect@mq.edu.au](mailto:hdrconnect@mq.edu.au)

**HDR APPLICATIONS AND ENROLMENTS**

E: [hdr.admissions@mq.edu.au](mailto:hdr.admissions@mq.edu.au)

**HDR SCHOLARSHIPS**

E: [hderschol@mq.edu.au](mailto:hderschol@mq.edu.au)

**HDR PARTNERSHIPS**

E: [hdrpartnerships@mq.edu.au](mailto:hdrpartnerships@mq.edu.au)

**HDR INDUSTRY ENGAGEMENTS  
AND PLACEMENT**

E: [ProfDevHDR@mq.edu.au](mailto:ProfDevHDR@mq.edu.au)

**HDR SUPPORT AND DEVELOPMENT**

E: [HDR\\_Development@mq.edu.au](mailto:HDR_Development@mq.edu.au)





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