

ENTERPRISING RESEARCH DEGREES

Harness innovation within your organisation through a Masters by Research or PhD



University of
South Australia

Enterprise
Hub

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On the cover: UniSA's Australian Research Centre for Interactive and Virtual Environments 360-degree visual flight arena.



We're proud to be the number one university in Australia for research impact and engagement. We foster innovation, bringing together experts to generate ideas, build connections, and solve complex challenges. This is one of our strengths as an institution.

To deepen our relationship with industry, we've introduced the Enterprise Hub – a front door for engagement – a virtual and physical one-stop shopfront enabling business and the community to partner with us in research and enterprise.

One of the key ways we engage with industry and community is through our national, unique project-based approach to research degrees.

We work with you to co-design a project, and identify a student or a team of students to help solve a problem for your organisation.

By engaging a UniSA research student through the Enterprise Hub, you can improve your organisation's workforce planning, benefit from access to data and contemporary research methods, and tap into specialist expertise to overcome business challenges and solve critical problems. You can also secure a talent pipeline, placing you in the front seat for recruiting future leaders.

We're challenging and transforming research degrees – making them more relevant in an enterprising world where higher education and industry connect to create new knowledge.

*Professor Marnie Hughes-Warrington AO
Deputy Vice Chancellor: Research
and Enterprise*



UniSA's distinctive partnered approach to research and learning has never been more important to provide industry and organisations with a competitive edge. We've extended our national leadership in industry-intensive higher education through the UniSA Enterprise Hub and our project based-research degrees – the Enterprise PhD and Masters by Research.

Many of our research degree students have made an impact on organisations within industry ranging from SA Pathology, Royal Adelaide Hospital, BAE Systems and Lockheed Martin. They've applied their curiosity and enterprise to explore a problem from a new perspective whilst applying the latest methods and knowledge. They've made advancements in the treatment for brain cancer, enhanced Aboriginal-centered health care practices, kept track of satellites in space and used VR technology to fight bushfires.

A co-designed project-based research degree will prepare your industry's future workforce and bring innovation into your business. We also have opportunities for internships, which are an excellent way to apply a student resource to a project within your organisation.

*Professor Sandra Orgeig
Dean of Graduate Studies*

No.1 in Australia for research impact and engagement

2018 ARC Engagement and Impact Assessment (EI), Combined Impact – Approach to Impact and Engagement on Assessed Fields.



Enterprise Hub

The UniSA Enterprise Hub is home to our research portfolio, including our research degrees. It's an online gateway and physical shopfront in Adelaide's CBD, where industry can directly connect with our researchers, educators and students on activities that solve real problems, drive progress, and shape business and community growth in South Australia and beyond. It also incorporates UniSA Ventures, Research and Innovation Services (RIS), and the Innovation and Collaboration Centre (ICC), which are all focused on supporting startups to mature business regeneration and commercialisation.

unisa.edu.au/enterprisehub

Enterprising research

At UniSA, we're unstoppable in setting the pace for end-user research that is inspired to deliver solutions for a rapidly changing world.

We've built a culture of collaboration that brings our best minds together to solve real-world problems in a multidisciplinary environment. Through our research degrees, we can partner with you to bring impactful and applied knowledge to a range of challenges.

Our approach has always been strongly aligned with industry, engaging in partnerships with business and the community to help shape the questions we ask.

Welcome to Australia's University of Enterprise.

Our industry expertise

By connecting with us, you'll draw on the energy and expertise of 30+ research entities and more than 2,500 partnerships across 13 industry sectors. You'll gain access to world-leading knowledge, research expertise, facilities, technology and talent.

Our key industry sectors include:

Advanced manufacturing

We're creating solutions to meet current manufacturing challenges such as climate change, shifting customer needs and quality assurance, along with new approaches for tomorrow's manufacturing industries.

Community and social services

We work across complex areas, including child protection, mobility and identity, arts and culture, sociology and social theory, communication, cross-cultural health, Aboriginal engagement, and welfare reform to create solutions and drive systemic change.



Defence

In a fragile world, with global power balances shifting and strategic tensions rising, we're focused on creating multidisciplinary teams to address Australia's defence capabilities, bringing together experts in engineering, psychology, virtual reality, autonomous systems, industrial design, and more.



Education and training

Education is the spark that ignites new ideas, increases economic outcomes and creates social inclusion. Our researchers take a holistic approach, combining expertise in education, social and wellbeing policy, digital inclusion, literacy, skills gaps and personalised learning.



Energy, resources and mining

We know that a strong domestic resources sector delivers the energy needed for everyday life and is a key driver in national job creation and economy growth. Our focus is on ensuring that our energy, resources and mining sectors remain competitive and sustainable.



Engineering and construction

These industries operate in a continually evolving landscape, so we apply our expertise in engineering, fabrication, construction management, computer science, environmental science, economics, architecture, mathematics, software development and business intelligence to support major projects, processes and production.



Environment and water

We're focused on cultivating a sustainable relationship with our planet while balancing human demands. Our researchers are finding solutions to environmental challenges such as increasing emissions, resource depletion, waste management, threatened ecosystems and unsustainable consumption.



Food, wine and agriculture

These industries are the backbone of the South Australian economy. Challenges such as soil degradation, reduced water availability, global health pandemics and export tariffs make it a critical time to find solutions that can protect and support business growth.



Health, medical and care

We know that effective healthcare can save lives and contributes to population wellbeing more broadly. Our wide range of expertise across allied health, nursing and midwifery, biomedicine, digital health, epidemiology, pharmacy, nutrition and more, creates a multidisciplinary research environment ready to take on current and future healthcare challenges.



Professional and commercial services

We're influencing contemporary workplaces and work practices through research that embraces digital transformations, customer-centric delivery, sustainability and social good, and re-imagined service models.



Space

We're ready for new frontiers, bringing together expertise in engineering, information technology, cybersecurity, telecommunications and advanced materials to achieve sector growth and increase Australia's space capabilities and regulation efforts.



Technology, computing and artificial intelligence

Technological advancements and digital disruption are moving at a rapid pace. Our partnership model is centred on agility, working closely with organisations across the technology, computing and AI sectors to ensure we can predict future trends and provide creative solutions that support future growth.



Tourism, arts and creative industries

As the creative ecosystem evolves, our researchers are focused on how South Australia can continue to deliver world-class tourism experiences and thriving arts and cultural organisations to achieve long-term business and social impact.

Unleash your potential

Through our enterprising research degrees

At UniSA, we've transformed the way we design and deliver research degrees. Using a project-based approach, we partner with organisations to address current and future challenges relevant to business, industry and the wider community.

Our research degrees are supported by a supervisory panel often including an end-user to provide contemporary and balanced perspectives.

From the outset, our students are provided with clear project direction and high-quality support to allow them to harness their research skills and start to develop new knowledge, injecting that back into business – either through partnering with industry on a project, or through an internship.

You can play an active role in co-designing a project-based Masters by Research or Doctor of Philosophy (PhD) that tackles a problem in your sector, to attract further talent into your company, or to upskill your own staff.

You can also partner with us to provide a student (who is an expert in their field), an internship within your organisation, embedding the right knowledge into your ecosystem to help it thrive.

Co-design a research project

Work with us to inject new knowledge into your organisation through a bespoke project-based research degree.

Option 1: Recruit a specialist from UniSA to explore a key business challenge.

Option 2: Identify talent from within your organisation and build your own capabilities and culture of innovation through a research degree.

Host an internship

Embed a research degree student as an intern in your organisation to add new knowledge and build your future workforce.

unisa.edu.au/enterprisehub/researchdegrees

No.1 young university in Australia for industry income

2022 THE Young University Rankings

100% of our research at or above world-class

2018 Excellence in Research for Australia (ERA), 4-digit Fields of Research.

No.1 young university in Australia for industry collaborations

2022 THE Young University Rankings – Industry Income Indicator.



Adam Drogemuller, UniSA PhD candidate, Australian Research Centre for Interactive and Virtual Environments.



Cintya Dharmayanti, UniSA PhD candidate and 2021 3 Minute Thesis (3MT®) UniSA Winner and People's Choice Winner.

What's a research degree at UniSA?

Masters by Research

About this degree: This program aims to train candidates in analysing their project topic at an advanced level, applying contemporary research methodologies and techniques that will contribute to new knowledge and solutions with guidance from a research supervisor.

What experience is required: This is suitable for someone who holds a bachelor's degree or equivalent professional experience. Applicants don't necessarily need to have experience in conducting independent research.

Duration: A Masters by Research can be completed in one to two years full-time or two to four years part-time, depending on prior research experience.

Doctor of Philosophy (PhD)

About this degree: This program produces graduates with the capacity to conduct independent research with a high level of originality and quality. On completion, the PhD candidate will be able to design and execute forward-thinking research that generates new knowledge and solutions to real-world issues.

What experience is required: A PhD is suitable for someone who already has some research experience, either through formal qualifications (an honours or master's degree) or equivalent professional experience.

Duration: It can be completed in three to four years full-time or six to eight years part-time.

Who can apply?

For information about the eligibility criteria visit:

unisa.edu.au/resdegrees-eligibility



Andre Abou Hatem, UniSA PhD candidate, Future Industries Institute.

Co-designing a research project

Access the brightest minds and smartest talent

Has your organisation identified a particular problem that requires investigation through research? Great businesses are built on ideas, solutions and connections. When you're busy solving the challenges of day-to-day, it's not easy finding the time to invest in these foundations. Engage with us to co-design a bespoke project-based research degree that will deliver real outcomes to your business or industry more broadly.

Together with our expert researchers, we'll work with you to develop a specific topic and then recruit the best student or team for the project. Alternatively, you may identify someone within your organisation who would benefit from completing a research degree, further enhancing the capabilities within your own workforce.

The research student or team will:

- Explore your specific problem through a dedicated project-based research degree (Masters by Research or PhD).
- Be mentored by world-class research supervisors.
- Have access to state-of-the-art facilities and resources, along with world-class networks.
- Bring new knowledge to your organisation that is applied and impactful.

How your organisation will benefit:

- Gain knowledge that can be applied to your specific organisational issue and future challenges.
- Connect with talent from outside of your organisation.
- Help to develop research capabilities and expertise within your existing workforce.
- Build a culture of innovation into the DNA of your organisation.
- Extend your professional networks to include our world-class researchers and other industry partners.

What's required from you:

- If sourcing a student from UniSA, industry partners pay a three-year stipend (living allowance) scholarship program of A\$35,000 per annum.
- Nominate an expert from within your organisation to be part of a supervisory team and provide the student with local insight and end-user expertise.
- Consider a co-location arrangement, where the student can be embedded within your organisation.
- Consider a three-month placement or internship to further enhance the project and research outcomes.

What we'll provide:

- Support in co-creating your project proposal.
- A fee waiver up to the value of A\$39,700 per annum*
- Access to a supervisory panel of world-leading research experts.
- Management and development of candidates with transferable skills.
- Access to purpose-built facilities that encourage collaboration in an entrepreneurial environment.

*Based on 2023 entry.

Did you know?

If the student is already employed by your organisation, the research degree project can be completed at no additional cost. The time commitment will depend on the nature of the research, but will require a minimum of the equivalent of two full-time days of work for part-time students.

We're flexible

Our research degrees can be studied part-time, giving students the option of balancing studies with work and other commitments. Students can complete a Masters by Research in one to two years full-time (or part-time equivalent) or a PhD in three to four years full-time (or part-time equivalent).



Keeping track of satellites in space

While satellite systems such as the global positioning system (GPS) can determine our position on Earth, it's very difficult for us to tell the GPS where it is in space. And, with more than 4,500 satellites and 750,000 pieces of debris floating in the solar system, posing a risk it's time to find a solution.

As part of his research degree, UniSA PhD graduate, Dr Joe O'Leary, partnered with the Space Environment Research Centre (SERC) to find a new way to predict the motion of satellites using advanced theories of gravity and mathematics.

His research has helped track satellites in space and assisted with deterring impacts with space junk.

Strong hearts beating together

All is not equal when it comes to the access and provision of healthcare for our First Nations People. UniSA PhD candidate, Katharine McBride, is working with Aboriginal women and health providers such as the Watto Purrinna Aboriginal Primary Health Care Service to encourage governments to adopt a new approach to health from an Aboriginal perspective.

Through her research project, Katharine is exploring health delivery through the lens of 28 Aboriginal women from different communities to better establish cardiovascular protective and risk factors, with all work overseen by an Aboriginal Women's Advisory Group.

What's industry saying?

"Partnering with UniSA has allowed us to provide services which meet the needs and expectations of the community we care for. Knowing that the project's research was led by Aboriginal women, and being involved in the design and process, has given me, as an Aboriginal man, confidence that the research is meeting community priorities and delivering benefits on the ground for Aboriginal women."

*Kurt Towers, Executive Director
Aboriginal Health – Northern Adelaide
Local Health Network*



Fighting brain cancer

Glioblastoma is the most frequently diagnosed and aggressive form of adult brain cancer, commonly characterised by rapid tumour growth and treatment resistance.

UniSA PhD candidate, Kaitlin Scheer, has partnered with US-based company Advanced Solutions to develop microvessel fragments that encourage growth of new vessels, which can aid more effective treatments to fight the deadly disease.

What's industry saying?

"It's a research collaboration that I'm delighted about. We're excited to build a perfused in vitro brain cancer model to enable better human patient outcomes. Working with the world-class researchers at UniSA has been extraordinary and we look forward to hosting Kaitlin in our labs."

*Dr Jay Hoying, Chief Scientist –
Advanced Solutions*

Improving mental health in aged care

UniSA has partnered with Helping Hand to improve mental health in aged care using virtual reality (VR) technology. Apathy in aged care homes hastens cognitive decline and can affect up to 84 per cent of older populations.

The innovative tool enables seniors to relive happy memories from their past through a 360-degree experience. Residents with the highest levels of apathy showed the most improvement suggesting using VR may help improve the lives of older adults in residential aged care.

Hear from our student

"Working with Helping Hand allowed me to understand aged care systems and procedures so I could ensure we were engaging with both residents and their families in the right way while providing person-centred care."

*Dimitrios Saredakis,
UniSA PhD candidate*

Hear more stories at

unisa.edu.au/enterprisehub

Hosting an internship

Developing your industry's future leaders

Are you interested in helping to develop future leaders by embedding a research degree student as an intern in your organisation?

No two workplaces are the same, and neither is our approach to student placements. At UniSA, we'll match you with a student who is focused on making a lasting impact in your industry. They'll add innovation to your workplace and support the future of your business by sharing new knowledge and insights.

By hosting a UniSA student intern, you can also build a recruitment pipeline and nurture tomorrow's professionals, preparing them for a seamless transition into a role within your organisation or the wider workforce.

What the intern will do:

- Complete a minimum three-month internship within your organisation.
- Focus on your organisational issue either as part of a research degree or an additional related project.
- Be supported by world-class UniSA research supervisors.

How your organisation will benefit:

- Access to new knowledge and a network of experts and world-class researchers.
- The ability to build innovation into your organisation.
- Develop future knowledge for your industry and workforce.

What's required from you:

- Industry partners pay living costs of A\$2,500 per month (for a three-month internship).
- Nominate an industry expert from within your organisation to help inform the intern's area of focus.

What we'll provide:

- Connect you with a student who is exploring a project relevant to your organisation.
- Support in setting up and developing an internship project.

Hear from our student

“Interning at the Environmental Protection Agency has helped me to grow as a scientist and taught me a lot about producing research with practical applications. It's great to have the support of an organisation with such knowledgeable and passionate people who want to make a difference.”

Antti Mikkonen, UniSA PhD intern – EPA Victoria

What's industry saying?

“Having an intern at the EPA has been a significant benefit to the organisation. The internship has enabled thoughtful project design that directly links research to much needed societal solutions. The result is a PhD that has had an immediate beneficial impact.”

Dr Jen Martin, Principal Health Risk Advisor (Chemicals, Environmental Public Health Branch) – EPA Victoria



Next steps

What's the process?

Co-designing a research project

Contact us directly to discuss the development of a co-designed research project. We'll then match you with an expert, so you can collaborate and design a research degree project that will drive the future of your organisation. You can nominate an employee, or we can recruit a highly qualified research student.

Hosting an internship

Reach out to our expert team to discuss an internship project that's aligned to your business goals and objectives. We'll then source the right research degree student to spend time with you and your organisation.

What's the cost?

Funding for research degree projects

If you engage a student from UniSA, your organisation will need to provide a living allowance scholarship at a minimum of A\$35,000 per annum for three years. If you select the student from your own workforce, the project can be incorporated within their role, requiring a minimum commitment of two days per week through a part-time mode.

Funding for internships

If you're sourcing a research degree student for an internship, the contribution would be A\$2,500 per month (for a three-month internship).

Who can I contact?

To learn more about co-designing a research degree project or accessing an intern, discussion is welcome at any time throughout the year.

Get started by completing an enquiry form through our website:

unisa.edu.au/enterprisehub

Want to know more?

unisa.edu.au/enterprisehub/researchdegrees





University of South Australia

Australia's University of Enterprise

unisa.edu.au

Learn more: **unisa.edu.au/enterprisehub/researchdegrees**



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Acknowledgement of Country

UniSA respects the Kaurna, Boandik and Bamgarla peoples spiritual relationship with their country.

Artist: Ngupulya Pumani

Find out more about the University's commitment to reconciliation at **unisa.edu.au/RAP**