



# ENGage

Technology for humanity



# Join the network behind impactful work.

**Combining purpose-led partnerships with cross-disciplinary engineering thinking to drive progress, globally.**

Engineering is all around us, transforming science into the technologies and products we use every day. For over 75 years now, UNSW Engineering has set the pace for that transformation – pushing technology further into the future with the good of humanity at its core.

## Our schools

### **School of Computer Science Engineering**

Enhancing the human experience.

### **School of Mechanical & Manufacturing Engineering**

Moving the world with ingenuity.

### **School of Electrical Engineering & Telecommunications**

Generating connection through sparks of innovation.

### **School of Photovoltaic & Renewable Energy Engineering**

Realising the renewable future.

### **School of Mineral & Resources Engineering**

Supplying future resources through future-focussed research.

### **Graduate School of Biomedical Engineering**

Saving lives through medicine and technology.

### **School of Civil & Environmental Engineering**

Redefining the foundations for civilisation.

### **School of Chemical Engineering**

Designing the products that enhance the everyday.



## Fast facts



#1 Engineering and Technology Faculty in Australia



Australia's only Humanitarian Engineering Minor



More specialisations than any other Engineering Faculty in Australia



Over 118 different nationalities represented across Faculty



4 Engineering MakerSpaces providing barrier-free access to tools and technology



\$700 Million recently invested in purpose-built facilities



UNSW's Challeng program connects students, academics, and industry to real-world project-based learning initiatives

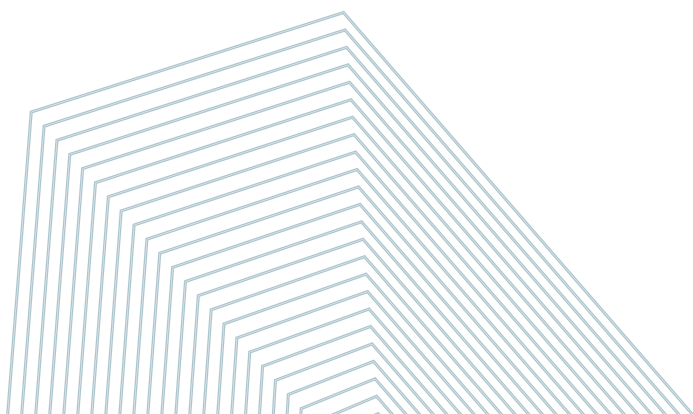
# Our eye is on the future. Our door is open for everyone.

As we step into a new era of climate and technology, the opportunity for innovation has never been greater. What the world needs now is a drive towards positivity and action.

**The avenues for impact alongside UNSW Engineering are far-reaching.**

We partner with companies of all shapes and sizes to make that impact – providing the talent, vision and capability you need to be an investor or inventor of technology for humanity. From start-up to scale-up, we provide people and teams with the platform they need to be part of the solution.

Our students and academics are fearless in their thinking and ready to transform their ideas into world-changing action.



Here's how we can work together >



# Visionary research

Welcome to the global frontier of research and innovation at UNSW Engineering. Our research partners play a vital role in pioneering ground-breaking projects that meet the needs of people all over the world.


Together, we deliver targeted impact in major technology sectors to engineer abundance into people's lives. We can help connect dots faster, apply our research at a systems and policy level, ensuring that we do our part to leave a better world to future generations.

Research that leads to discovery.

Discovery that leads to technology.

Technology that connects humanity.





By joining forces with  
UNSW Engineering,  
you're not just a partner;  
you're an investor in  
human progress.

## The common drivers that guide our research projects

### Community

The people we help  
instil our research  
with purpose.

### Ingenuity

The ideas we  
originate belong to  
the people we impact.

### Opportunity

The platform we  
provide helps people  
apply their ideas.

# The focus of our fearless thinking

**As society has fundamentally evolved over the decades, so too have the areas we choose to focus on making an impact.**

We focus on needs that are core and universal to human life, and openly collaborate at an interdisciplinary level to answer the questions and upgrade the systems that keep us alive – and always reaching further.



Our research

## Focus areas

> Energy

> Water

> Health

> Recycling & Decarbonisation

> Digital Transformation

> Future Technologies

# The opportunities for making your impact

**Being an industry research partner with UNSW Engineering enables you to:**

- Co-design and co-develop fit-for purpose solutions with leading experts and engineering specialists that make progress technology for humanity.
- Access unique state-of-the-art testing facilities, along with equipment designed for specialised industry-led projects.
- Partner with our engineering teams to amplify your investment reduce the risks of R&D costs – by co-applying dedicated Commonwealth Government grants and funding.
- Call on the collective insights and ingenuity of research leads and their team of postdoctoral fellows and PhD students – all of whom can help take your project from lab to market at pace.
- Scale up the commercialisation of UNSW research and intellectual property including more spin outs – to deliver more meaningful progress to more people and places.
- Play your part in developing the UNSW Entrepreneurial Campus – with the opportunity for R&D collaboration organisations to centre themselves at the heart of UNSW's Sydney campus.





From small sparks of new ideas, to working prototypes and full-scale solutions, our research is guided by:



## Hands

What are the actionable steps we can take to bring research to the real world?



## Hearts

What's the human benefit and positive impact at the heart of our research?

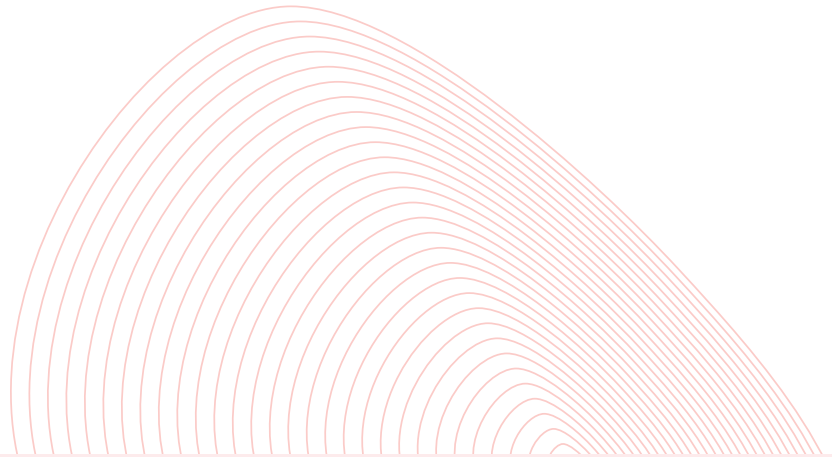


## Minds

How do we collaborate and innovate, making progress at a multi-disciplinary level?

# Challenging convention

The opportunity for innovation through engineering has never been greater – but it can't happen without unseen perspectives, unheard voices and untapped potential. Choose to challenge convention. And start doing it here.



## The ChallengENG Program

This multidisciplinary program unites industry partners with UNSW Engineering students and academics. Collaborating together at the edge of contemporary technology, ChallengENG invites students and partners alike to deliver real-world outcomes with humanity's best interests at heart.

Discover more about the ChallengENG Programs here



ChallengENG Program

**The four pillars of ChallengENG are:**

### **Vertical Integrated Projects (VIP)**

Ambitious in scope and collaborative in nature, these exciting multi-year research projects bring together students, industry partners, academics and researchers to think fearlessly and impact significantly. Previous projects have included our world-famous Sunswift solar vehicle and the development of artificial hearts.

### **Assisted Tech Hub (ATHub)**

Students co-design and prototype assistive technologies for real clients living with a disability. As a partner in this program, you're supporting technology with the good of humanity at its core.

### **Humanitarian Engineering**

Engineering has always had the power to change the world for the better – and this program aims to continue that pattern. Students, academics and partners work on humanitarian activities like disaster response and sustainable community development, to solve some of the most pivotal challenges of our time.

### **Student Projects**

No two engineers are the same – and their avenues for innovation are just as diverse. These projects aim to establish our graduates as fearless thinkers and collaborative changemakers. There are all kinds of opportunities for you to partner with that progress.





## Women In Engineering

Connect with some of UNSW's most progressive and passionate engineers – and help to build a more gender-balanced profession in the process. Women In Engineering is an inspiring support network that offers all kinds of exciting opportunities for women engineers.

Connect at:

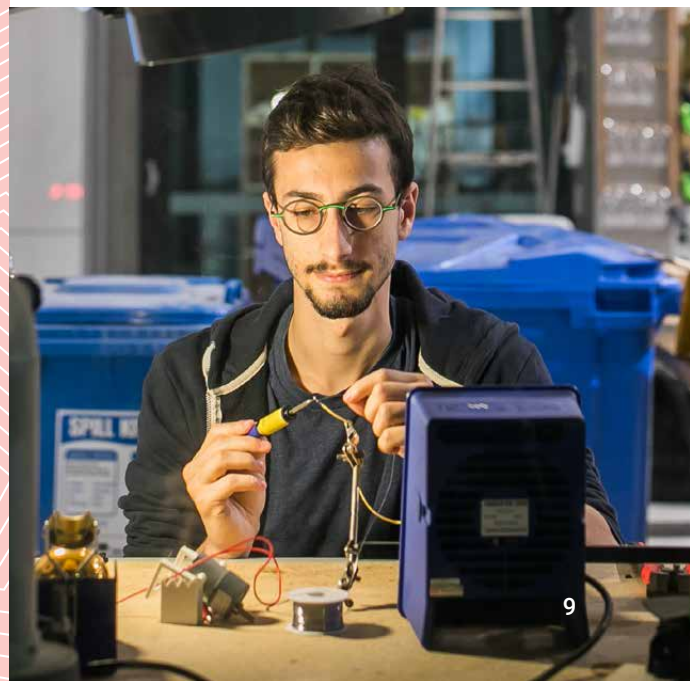
[unsw.edu.au/engineering/  
student-life/women-engineering](https://unsw.edu.au/engineering/student-life/women-engineering)



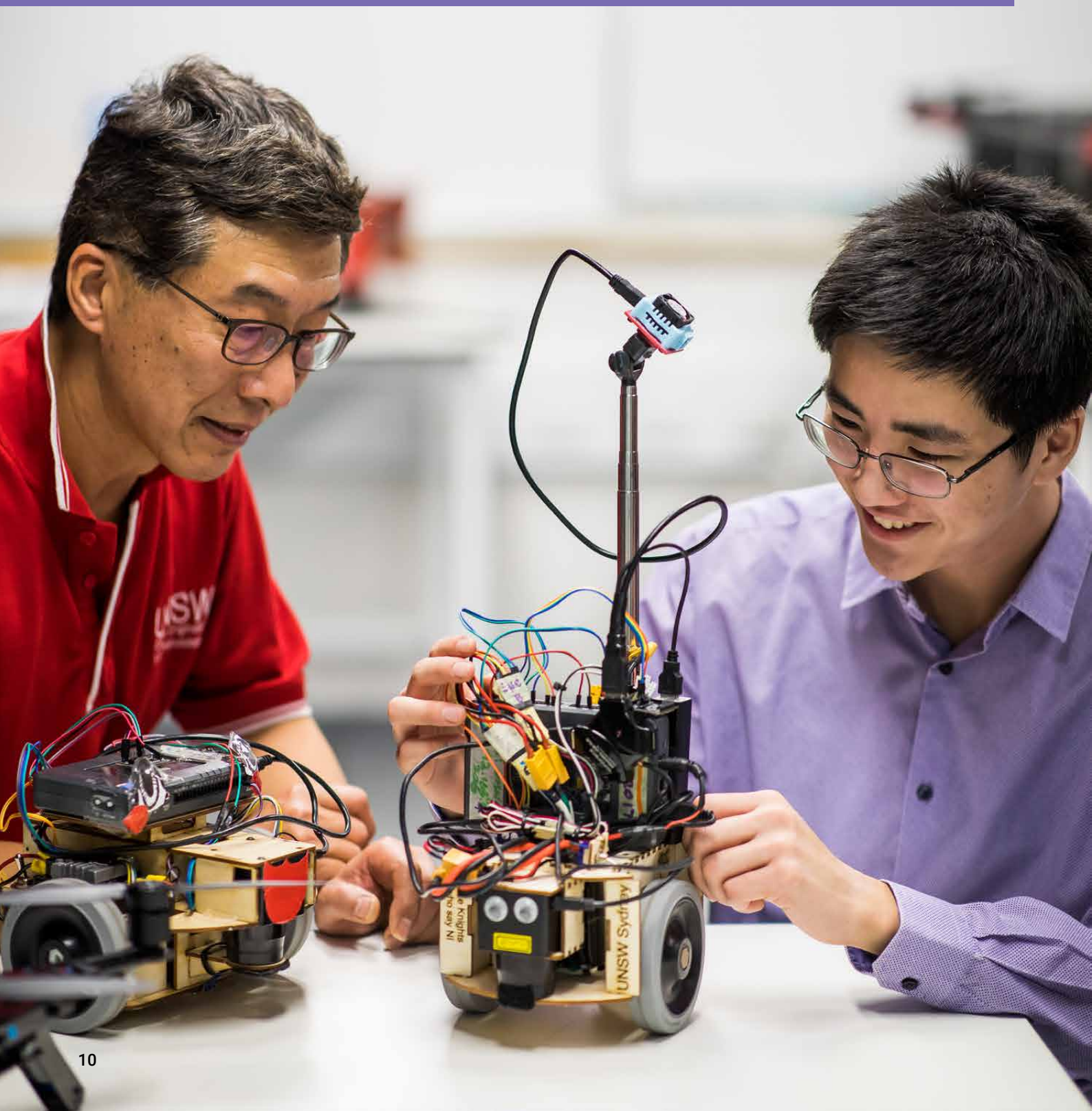
Women in Engineering

## MakerSpaces

Fearless thinking can't happen without space to prototype and play with possibility. We're creating Australia's largest network of MakerSpaces and workshops to give engineers that space – along with access to the tools and tech they need to collaborate and create. .



# Training engineers of the future through Experiential Education





# Work Integrated Learning

**Some of the most insightful learning experiences for many UNSW Engineering students happen off-campus – especially as part an accredited Engineers Australia (EA) program.**

These 60 days of work-integrated learning offer a platform for driven engineering minds to start practically applying their skills and know-how.

By partnering with us to provide purposeful, supervised industrial training opportunities, you'll be connecting your business to future graduates – and future recruits – first.

## You can also choose to:

### Share paid opportunities

Advertise Graduate, full-time, paid internships and part time opportunities on UNSW Connect and Readygrad Ribit – so students who are looking for experience that's relevant to their studies can reach out.

### Take part in Industrial Training workshops

Share their advice for stepping into the industry and connect with the next generation of changemakers.

### Engage with an Interdisciplinary Partner Project

The solutions to today's most pressing engineering challenges are rarely limited to a single school of thought. We offer interdisciplinary project-based Work Integrated Learning (WIL) courses, so that students can combine their professional skills and personal perspectives – to deliver purposeful project outcomes for a partner organisation.

## Ready to connect?

Reach out to [employability@unsw.edu.au](mailto:employability@unsw.edu.au) to find out more.

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# Industry Access Program

**The impact of an engineer is limitless – especially when they've partnered with an industry leader who shares their drive to change the world. The Industry Access Program is your chance to invest on this kind of partnership.**

You'll build connections with the latest generation of visionary engineers, give your organisation a competitive edge and contribute to the education that leads to true innovation.

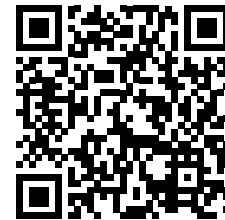
## **Show up for future leaders through scholarships**

Brilliant engineering thinking isn't only found amongst those who can afford higher education. Scholarships even the playing field – and open doors for students whose impact deserves to be felt.

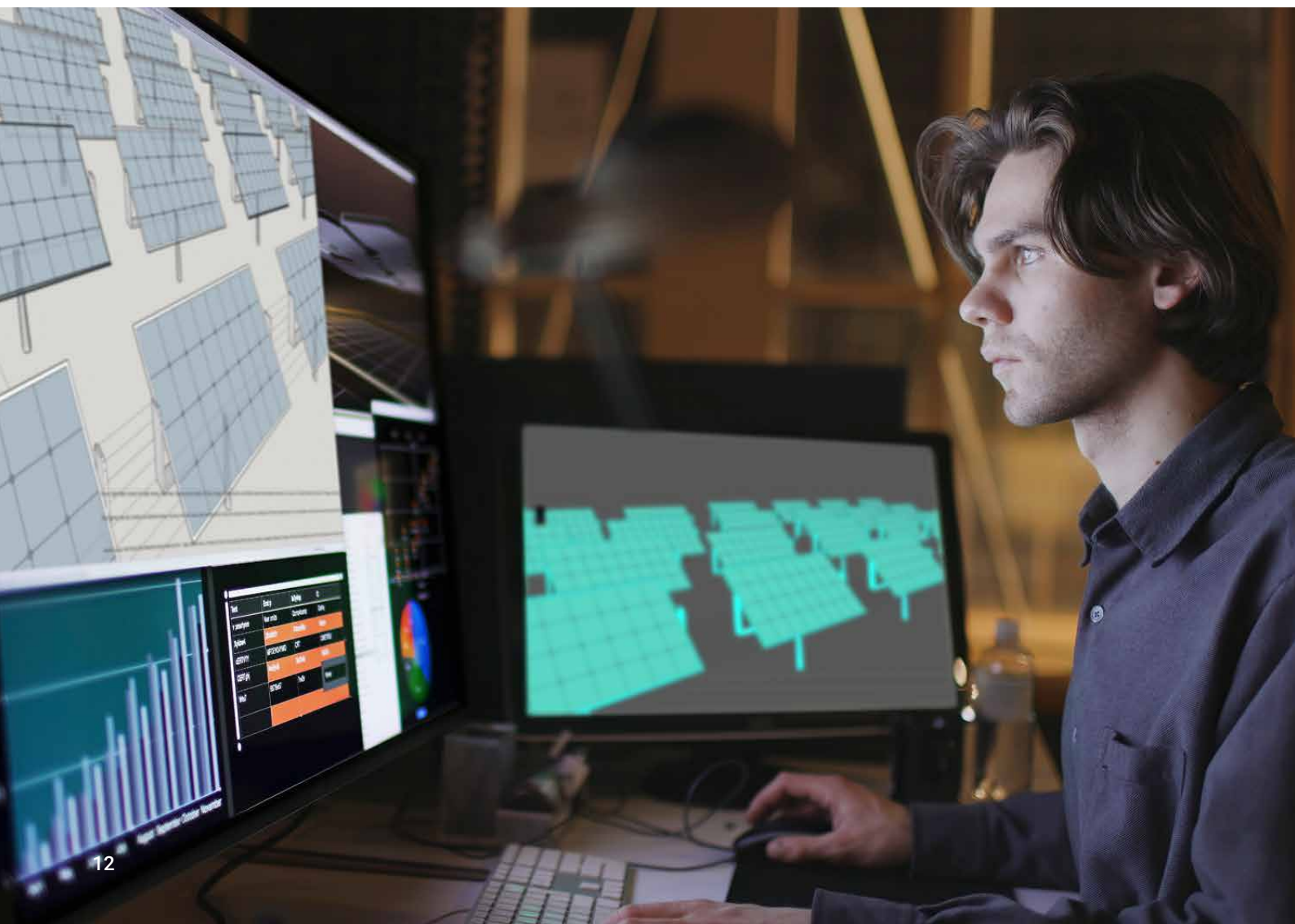
In supporting these programs, you'll also have the opportunity to access the best and brightest students at the beginning of their career. Our Women in Engineering, Rural, Indigenous and Equity Scholarship programs have

produced some of the top graduates in Australia. Are you ready to invest in their impact?

Connect at:  
[unsw.edu.au/engineering/study-with-us/scholarships](https://unsw.edu.au/engineering/study-with-us/scholarships)



Scholarships





# Australian Graduate School of Engineering

**Established in 2021, the Australian Graduate School of Engineering has focused on developing post graduate education and lifelong learning programs for engineers by building upon the Engineering faculty's strong reputation and track record for excellence.**

Our strength lies in the development of short courses after leveraging AGSM's 40-year expertise. We are equipped to design, create, sell and deliver U2C programs that count with the expertise of academics from across all engineering schools and external SME's.

The AGSE at UNSW offers interactive and engaging learning experiences delivering a premium experience

arming you with innovative tools to excel in engineering.

Whether you are looking to update your technical and leadership skills to move towards your career goals or to invest in the development of your team of engineers, we provide tailored learning solutions that align with your business model and company strategy.

Contact us to explore our accredited short courses and micro-credentialed programs, professional development or to custom design tailored programs to build future leaders within your organisation.

Upon completion of individual courses, all participants will earn a digital

badge, representing their acquired skills and qualifications.

Additionally, all our courses are recognised by the Australian Graduate School of Management and credited towards the Certificate of Executive Management and Development CEMD.

Explore our open catalogue:



AGSE



# Research at the intersection of industry and academia

**AGSE have introduced a new mode of experiential learning to close the gap between academic research and industry, to open new doors to impact.**

Whether employed in industry or sponsored to undertake research training while not in the workforce, this program enables PhD or Master of Industrial Research trainees to co-design research with industry, bringing a fresh perspective to sector-specific goals and barriers, underpinned by advancing disciplinary knowledge.

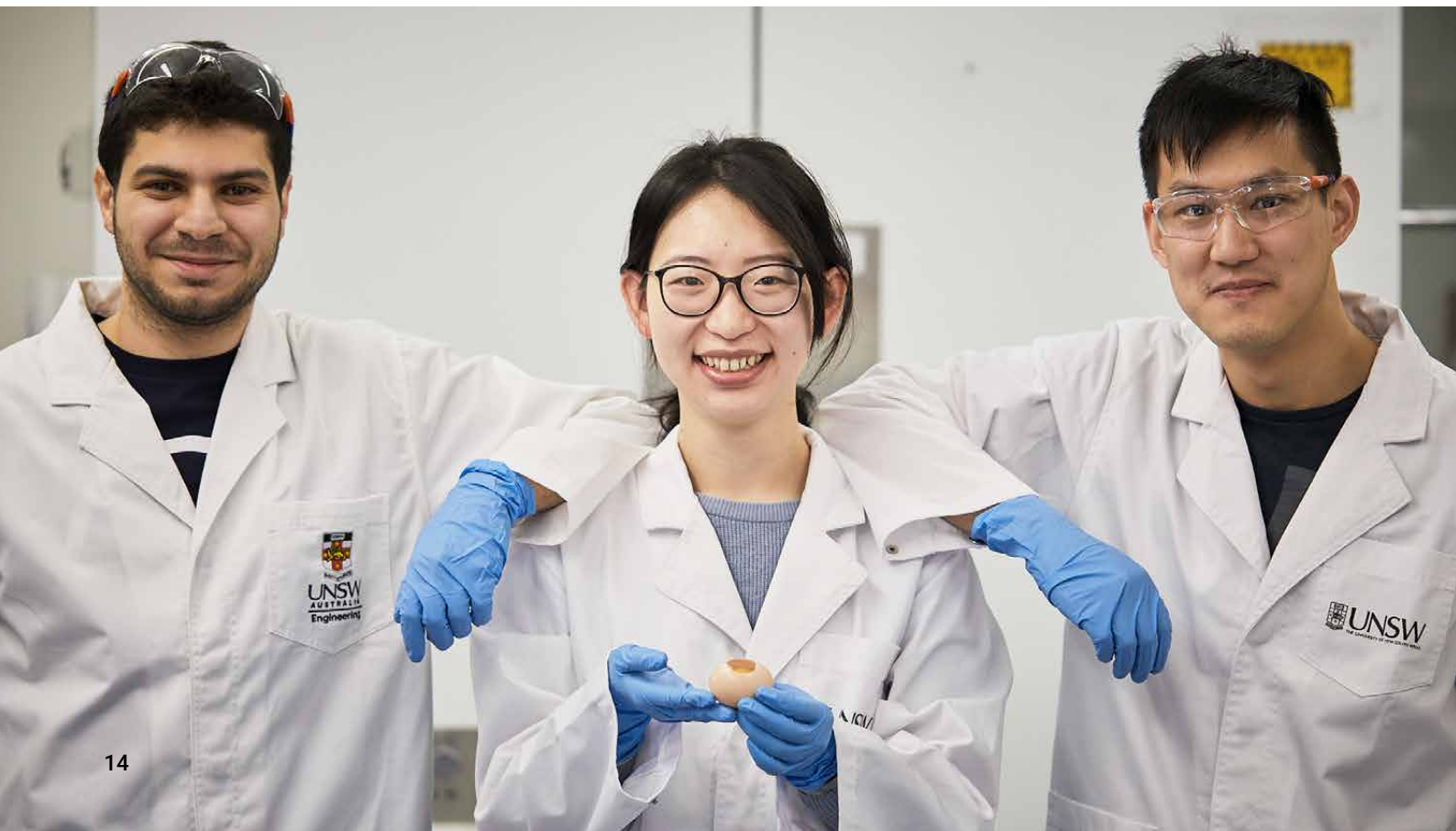
Partnering with UNSW Engineering enables organisations to:

- Access expertise and infrastructure to drive their innovation pipeline
- Develop and retain talent
- Be directly involved in shaping the next generation of engineering leaders

Connect at:  
[unsw.edu.au/engineering/our-schools/agse/industry-phd](https://unsw.edu.au/engineering/our-schools/agse/industry-phd)



PhDs







“Working together, we put  
possibility into practice  
to create progress for all.”



# Ready to turn idea into impact?

So are we. Get in touch –  
and let's make it happen.



[unsw.edu.au/engineering](https://unsw.edu.au/engineering)