

A world-class career

PROFESSOR OF ELECTRONICS ENGINEERING



Macquarie University

A WORKPLACE LIKE NO OTHER



As Executive Dean of the Faculty of Science and Engineering, it gives me great pleasure to introduce the new role of Professor of Electronics Engineering in our School of Engineering.

We are a purpose-driven faculty, determined to lead positive change for our students, staff and partners. We aim to be the best for the world. We work with our partners to discover, innovate and build a better future, with environmental and social sustainability at the core. We are committed to nurturing the next generation of STEM leaders, who will shape our rapidly evolving world.

By joining our faculty, you will become part of a vibrant community dedicated to pushing boundaries, fostering collaboration and embracing emerging technologies. We believe the pursuit of science and engineering goes beyond theoretical knowledge; it encompasses hands-on experience, interdisciplinary collaboration and a deep understanding of realworld challenges. We recognise that these challenges require collaborative and sustainable solutions. Therefore, we actively engage with our communities, fostering partnerships and collaborations that extend beyond the boundaries of our campus. By working together with industry leaders, government bodies and other stakeholders, we aim to discover innovative solutions that address societal needs and contribute to sustainable development.

We are seeking a leading engineering academic to help build a world-leading program in electronic engineering. The successful applicant will push the boundaries of semiconductor technology, enabling advancements in various domains such as electronics, telecommunications, energy and photonics. We will value the unique perspectives and experiences you will bring to our faculty. We will also provide an exceptional environment for you to thrive and make meaningful contributions.

Macquarie University is establishing itself as a leader in equality and inclusion, and we have been recognised for our progress in shaping a welcoming, diverse and inclusive organisation. We are proud to be recognised as an Employer of Choice for Gender Equality by the Workplace Gender Equality Agency for our progress towards gender equity, and we are focused on long-term systemic change.

We look forward to welcoming you.

Professor Lucy Marshall

EXECUTIVE DEAN FACULTY OF SCIENCE AND ENGINEERING MACQUARIE UNIVERSITY

Acknowledgement of Country

We acknowledge the Traditional Custodians of the land upon which the Macquarie University Wallumattagal Campus is situated, the Wallumattagal people of the Dharug Nation, whose cultures and customs have nurtured, and continue to nurture, this land since the Dreamtime. We pay our respects to the Dharug people and the Wallumattagal Clan. We also wish to acknowledge and pay our respects to the Elders of the Dharug Nation – past and present.

In paying our respects, we recognise that we are following in the footsteps of those who came long before us. As a faculty that aspires to promote sustainability, we understand that real sustainability is having the knowledge and wisdom to live on these lands for tens of thousands of years in partnership with nature.

Although those are time frames that none of us can grasp, we are inspired by Australia's First Peoples to live and work sustainably for the long-term future.

The University continues to develop respectful and reciprocal relationships with First Nations Peoples in Australia and with Indigenous people throughout the world.





Who we are

The School of Engineering was established at Macquarie University more than a decade ago to focus on research and education in the area of electronics. Since then, our focus has expanded to other engineering fields, including civil, electrical, mechatronics, materials and mechanical, and software engineering.

You will be joining a growing School of Engineering in the Faculty of Science and Engineering. The School is currently home to 50 academic staff and more than 70 research students, and an ever-growing cohort of undergraduate and postgraduate coursework students. The school offers a broad range of innovative undergraduate and postgraduate degrees, and enjoys a strong research ethos.

For many decades, Macquarie has maintained a significant presence in semiconductor education and research. Among its notable contributions is the Macquarie Analog Devices Laboratory (MAD Lab), home to a team of 12 professional engineers working on designing and testing VHF devices for many local and international companies. The laboratory includes world-class test and measurement facilities. We invite you to search 'Macquarie MAD Lab' to discover more about the lab's remarkable work.

Engineering is a key priority of the University. Accordingly, significant investment is being made with an engineering precinct worth more than \$160 million currently under development. The school also works closely with the Australian Astronomical Optics – Macquarie (AAO-MQ), a recognised world leader in innovative astronomical instrumentation, software and research.

50 academic staff

>70 research students

>\$160M engineering precinct under development



About the faculty

The Faculty of Science and Engineering undertakes a broad range of research and teaching activities at the highest national and international levels. We offer undergraduate and postgraduate degrees across a diverse range of disciplines.

Our passionate staff and engaged students are dedicated to advancing science and engineering. The faculty has 600 staff (academic, professional and technical), more than 6000 students (equivalent full-time student load) and 450 higher degree research students. This year (2023), our annual expense budget is approximately \$136 million, and we receive \$65 million in research income.

Our collaborative education and research partnerships extend not only across every faculty at Macquarie but also throughout the world. We continue to establish and strengthen links with industry by building partnerships with commercial, government, cultural and professional organisations. For example, Macquarie now hosts the Australian Research Council (ARC) Training Centre for Facilitated Advancement of Australia's Bioactives. The training centre will help Australia make the most of the growing global market for bioactive ingredients and brings together universities in Australia, the United Kingdom, Germany and Brazil, and 14 respected industry partners.

OUR PURPOSE

We endeavour to be the best for the world. We deliver world-class education to enable our students to reach their full potential and work with our communities to discover and innovate, with sustainability at our core.

OUR SCHOOLS

- · School of Computing
- · School of Engineering
- · School of Mathematical and Physical Sciences
- · School of Natural Sciences

OUR RESEARCH DEPARTMENTS

- Applied BioSciences
- · Australian Astronomical Optics Macquarie

OUR WORLD-CLASS RESEARCH CENTRES

- ARC Centre for Fruit Fly Biosecurity Innovation
- ARC Centre of Excellence for Engineered Quantum Systems
- · ARC Centre of Excellence in Synthetic Biology
- ARC Industrial Transformation Training Centre for Facilitated Advancement of Australia's Bioactives (FAAB)
- · Cyber Security Hub

OUR MISSION AND VISION STATEMENT

We believe in the power of STEM to engage minds and change lives.

OUR STRATEGIC GOALS

- Equip our STEM graduates with the fundamental skills, knowledge and ability to adapt to and prepare for their careers.
- Work with our communities and industry, using our capacity and capabilities, to innovate for the future.
- Discover and build the new economy with environmental and social sustainability.
- Grow and engage with our current and future partners.



Who we are looking for

The successful candidate will be an academic leader with an outstanding record of research and teaching or industry experience in the discipline of electronic engineering, and will be able to demonstrate successful leadership specifically within the area of semiconductor engineering.

You will work collaboratively as part of the leadership team of the electronic and semiconductor discipline in the School of Engineering, and will leverage your international standing to provide a focal point for the further development of the discipline at Macquarie University. You will have a record of research excellence and be renowned in the field. As part of your role within the discipline, you will enable innovative, high-quality research, teaching and engagement activities. You will mentor and support staff as they grow their careers and reputation. As a leading contributor in the School of Engineering, you will inspire respect among national and international peers, and represent the University at public forums.

LOCATION

Wallumattagal Campus Macquarie University Macquarie Park Sydney, Australia

REPORTS TO

Dean of Engineering Faculty of Science and Engineering



Selection criteria

To be considered for the position of Professor of Electronics Engineering, you must demonstrate the following selection criteria in a curriculum vitae (CV) and supporting documents by providing examples of your relevant experience and achievements.

- A PhD in engineering or a closely related discipline
- Demonstrated outstanding contributions to research in semiconductors and its associated technologies, and recognition as an eminent authority in the discipline
- Demonstrated ability to attract significant and sustained external research funding
- Demonstrated record of deep and effective partnerships with industry and/or government

- Demonstrated ability to build and lead teams in a supporting environment
- Proven ability to successfully attract and supervise research students
- Demonstrated capacity to make a substantial contribution broadly within the school, as an inspiring leader and citizen of the school
- Outstanding communication skills in English, and proven ability to work effectively and collaboratively with key internal and external stakeholders



Where you will work

A PLACE OF INSPIRATION

Uniquely located in the heart of Australia's largest high-tech precinct, Macquarie brings together more than 44,000 students and 3000 staff in one thriving hub of discovery. Our campus spans 126 hectares, with open green space that gives our community the freedom to think and grow.

More than A\$1 billion has recently been invested in our facilities and infrastructure, so our students and staff can thrive in an environment that is both inspiring and switched on to the latest digital technologies. With more than 300 leading companies located on or around our campus, our students are able to tap into industry connections that give them an edge in their future careers, while our staff have access to outstanding research and innovation opportunities with some of the world's leading organisations.

RENOWNED FOR EXCELLENCE

Despite its youth, the University has risen to be a progressive and influential institution, and is highly regarded both locally and internationally.

Ranked among the top one per cent of universities in the world, we produce graduates who are among the most sought-after professionals in the world.

With our tradition of innovation and exploration, we continue to break new ground, ranking among the top 100 institutions in the world for accounting and finance, classics and ancient history, English language and literature, geology, linguistics, philosophy and psychology.

A PROUD TRADITION OF DISCOVERY

Our University is bold and innovative. Unconstrained by tradition, we take a pioneering approach to research. Such an approach is largely responsible for our enviable reputation for research excellence – 100 per cent of our research is ranked at world standard or above.

Our Research Strategy 2025 is brought to life by renowned researchers, whose audacious solutions to issues of global significance benefit the world we live in.

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



Our purpose, vision and values

At Macquarie, we are not afraid to choose the less trodden path. We see life as an exhilarating source of possibilities to grow intellectually and professionally, unconstrained by traditions. We are ready to embrace new experiences and ideas.

We believe that a leader is about being a team player and know that success in today's world is all about collaborating with the right people on the right issues.

We are naturally curious and open to the most diverse intellectual perspectives. United by a sense of purpose, a single vision and one set of values, we actively engage in the complex issues that define the future of humanity.

UNITED BY ONE PURPOSE

We are a university of service and engagement:

- We serve and engage our students and staff through transformative learning and life experiences.
- We serve and engage our world through discovery, dissemination of knowledge and ideas, innovation and deep partnerships.
- Our University is a place for staff and students to be nurtured and to grow, develop, learn and explore.

SHARING ONE VISION

We aspire to be:

- a destination of choice for students and staff who share our values
- deeply connected with our stakeholders and partners and known for this globally
- ranked among the highest-performing research universities in Australia and, for key disciplines, recognised globally for our pre-eminence
- known across Australia and beyond as custodians of a remarkable university campus that blends the vibrancy of a cosmopolitan university village with a natural Australian bushland setting.

EMBODYING ONE SET OF VALUES

We value:

- **Scholarship** We believe learning, inquiry and discovery improve lives.
- **Integrity** We conduct ourselves ethically, equitably and for mutual benefit.
- **Empowerment** We make our community a source of strength and creativity.

Through our actions as students and staff, we live these values and it is against them that we hold ourselves accountable.



Macquarie at a glance



RANKED IN THE TOP 200 UNIVERSITIES IN THE WORLD

QS World University Rankings, 2023, and Times Higher Education World University Rankings, 2023



MORE THAN 40,000 WORK PLACEMENTS

or community experiences through our PACE (Professional and Community Engagement) partnerships



MORE THAN 4000 PARTNER ORGANISATIONS

across Australia and around the world, providing access to industry contacts that help develop valuable employability skills



ONLY UNIVERSITY IN AUSTRALIA

with its own metro station



LOCATED IN SYDNEY'S LARGEST BUSINESS PRECINCT

only 15 kilometres from the Sydney CBD



190 PARTNER UNIVERSITIES **FOR STUDENT EXCHANGE**

in more than 40 countries



44,000+ CONNECTED **STUDENTS**

from more than 129 countries



\$1 BILLION INVESTED TO CREATE A COLLABORATIVE CAMPUS

with world-class facilities and infrastructure



WALLUMATTAGAL CAMPUS

is set on 126 hectares of stunning parkland



225,000 ALUMNI IN OUR INTERNATIONAL COMMUNITY

from more than 155 countries



3 SUBJECTS

ranked in the top 50 globally and 7 in the top 100

QS World University Rankings by Subject, 2023



RANKED #1 IN SYDNEY

for graduate employment rate QS Graduate Employability Rankings, 2022



AUSTRALIA'S FIRST FULLY INTEGRATED HEALTH PRECINCT

centred around our on-campus hospital



40+ SINGLE **BACHELOR DEGREES**

many of which are designed in consultation with industry



100% OF **RESEARCH ACTIVITY**

rated at world standard or above Excellence in Research for Australia, 2018

Organisation chart

Vice-Chancellor Professor S Bruce Dowton Deputy Vice-Chancellor **Deputy Vice-Chancellor** Office of the Vice-Chancellor Vice-President, Strategy, **Vice-President Vice-President** (Academic) (Research) **Professional Services Finance and Resources Planning and Performance** Professor Sakkie Pretorius Professor Rorden Wilkinson Ms Nicole Gower Mr Robin Pavne Mr Ionathan Wylie Chief of Staff Office of the Pro Vice-Chancellor Office of the Dean of Students Government Relations Human Resources · Financial Services University Operating Plan 2020-24 (Research Services) Office of the Pro Vice-Chancellor Philanthropy Information Technology Strategic Procurement Business Intelligence and Reporting - Macquarie Animal Research Services (Learning and Teaching) Group Marketing Property Services Rankings Strategy Graduate Research Academy Office of the Pro Vice-Chancellor Global and Domestic Student Group Risk Global Engagement and Reputation Office of the General Counsel Office of the Pro Vice-Chancellor (Programs and Pathways) Recruitment - Workplace Health and Safety Ms Carol Kirby (Research Innovation and Enterprise) - Macquarie University College - Advancement Solutions Shared Services Campus Life/U@MQ - Partnerships Office of the Pro Vice-Chancellor · Legal · Access MQ - Commercialisation (Indigenous Strategy) - Incubation and Entrepreneurship Compliance - Walanga Muru MGSM Hospitality Office of the Pro Vice-Chancellor Governance Services (including Policy) University Library and Art Gallery (Research Performance and · Internal Audit Development) Privacy Archives and Records Deputy Vice-Chancellor (Medicine and Health) and Executive Dean, **Executive Dean, Faculty of Executive Dean Executive Dean Faculty of Arts Macquarie Business School** Science and Engineering Faculty of Medicine, Health and Human Sciences Professor Chris Dixon Professor Lucy Marshall Professor Patrick McNeil Professor Eric Knight Departments: Departments: - History and Archaeology - Accounting and Corporate Governance - Applied BioSciences MQ Health - Indigenous Studies - Actuarial Studies and Business - Australian Astronomical Optics -- Media, Communications, Creative Arts, Analytics Macquarie Language and Literature - Applied Finance Schools: Faculty of Medicine, Health Macquarie University Hospital MQ Health Clinics Macquarie University Hearing - Philosophy - Economics - School of Computing and Human Sciences: and MindSpot - Security Studies and Criminology - Management - School of Engineering · Macquarie Medical School - Marketing Macquarie Law School - School of Mathematical and Physical School of Psychological Sciences Macguarie School of Education Sciences School of Natural Sciences Macquarie School of Social Sciences Departments: - Health Sciences - Chiropractic - Linguistics Australian Institute of Health Innovation

How you can apply

APPLICATIONS

Applications, including CVs and candidate statements, should be submitted through Macquarie's online Workday platform.

For details regarding the position, email Professor Aman Oo, Dean of Engineering, at aman.oo@mq.edu.au. For general enquiries, email Roberta Palfreeman, Human Resources Manager, at roberta.palfreeman@mq.edu.au.

The closing date for applications for this position is advertised on Workday.

Criminal record checks are required for this position.

DIVERSITY AND INCLUSION

Innovation and ingenuity thrive at Macquarie University when diversity, equity and inclusion take centre stage. At the University, we embrace a culture where diversity of background, experience and perspective are fundamental to our success.

We do not discriminate on gender identity, age, culture, disability, sexuality, Indigeneity, family and caring responsibilities or religion. See our journey towards leadership in Equity, Diversity and Inclusion in Higher Education.

FLEXIBLE WORK

At Macquarie, we believe by providing flexibility in when, where and how work is done, we can support our staff to manage their personal commitments, while optimising their work performance and contributions to the University. See how we lead in flexible work to enable an outcome focused and inclusive workplace.
To learn more about our culture and hiring process, explore our Candidate Resource Hub.

SUBMIT THE FOLLOWING INFORMATION AS PART OF YOUR APPLICATION

CURRICULUM VITAE

Candidates are expected to submit their most recent and significant career appointments and achievements in their CV. This should include details of leadership, management and professional experience, published works and grants received, and contributions to professional associations, societies and community activities.

CANDIDATE STATEMENT

In a document not exceeding five pages, outline the qualities and strengths you would bring to this position, along with your aspirations for what you hope to achieve. Additionally, reflect on your relevant experience in the context of the selection criteria.

Applications are considered holistically, and candidates are encouraged to apply even if they may not feel strong on each selection criterion. For more information, visit our Equity, Diversity and Inclusion page **staff.mq.edu.au/work/diversity-inclusion**

PHOTOS: Morris McLennan, Chris Stacey and Joanne Stephan

CRICOS Provider 00002J (HRE97381)

