Head of Department, Mathematics and Statistics
A WORLD-CLASS CAREER
Scientific research and discovery has been an integral part of the Science and Engineering story at Macquarie since our beginnings. Our first 50 years have seen us participate in the world’s first ever attempt to synthesise complex life, turn Wi-Fi into a reality, discover dancing dwarf galaxies, and set the groundwork for the development of blue LED light - the future key ingredients in everything from your smartphone to the lights in your home.

Scientific discovery – be it during our studies or working in industry or at a university – comes from a deep understanding of the fundamentals as well as from being creative. We believe that the creativity and hard work of our staff is the key to success in Science and Engineering at Macquarie University. Our academics are not only at the cutting edge of their field, highly active in research and development, but also accomplished and dedicated teachers.

We have a strong and ambitious strategy and plan for the next five years. We’re investing heavily in new buildings, courses and staff, and collaborating with businesses here and around the world including Cochlear Ltd, Optus and Johnson & Johnson.

This is an exciting time to join the newly merged Department of Mathematics and Statistics. The new Head of Department will play a key role in defining the Department’s strategy, bringing together the world’s best researchers, and be seen as a destination of choice for high ability passionate students at all levels.

We offer you the opportunity to bring your outstanding academic leadership skills to enable the department and its staff to realise their full potential and deliver excellence across the full portfolio of academic activity.

We look forward to welcoming you.

Professor Barbara Messerle
EXECUTIVE DEAN, FACULTY OF SCIENCE AND ENGINEERING
Macquarie University at a glance

- Degrees awarded: 8,451
  - Undergraduate: 5,425
  - Postgraduate: 3,026
- Enrolments: 42,747
  - Domestic: 32,119
  - International: 10,628
- Students: 42,747
  - Full-time: 30,585
  - Part-time: 12,162
- Staff (FTE): 3,221
  - Professional staff: 1,668
  - Academic staff: 1,553

- Assets: $2.2 Billion
- Revenue: $1 Billion
- Alumni: More than 181,000 in more than 140 countries

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A WORLD-CLASS CAREER  HEAD OF DEPARTMENT, MATHEMATICS AND STATISTICS

Innovation through ingenuity

A PLACE OF INSPIRATION
Uniquely located in the heart of Australia’s largest high-tech precinct, Macquarie brings together more than 46,000 students and 3,000 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 AU$1 billion has 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 the Macquarie 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.

RENOVED FOR EXCELLENCE
While only 54 years young, Macquarie has risen to be a progressive and influential institution and is highly regarded both locally and internationally.

Ranked among the top two per cent of universities in the world and with a 5-star QS rating, Macquarie is considered one of the world’s best universities, producing graduates that 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, communication and media studies, development studies, earth and marine sciences, education, English language and literature, geography, linguistics, philosophy and psychology.

A PROUD TRADITION OF DISCOVERY
Macquarie 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 and more than 30 of our researchers are ranked in the top one per cent of researchers in the world.

Our research framework – World-leading research with world-changing impact – 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 and innovative technologies – that provide a focal point for the cross-disciplinary research approach that is at the heart of our ethos.

Macquarie University consistently breaks interesting ground.

2010 Manufacture of yellow lasers for enhancing eye surgery was underway using Macquarie University technology.
2012 AO awarded to Dr Skellern for his contribution to the invention of WiFi.
2013 Revealed messages hidden in ancient clay tablets by combining our expertise in history with cutting-edge medical imaging technology.
2013 Launched the Centre for the Health Economy.
2014 Named to lead the Yeast 2.0 project in Australia to create the world’s first ever synthetic complex organism.
2016 Launched the Optus Macquarie University Cyber Security Hub.
2016 The Macquarie Park Innovation District (MPID) launched, harnessing 180-plus multinational corporations.
2017 HRH Prince Andrew launches the Macquarie University Incubator to give local start-ups room to explore new ideas.

The Macquarie MD, an innovative postgraduate medical degree, is launched.
A university of service and engagement

BUILDING SUCCESSFUL GRADUATES
From our beginnings, we have defied the traditional boundaries of academia. Instead, we have pioneered – and continue to pioneer – learning and teaching approaches that challenge conventions and shift thinking.

Our pioneering approach is built around a connected learning community. Our students are considered partners and co-creators in their learning experience. Their face-to-face experience is paired with sophisticated and interactive digital resources. Their courses are linked to the latest research discoveries. They are connected with industry partners through internships and work placements.

We design many of our degrees in collaboration with industry and a significant number are also accredited by peak professional bodies, giving our students a head start on their careers. Additionally, we offer our students a package of career accelerator initiatives that educate, enable and empower them to launch a career in whatever field ignites their passion.

WORK-INTEGRATED LEARNING THROUGH PACE
Supported by our many corporate partners, our signature PACE (Professional and Community Engagement) program helps students enrich their classroom learning through placements and internships at world-leading companies and not-for-profits, as well as in community development programs, both locally and internationally.

Fully integrated into the academic program, PACE distinguishes Macquarie in learning and teaching, and is a key contributor to our graduates’ employability.

GLOBAL LEADERSHIP PROGRAM
Our Global Leadership Program is an extracurricular initiative that gives students the opportunity to develop leadership, cross-cultural and other practical skills, while connecting them with internationally renowned, inspirational thought leaders.
Our purpose, vision and values

At Macquarie, we’re not afraid to break new ground. We know that success in today’s world is about collaborating with the right people on the right issues. We see life as an exhilarating source of intellectual and professional growth, unconstrained by traditions, and we’re ready to embrace new experiences and ideas.

Our people 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, they want to grow into well-rounded citizens of the world, actively engaged in the complex issues that define the future of humanity.

UNIFIED BY ONE PURPOSE
Macquarie is 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, to grow, to develop, to learn and to explore.
• we also encourage our people to break free – literally and metaphorically.

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, to be 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
As custodians of Macquarie University, 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.
The Faculty of Science and Engineering is one of Macquarie University’s strongest research faculties and excels in all research indicators including publications, internal and external competitive research grants, research contracts, Australian Research Council (ARC) Fellowships, distinguished visitors and postgraduate student numbers.

Where you will work

RESEARCH AND TEACHING EXCELLENCE

The Faculty’s research is built on the strengths of its schools and research centres. Strong links exist between researchers in the different schools and research centres of the Faculty as well as with researchers at prominent national and international research institutes and Universities.

The Faculty sustains a broad range of research activities at the highest national and international standing. The Faculty acknowledges that research excellence is important to delivering high-standard undergraduate and postgraduate programs; the Faculty therefore encourages and supports research activities that enhance its educational mission.

The Faculty of Science and Engineering teaches courses and conducts research about people, our physical environment and how things work. We offer both undergraduate and postgraduate degree programs across a diverse range of disciplines. The Faculty is also home to a number of world-class research centres. The Faculty continues to grow links with industry by building partnerships with commercial, government, cultural and professional organisations.

The Departments within the Faculty of Science and Engineering are:

- Mathematics and Statistics
- Computing
- Biological Science
- Chemistry and Biomolecular Sciences
- School of Engineering
- Physics and Astronomy
- Earth and Planetary Sciences
- Environmental Sciences
- Chiropractic

The diverse research areas of the academic faculty are unified under three broad themes: cyber security, data science and virtual reality. These themes include diverse research topics such as natural language processing, machine learning, programming languages, artificial intelligence, intelligent agents, games design, computer vision, networks, information security, cryptography, trust management, category theory, graph theory, complexity theory, and information systems.

Over the years, academic staff have developed active research collaborations with several other institutions inside the University. In the Faculty of Science and Engineering itself, the Department of Computing contributes to the Centre of Australian Category Theory (CoACT), a University Research Centre bringing together Computer Scientists and Mathematicians.

2014 RESEARCH AND TEACHING AT A GLANCE

- More than $29.6 million in research income
- 512 Higher degree research enrolments
- 590 postgraduate coursework enrolments
- 4,616 Undergraduate enrolments

A WORLD-CLASS CAREER

HEAD OF DEPARTMENT, MATHEMATICS AND STATISTICS
Who we are looking for

This appointment will play a critical role in the success of the newly merged Department of Mathematics and Statistics. We are looking for an experienced visionary leader who can unite, inspire and create a culture of high performance and collegiality.

You will bring with you a wealth of successful leadership and management experience within academic administration. You will have proven success in developing a strategic vision aligned to a faculty and University’s strategic priorities and leading and enabling the department to realise and achieve the vision in a collegial and collaborative manner.

You will have built a strong external profile and reputation with current and prospective partners, industry, government, future student organisations, institutions and alumni.

You will have demonstrated proven academic leadership in your discipline with recognition as an eminent authority and an exceptional track record of research in an Applied or Pure Mathematics and/or Statistics discipline. You will be a lead enabler of multi disciplinary collaborations, playing an active role in collaborating with researchers across the discipline, faculty and wider academic community.

You will have proven expertise in curriculum design and innovation and in the delivery and assessment of quality teaching programs which enhance student learning outcomes and deliver excellence in teaching.

Your proven track record of modelling core academic and university values, inspiring teams and fostering an environment of innovation and excellence will enable you to succeed in this role.
What you are responsible for

The successful candidate will be responsible for the following:

1. In consultation with the Executive Dean, develop a strategic plan for the Department that is aligned to Faculty and University Strategy, and engage staff within the Department to achieve that plan.

2. Drive the overall academic performance of the Department in meeting the University’s objectives, through:
   - Fostering a culture of transformative learning, innovation and excellence in teaching aligned to the objectives of the Strategic Learning and Teaching Framework.
   - Attracting high calibre students at the undergraduate and postgraduate level
   - Enhancing the research profile of the Department in alignment with the Strategic Research Framework
   - Leading new and innovative programs and course development to enhance graduate employability and reputation
   - Developing and managing collaborative local, national and international partnerships aimed at expanding research opportunities and raising the profile of the department.

3. Provide leadership and mentoring to staff to achieve potential and sustain high performance through:
   - Supporting staff in achieving their research, teaching and service objectives and to address any potential barriers to high performance
   - Attracting and retaining high performing staff to enable the vision and strategy of the Department
   - Establishing, promoting and maintaining a collegial, collaborative and productive culture within the Department.

4. Oversee the effective administration of the Department’s budgets and resources including optimising the allocation of resources, operating within budget and meeting relevant legislative and compliance obligations.

5. Build and sustain relationships with external stakeholders such as potential students and high schools, potential employers of students, donors, alumni, the community, business and government to ensure the interests of the Department are effectively promoted and advanced.

Reports to
Executive Dean, Faculty of Science and Engineering

Direct Reports
This position will have oversight of Department Professional and Academic staff

Key Accountabilities
Strategy, leadership, transformative change
Selection criteria

- Collaborative and transformational leadership that unites and inspires people and creates a culture of high performance and collegiality.
- Demonstrated academic leadership in mathematic and/or statistic disciplines.
- Strong capability to manage financial and physical resources and people to deliver outcomes against a background of change and development.
- Proven track record in developing and enabling multi disciplinary collaborations within a department, faculty, university and wider community.
- Strategic thinking, business development and implementation at a senior level.
- Ability and experience to mentor and ensure the professional development of academic and professional staff.
- A PhD in a suitable discipline and outstanding contributions to scholarship and research in a discipline as evidenced by ongoing publications in top tier journals and recognition as an eminent authority in the discipline.
- A record of excellence in teaching and innovative curriculum development at both the undergraduate and postgraduate levels.
- Outstanding communication skills including the ability to work effectively and collaboratively with key internal and external stakeholders.
How you can apply

Macquarie University has engaged Carol Watson Executive Search and Consulting to assist in the recruitment process.

For a confidential discussion of the role and the University’s expectations contact:
Brenda Gibbons (Aus) on +61 (0) 421 388 657 or brenda@carolwatson.com.au;
Sean Gillen (UK) on +44 (0) 7950 123 466 or sean@carolwatson.com.au;
Carol Watson (Aus) on +61 (0) 419 523 410 or carol@carolwatson@com.au

Applications to: Debbie Dickinson on debbie@carolwatson.com.au

Closing date for applications: Sunday, 1 April 2018

SUBMIT THE FOLLOWING INFORMATION WITH YOUR APPLICATION:

FULL CURRICULUM VITAE
Candidates are asked to set out in a curriculum vitae the nature of their most recent and significant career appointments.

RESPONSE TO THE SELECTION CRITERIA
In no more than four pages, respond to the selection criteria providing examples of relevant experience and achievements.

CANDIDATE STATEMENT
In no more than one page, outline what you would bring to this role, your vision for the portfolio, and how you would go about implementing that vision.

REMUNERATION
Provide an indication of your current remuneration package.

REFEREES
Provide the names, contact details and present positions of four referees. Referees need not be alerted in advance, as they will not be contacted without the prior approval of the applicant.

DATE OF COMMENCEMENT
Indicate when you will be available to commence at the University