

Professor of *Mechanical Engineering* Griffith School of Engineering



Contents

Page

The Role	3
Mechanical Engineering Program	3
Griffith University	4
Strategic Vision	5
Science, Environment, Engineering and Technology Group	6
Brisbane and the Gold Coast	7
How to apply	8
Position Description	9
Selection Criteria	9
Useful Links	10



The Role

■ Professor of Mechanical Engineering, Griffith School of Engineering

The role of the Professor of Mechanical Engineering is to provide academic and operational leadership in all areas of the discipline including external and professional engagement, to promote educational excellence, mentor, develop and supervise academic staff, and to maintain an active research engagement.

The Professor of Mechanical Engineering reports to the Head of the School of Engineering and is accountable for:

- leadership, management and mentoring of academic staff;
- leadership in learning and teaching, curriculum development, and delivery of high quality undergraduate and postgraduate courses to students;
- leading research in Mechanical Engineering; and
- leading professional engagement with the industry and wider community.

Further, it is envisaged that the Professor of Mechanical Engineering may be expected to take on the leadership role of the Head of School of Engineering in the future.

Mechanical Engineering Program

Griffith University is broadening the range of engineering disciplines on offer at its Gold Coast campus by establishing a Mechanical Engineering major to commence in 2012. As the first senior appointment in Mechanical Engineering, the appointee will be able to take a primary role in this development. Mechanical Engineering will be one of five majors in Bachelor of Engineering on the Gold Coast Campus, the existing four being Civil, Electrical & Electronic, Mechatronic, and Sport & Biomedical. Mechanical Engineering is planned as a number of strands, namely, mechanical design, materials and manufacturing, thermofluids, structures and vehicle technology. New laboratories to support Mechanical Engineering are in the pre-construction stage. On current planning, the Mechanical Engineering group will consist of 7 full-time academic staff and be responsible for 16 existing and new courses.

The Griffith School of Engineering currently has about 50 full-time academic staff, 17 administrative and technical staff, approximately 1400 undergraduate and postgraduate coursework students, and 100 research higher degree students. The School has established research activities in the broad fields of Civil, Electrical and Electronic, and Environmental Engineering. Most of the academic staff in the School are active members of one of five research centres in the Academic Group of Science, Environment, Engineering and Technology.

Griffith University

In December 1970 the Queensland Education Minister, Sir Alan Fletcher, approached the distinguished newspaper editor Sir Theodor Bray with the task of creating a new university. The brief was deceptively simple – to offer an alternative university experience to that already available in Queensland and other parts of Australia.

The State Government of the time had just one other requirement, that the new university be named after Sir Samuel Walker Griffith, a former Queensland Premier, Chief Justice of Queensland and the Chief Justice of Australia. A parcel of land at Nathan (10 kilometers south of central Brisbane) was formally named Griffith University in the Queensland Parliament on 21 September 1971.

The newly established Griffith Council developed a philosophy, not only to provide specialised academic courses, but also to emphasise the general educational development of students. Central to this was the creation of theme-oriented schools. These schools were multi-disciplinary with groups of disparate scholars integrating their research and teaching in problem-solving units. The University opened its doors in 1975 to 451 students in four schools: Australian Environmental Studies, Humanities, Modern Asian Studies and Science. From these small but enthusiastic beginnings, Griffith University has grown to its present size and status with an enviable national and international reputation. No institution can remain static, and Griffith has been fortunate that the seeds planted by the University's founders have been nurtured and tended by its Chancellors, Sir Theodor Bray, Sir Alan Sewell, Chief Justice John Macrossan and now Ms Leneen Forde.

The introduction of a national unified system for higher education in 1988 resulted in the Mt Gravatt campus of the Brisbane College of Advanced Education, the Gold Coast College of Advanced Education, the Queensland Conservatorium of Music and the Queensland College of Art all becoming part of Griffith University.

Through all the change and expansion, the University has remained committed to bringing disciplines together, in the interests of the healthy development of the disciplines themselves and the development of innovative and relevant programs of study. Griffith has come to be regarded as one of Australia's most innovative tertiary institutions and one of the most influential universities in the Asia-Pacific region.

We were the very first university in Australia to offer degrees in Asian studies and Environmental studies to our students and we remain a pioneer in these fields. We have grown to be a large multi-campus institution with internationally recognised strengths in teaching and research. Griffith now offers more than 300 degrees across five campuses and is home to more than 40 000 students from 124 countries. Griffith is Australia's ninth largest higher education provider. Our five campuses span 3 cities between Brisbane and the Gold Coast, each with distinct areas of teaching and research strength and working closely with its local community.

Further information about the University is available from the About Griffith University website accessible via:

<http://www.griffith.edu.au/about-griffith>



Strategic Vision

In December 2008, the University Council approved a new Strategic Plan which sets a distinctive vision and position for the University:

Griffith is a university which inspires and enables staff and students to make a positive contribution to our local and global community. It has an engaged and rigorous mindset to the big world issues of the time.

It has internationally renowned areas of excellence, and is highly focused on research outcomes capable of delivering real solutions to global issues. Its curriculum and teaching fosters a global perspective in the minds of all students.

Challenging paradigms, creating new solutions and developing enlightened global citizens, Griffith University is part of the global community making a world of difference.

■ Gold Coast Campus

This dynamic, modern campus is our comprehensive campus, set in native bushland, minutes from the famous Gold Coast beaches. With a population of more than 13,000 students, the campus boasts state-of-the-art facilities, including the \$36 million Griffith Centre for Medicine and Oral Health adjacent to the Gold Coast Hospital at Southport. The new Gold Coast University Hospital adjoins the campus and is scheduled to open in 2012.

■ Logan Campus

This community campus is renowned as a national showcase of social inclusion in higher education through innovative partnerships, industry engagement and program pathways, with a strong focus on community health and education. Home to more than 2,600 students, this large 56-hectare campus is based in one of Australia's most rapidly developing regions, midway between Brisbane and the Gold Coast. The campus serves the rapidly growing populations of Logan City, the Beaudesert and Redland Shires and the Beenleigh district. The Logan City website is at <http://www.logan.qld.gov.au>

■ Mt Gravatt Campus

Adjacent to Nathan campus, this modern campus is nestled in a native bushland setting, less than 15 minutes by car from Brisbane's city centre. Teaching and research on the campus focuses on the application of social and behavioural sciences to prevention of, and intervention in, critical social issues. The campus has a student population of approximately 4,100 students.

■ Nathan Campus

The original Griffith campus, Nathan, with more than 12,000 students, is also situated in a native bushland setting on the edge of Toohey Forest, 10 kilometres southeast of the Brisbane city centre (10 minutes drive by freeway). Nathan is home to our world-class expertise in the environment, corporate sustainability, Asian studies and the emerging bio-sciences.

■ South Bank Campus

South Bank is the home of the Queensland College of Art, the Queensland Conservatorium, and the Griffith Graduate Centre, and is strategically located in the heart of Brisbane's cultural precinct, over the river from the city's, and the state's, political and business centre. The Graduate Centre is located in the refurbished Ship-Inn and is the location for delivery of the MBA, and various postgraduate professional and award programs. One of Australia's oldest visual arts and design colleges, the QCA, incorporating the Griffith Film School, is also one of the most advanced, with multimillion dollar facilities at South Bank. Located in custom-designed facilities, the Queensland Conservatorium is one of Australia's leading music institutions. Adjacent is the Queensland Performing Arts Centre and the city centre is just a 10-minute walk away. Queensland Performing Arts Centre and the city centre is just a 10-minute walk away.

Science, Environment, Engineering and Technology Group (SEET)

Science, Environment, Engineering and Technology (SEET) is one of four academic Groups within Griffith University. We provide a setting of international standard for the pursuit of learning, teaching, research and professional practice. Our researchers are internationally recognised and cover a diverse array of disciplines and have access to some of Australia's most technically advanced research facilities. The Group hosts a student body in excess of 5,000 across three campuses with representation from 28 countries. SEET employs over 400 academic staff and more than 200 general staff and runs a total annual budget of over \$125 million.

The Group hosts four schools:

School of Biomolecular and Physical Sciences

School of Information and Communication Technology

Griffith School of Engineering

Griffith School of Environment.

There are currently 25 research institutes and centres associated with SEET including the Eskitis Institute for Cellular and Molecular Therapies, the Institute for Glycomics, the Queensland Micro and Nanotechnology Centre, the Australian Rivers Institute, the Environmental Futures Centre and the Institute for Integrated and Intelligent Systems. Over 30 years ago Griffith was the first university in Australia to offer degrees in Environmental Studies and to this day we remain leaders in teaching and research in the field. The Group offers extensive research opportunities through various centres, partnerships and collaborations designed to strengthen the overall collegiate experience, and meet critical social needs. Through a blend of innovation and traditional disciplines, SEET provides the ideal environment to inspire learning and discovery and to address global issues and challenges.

SEET is the research engine of the university. In 2010, the Group achieved \$37.4 million in external research income which accounted for 64% of the university total and produced the highest number of publications.

In the same year, SEET secured 60% of the ARC Discovery grants and 66% of the NH&MRC grants awarded to Griffith and significantly contributed to the University's top eight positioning in the Excellence in Research for Australia (ERA) results, with almost 93% of researchers being in fields of research assessed at world-standard or better. The Group currently hosts half of the University's Areas of Strategic Investment - Water Science, Drug Discovery and Infectious Diseases, Climate Change Adaptation and Sustainable Tourism, which over the past two years have received a combined total of \$47 million in research funding.



Brisbane and the Gold Coast

Brisbane is Australia's third largest city with 1.6 million inhabitants. It is the capital city of Queensland and as such offers opportunities for consulting with business and industry. Cosmopolitan Brisbane is clean, modern, relaxed and offers cultural amenities, public parks and gardens, recreational facilities, fine restaurants and sidewalk cafes. Brisbane justifiably claims to be Australia's most liveable city.



Governed by the largest municipal government in the Asia-Pacific Region, and recognised as one of the top ten Asian cities of the future by the London Financial Times fDi Magazine, Brisbane is home to the busiest airport in the state which receives the second largest international arrivals in Australia. Brisbane is a major hub for multi-national companies embracing its strong consistent economic growth and close proximity to Asian markets. These investors are attracted by the city's stable and cost-competitive business environment, highly skilled and creative workforce, leading educational institutions, world-class infrastructure, high population growth and clear lifestyle advantages.

Our world-class research and development communities are at the forefront of medical science breakthroughs and key emerging knowledge sectors include digital technologies; life sciences; food and beverage; innovative manufacturing; logistics and distribution; aviation; mining technology & services and clean technologies.

An enabler of innovation and enterprise, art and culture, Brisbane is a youthful city with a relaxed lifestyle and subtropical climate. So it's no wonder that it's also a key tourist destination with the natural splendour of Moreton Bay and Islands and the Scenic Rim and country valley on its doorstep.

Visitors to Brisbane can enjoy a diverse range of holiday choices, attractions, events and activities including: world-class exhibitions at Australia's largest Gallery of Modern Art, shopping in the City with over 700 retail outlets in the Queen Street Mall, lively urban villages, river cruising, al fresco riverside dining and a vibrant live music scene.

The Gold Coast is one of Australia's premier tourist destinations and is famous for its sub-tropical climate, laid back atmosphere, nightlife and golden quartzite sandy beaches.

The Gold Coast features immaculate beaches running almost the entire length of the regions coastline which faces the beautiful blue Pacific Ocean. Match this with a favourable climate, endless attractions, nightlife, dining, friendly people, along with a safe environment, and you have Australia's favourite holiday destination that's open to the world.

The Gold Coast region is located 70kms south of Queensland's capital city, Brisbane, and almost 1000 kilometres north of the capital of New South Wales, Sydney. It has an estimated population of 480,000 and is Australia's sixth largest city.

Inland from the beaches and behind the city, there are magnificent National Parks - Springbrook, Lamington and Tamborine which feature World Heritage protected areas. These scenic mountains and sub-tropical rainforests are visitor-friendly with picnic areas, short and long nature walks, amazing natural flora and fauna, and spectacular lookouts that gaze out across the hinterland, the city and out to the expanse of the ocean. The Hinterland and especially Mt Tamborine is also popular for its wineries.

How to Apply

■ Confidential Enquiries

Confidential enquiries to Michael Toohey on 0418 883 807 or michael.toohey@uni-recruit.com.au



■ Applications

Your application should include a covering letter in which you address the Selection Criteria on a “point by point” basis. In addition, your application should contain your full curriculum vitae including the following:

- Address, mobile and telephone number(s) and email address
- Names, telephone, and email contact of at least three referees (no contact will be made without your permission)
- Country of permanent residence
- Employment history, including present position and notice required; details of education, professional training, and qualifications
- Details of relevant professional, consulting, or industry experience
- Employment history, including present position and notice required
- Research interests and list of publications
- Research grants awarded; any other relevant information, such as offices held in professional bodies and community services

Note: Please provide your documentation in “Word” format

Applications are to be emailed to Michael Toohey at the address above

Closing date is Monday 22nd August 2011

Position Description

- **Position Level:** Professor Level E
- **Position Title:** Professor of Mechanical Engineering, Griffith School of Engineering
- **Reports to:** Head of School, School of Engineering
- **Section:** Griffith School of Engineering
- **Element:** Science, Environment, Engineering and Technology
- **Supervisory Responsibilities:** As required

■ Key Accountabilities:

- Provide research, academic and administrative leadership to the discipline of Mechanical Engineering.
- Establish and conduct research of international standing in a field of Mechanical Engineering.
- Teach, and undertake course and program development and coordination in Mechanical Engineering.
- Provide strategic leadership for Mechanical Engineering, particularly in program development, professional engagement with government, industry and the community.
- Take a leadership role in the professional and ethical conduct of research
- Supervise students' projects and dissertations including primary supervision of higher research degree students
- Foster the research of other groups and individuals within the discipline
- Responsibly implement Workplace Health and Safety policy in teaching and research activities
- Provide leadership in the management and development of academic staff in line with University, Group and School Strategic and Operational Plans and objectives.
- The appointee may be required to take on the Head of School role in the future.

■ Selection Criteria:

- A PhD or equivalent professional experience relevant to Mechanical Engineering
- Experience in academic leadership including a record of building successful teams and driving performance in a large and complex organisational environment.
- An internationally competitive research track record in Mechanical Engineering.
- Extensive experience in undergraduate and postgraduate teaching, course development and coordination.
- Significant experience in primary supervision of research students.
- Awareness of the issues surrounding the delivery of Mechanical Engineering in the Australian tertiary context, and a vision for the discipline at national and international levels.
- Capacity to engage and form partnerships with government, industry and community stakeholders.
- A commitment to inclusive management and equity principles.



Useful Links

About Griffith University

<http://www.griffith.edu.au/about-griffith>

Griffith Strategic Plan

<http://www.griffith.edu.au/about-griffith/plans-publications/pdf/strategic-plan-2009-2013.pdf>

Griffith Academic Plan 3

<http://www.griffith.edu.au/about-griffith/plans-publications>

Griffith Research Plan

<http://www.griffith.edu.au/research>

University Executive Group members and portfolio information

<http://www.griffith.edu.au/office-vice-chancellor/university-executive>

Academic Structure

<http://www62.gu.edu.au/policylibrary.nsf/xmainsearch/633bb8bfa6c3a9b34a256fb80063e597?opendocument>

griffith.edu.au/science-environment-engineering-technology