THE UNIVERSITY OF MELBOURNE

School of Electrical, Mechanical and Infrastructure Engineering

Lecturer/Senior Lecturer Appointments 2018

Message from the Head of School

The School of Electrical, Mechanical and Infrastructure Engineering (EMI) has a focus on delivering world class teaching and research programs with the aim of making an impact on society.

Graduates are trained in fundamental theory and have the opportunity to work together with industry in internship programs with an expectation they will be future leaders in their field. The University of Melbourne has pioneered the Melbourne Model of tertiary education, where most students complete a Bachelor of Science degree followed by a professional Masters of Engineering Program. This pathway is complemented by a number of Coursework Masters programs. The University of Melbourne attracts outstanding students and a number of our students engage in accelerator and start-up programs.

Our academic staff are highly respected for their research and the School encourages collaboration, both nationally and internationally, as well as across disciplines. Academics work in teams with industry, defence and government and these projects are informed by their high quality fundamental research.

The Melbourne School of Engineering, our host faculty, is undertaking the most dramatic expansion in its 150-year history, doubling its size, adding a wide range of new facilities, and building an unprecedented program of cooperative interaction with industry.

Staff in the School of Electrical, Mechanical and Infrastructure Engineering will be located in an innovative precinct with new facilities and laboratories and opportunities to work closely with industry.

The University is in the City of Melbourne, near the central hub and close to many cultural and social centres. Repeatedly voted as the world's most liveable city, Melbourne is a vibrant multi-cultural city with a large international student population attending either Melbourne or one of the other universities in Victoria. In this ideal location, the University provides a breadth and depth of opportunities for collaboration and a supportive environment where both academic staff and students can thrive.

The School of Electrical, Mechanical and Infrastructure Engineering is seeking applications from young early career researchers. We seek people who will work collaboratively in both teaching and research with an aim to build a successful career in a stimulating and supportive environment. We particularly encourage female applicants to allow us to continue to build a staff profile reflective of the world where engineers can make a difference. The School has developed and implemented many initiatives aimed at supporting our early career researchers to ensure they become world leading academics in every sense.

Professor Doreen Thomas
Head of School of Electrical, Mechanical & Infrastructure Engineering


Welcome
THE UNIVERSITY OF MELBOURNE
Wominjeka
We acknowledge and pay respect to the Wurundjeri people, the Traditional Owners of this land.
Bienvenidos
Where great minds collide

Welcome!

The University of Melbourne is a public-spirited institution that makes distinctive contributions to society in research, learning and teaching, and by engaging with communities, corporations and cultural organisations. Outstanding academics are at the heart of the University's teaching, research and engagement endeavours and their exception academic performance has placed the University of Melbourne amongst the world's top universities and at the forefront of higher education in the Asia-Pacific region and beyond.

Our commitment to excellence is demonstrated by innovative academic programs and our record as one of Australia's largest recipients of competitive research funding.

The University provided students with a rich and varied learning experience characterized by an atmosphere of intellectual excitement, an intensive research culture, a commitment to global engagement, clear academic expectations and standards, and a vibrant and exciting social context.

Over 46,000 students, including over 12,200 students from 129 countries, take courses at Melbourne. The University encouraged its students to take responsibility for their own learning, in order to create dynamic partnerships with peers, teachers and researchers.

http://joining.unimelb.edu.au/
http://about.unimelb.edu.au/careers/working/benefits

Position Summary

The School of Electrical, Mechanical and Infrastructure (EMI) Engineering is seeking to appoint seven (7) candidates in teaching and research positions. The successful applicants appointed in this hiring round will enhance intra-Departmental collaboration and expand the research capability at The University of Melbourne.

Whilst exceptional candidates from all sub-disciplines across the School of EMI will be considered, particular emphasis will be placed on applicants with research track records in the following areas:

- Embedded systems
- Power electronics or Power System Dynamics
- Integrated computational materials engineering
- Robotics
- Structural engineering
- Concrete technology and design
- Geodesy

The MSE2025 vision seeks to strengthen industry links to academic research and it is expected the appointees will play a significant role towards the Melbourne School of Engineering realising its industry engagement targets.

Consequently, the successful appointees to these Level B/C positions will be expected to develop internationally recognised research portfolios in a complimentary area to the current research strengths in Melbourne School of Engineering, as well as establish funding streams to support these portfolios.

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The Melbourne School of Engineering is strongly committed to supporting diversity and flexibility in the workplace. Applications for part-time or other flexible working arrangements will be welcomed and will be fully considered subject to meeting the inherent requirements of the position.

The University seeks to increase the diversity of its workforce and the representation of women in areas they have been traditionally under-represented. Consistent with this, MSE is seeking to increase the representation of women in the academic workforce across engineering disciplines. Under a Special Measure, under Section 12 (1) of the Equal Opportunity Act 2010 (Vic) the School is seeking to lift the representation of women from 20% in 2014 to at least 25% over the next 5 years, and strongly encourages applications from suitably qualified female candidates.

Selection Criteria

Essential

- A PhD in one of the disciplines of Electrical, Mechanical or Infrastructure Engineering or a cognate discipline;
- Independent research experience relevant to the discipline;
- A track record of applying for competitive research funding;
- A track record of quality research as evidenced by research publications in high-quality journals, conferences and technical reports;
- Demonstrated potential to achieve the highest levels of scholarship in engineering research;
- Capacity to teach effectively and develop high quality learning experiences and assessment tools across a broad range of subjects, including the capacity to develop and deliver seminars and lectures and other teaching activities;
- Excellent communication and interpersonal skills to engage with industry, government, research groups, diverse student cohort and a variety of other stakeholders;
- Demonstrated ability to work as part of a team, and build rapport with all levels of staff within a diverse work environment;
- A willingness and ability to supervise graduate research students;
- Exhibited commitment to the highest standards of scientific and ethical integrity.

Selection Criteria

Desirable

- Relevant practical experience and track record of industry engagement;
- Experience in curriculum development and implementation at undergraduate and postgraduate level that will maintain the home Department's programmes at the highest international standards.

Additional for Level C

- A strong publication record and demonstrated independence of scholarship;
- Demonstrated ability to teach small and large classes effectively at tertiary level and to develop courses and course material;
- A successful record of attracting competitive research funding;
- Experience with undertaking collaborative research projects as part of a team across institutions and/or disciplines;
- A successful record of engaging industry, government and/or the community in teaching and research;
- Experience in supervision of research higher degree students to timely completion.

Key Responsibilities

Teaching and Learning

- Contribute to delivery of relevant subjects in the Master of Engineering, Specialised Masters or in engineering and breadth subjects taught in the University's New Generation Undergraduate degrees, as directed by the Head of Department or Deputy Head
- Contribute to the development and review of curriculum, along with familiarisation with the role of multi-media in relation to the curriculum and develop high quality, innovative subject material;
- Prepare project work to support student learning;
- Perform marking and assessment duties and be responsible for supervision of project marking in subjects as lecturer-in-charge;
- Coordinate and conduct lectures and tutorials at undergraduate and postgraduate level, including engagement in teaching innovation and improvement;
- Teach subjects to a standard that delivers a high-quality learning experience;
- Ensure availability for consultation with students that fosters their learning;
- Act as Subject Coordinator with responsibility for the design, development, coordinated delivery and ongoing improvement of that subject and keep the Teaching Liaison Coordinator informed of changes to personnel and/or requirements;
- Assist with supervision of graduate research students;
- Contribute to the continued improvement of teaching quality through engagement with the Engineering Learning Unit regarding teaching practices and the ongoing review of subject and assessment materials to enhance student learning.

Key Responsibilities

Research

- Independently plan and carry out fundamental and application-oriented research;
- Generate conference papers for presentation at national and international conferences;
- Publish research outcomes on a regular basis by writing in high-impact journals, with the goal of submitting at least two per year as first-author;
- Develop independent research and apply for grants;
- Actively engage academic and industry partners to establish effective collaborations between multidisciplinary groups across the school, the university, and national and international research/industry partners in relevant areas of research;
- Supervise PhD, research masters, and coursework research projects;
- Contribute to knowledge through scholarship, publications in leading journals and with leading publishers, and presentations;
- Contribute to the success of the research and innovation program within the Melbourne School of Engineering;
- Actively seek funding opportunities to develop a program of research.

Engagement

- Build and foster partnerships with industry, government, collaborators at other Universities and other stakeholders that contribute to the engagement of teaching and research in the wider community engagement;
- Actively participate in professional activities including consulting, workshops, meetings of professional societies and short courses for external participants;
- Participate in external department activities such as student events, school visits and industry liaison activities;
- Engage in knowledge transfer and community activities beyond the university.

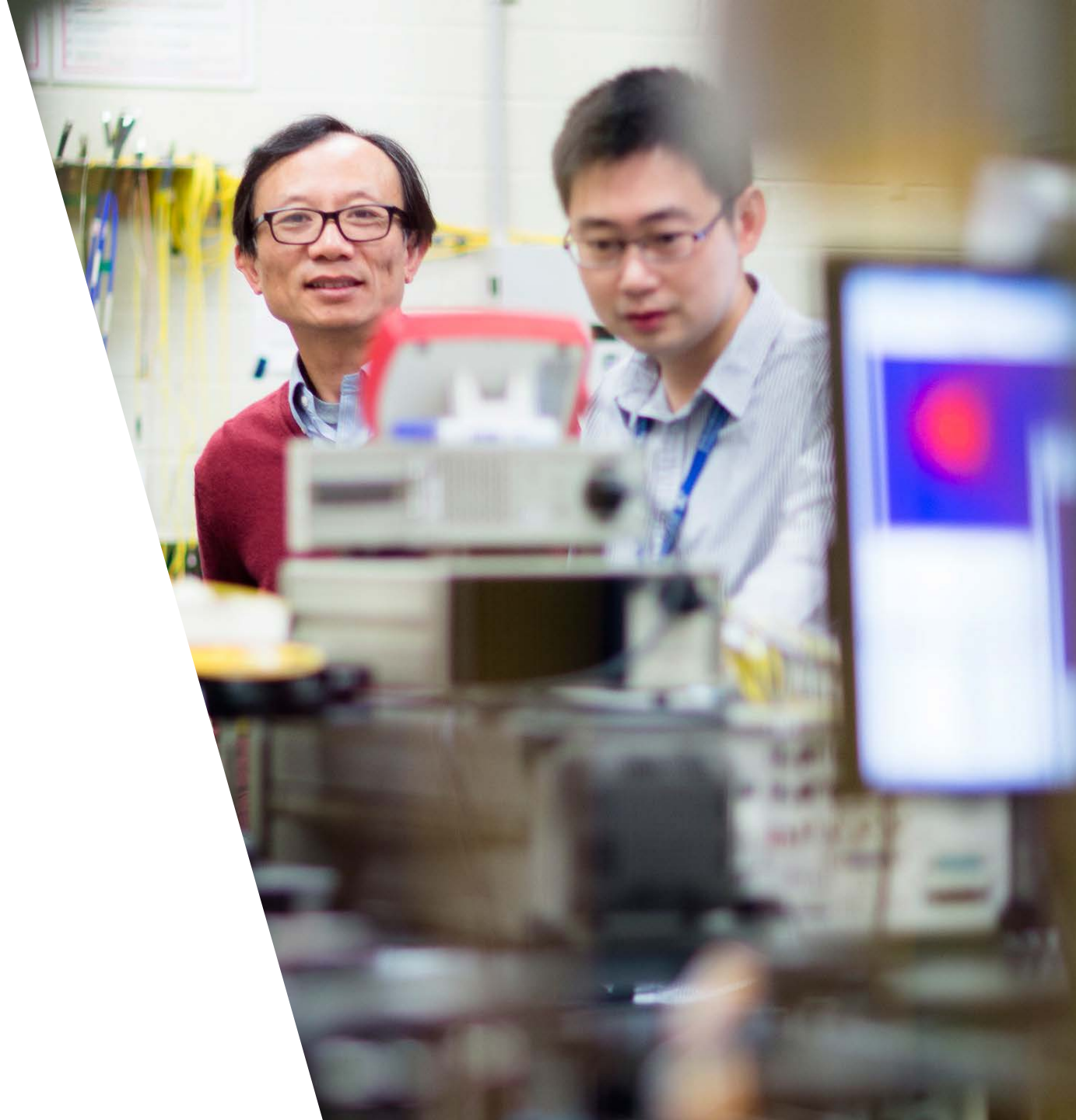
Key Responsibilities

Service and Leadership

- Take a leading role in the department to actively foster and participate in industry liaison activities consistent with the home Department's business plan;
- Drive and lead departmental committees and/or projects as required;
- Participate in administrative functions as required;
- Participate in industry liaison activities as arranged by the home Department;
- Undertake other tasks as requested by the supervisor or the Head of Department;
- Undertake Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in Section 4.

Additional Responsibilities for Level C

- Make original and innovative contributions to scholarship, research and teaching in Engineering;
- Supervise both undergraduate and graduate students and play a significant role in research projects including, where appropriate, leadership of a research team;
- Foster collaborations with other scientists and clinicians to develop a multidisciplinary approach to research.
- Make a significant contribution to, and advancement of the profession/discipline;
- Make a significant contribution to the governance and collegial life inside and outside of the Faculty and a significant role in knowledge transfer and community engagement;
- Contribute to strategic planning and policy decision making processes by actively participating in planning or committee work;
- Liaise with others in the University to develop a collaborative approach to enhance educational and research programs of the School.




WELCOME
TO THE UNIVERSITY OF MELBOURNE
#1
IN AUSTRALIA
#44
IN THE WORLD
Shanghai
ademic Ranking of World Universities 2014

People and Benefits

The University is committed to providing an intellectually stimulating and personally rewarding workplace which attracts people who are the best in their professional, academic and teaching fields. Outstanding academic staff are at the heart of the University's teaching, research and engagement endeavours. The University is proud of its many staff that have been recognized through prestigious national and international awards and through membership of Australia's learned academics.

The University offers staff more than just a job – it offers them an opportunity to be part of a dynamic work class organisation which provides its staff with exceptional benefits and support at every stage of their life and career.

- Working in a culturally inclusive environment
- Engaging in an active and vibrant campus life
- A focus on health and wellbeing
- Outstanding staff benefits in addition to competitive salary packages

Staff benefits on offer at the University include the opportunity to salary package everything from childcare and additional superannuation to subscriptions to the Melbourne Theatre Company. Benefits can be tailored to best suit individual needs and circumstances, including generous relocation support. Course fees can also be salary packaged and come as a 25% discount for staff and their immediate families. Unsurprisingly, the University has high numbers of women returning to work. It was one of the first winders of the Fair and Flexible Employer Recognition award.

http://about.unimelb.edu.au/careers/working/benefits

Living and Working in Melbourne

Melbourne and Surrounds

Melbourne is the capital city of Victoria, and the second largest city in Australia. It is set around the shores of Port Phillip Bay and is considered to be Australia's cultural capital and voted by The Economist as the most livable city in the world.

The City of Melbourne covers the city centre, many inner-city suburbs and precincts, each with its own personality and character. You can experience Greek culture from the Greek Quarter around Lonsdale Street, Vietnamese on Victoria Street, Italian on Lygon Street, Chinese in Chinatown and French on Collins Street.

Parkville Campus

A short walk from Melbourne's city centre, the Parkville campus is a hub of music, exhibitions, sporting facilities and libraries. Stroll around the historic campus to encounter a wealth of cafes, coffee corners, shops and services.

Parkville is recognised as the hub of Australia's premier knowledge precinct, comprising of eight hospitals and numerous leading research institutes and knowledge-based industries.

http://www.unimelb.edu.au/

Apply now:

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