

POSITION DESCRIPTION

School of Electrical, Mechanical and Infrastructure EngineeringFaculty of Engineering and Information Technology

Lecturer in Power Electronics

POSITION NO	0056628
CLASSIFICATION	Lecturer (Level B)
SALARY	\$110,236 - \$130,900 p.a.
SUPERANNUATION	Employer contribution of 17%
WORKING HOURS	Full time - 1 FTE
BASIS OF EMPLOYMENT	Continuing 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
OTHER BENEFITS	https://about.unimelb.edu.au/careers/staff-benefits
HOW TO APPLY	Online applications are preferred. Go to http://about.unimelb.edu.au/careers , select the relevant option ('Current Opportunities' or 'Jobs available to current staff'), then find the position by title or number.
CONTACT	

For information about working for the University of Melbourne, visit our website: about.unimelb.edu.au/careers

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Acknowledgement of Country

The University of Melbourne acknowledges the Traditional Owners of country throughout Australia. The University recognises the unique place held by Aboriginal and Torres Strait Islander peoples as the original custodians of country and their continued connection to the land, waterways, songlines and culture. The University respects all Aboriginal and Torres Strait Islander People and warmly embrace those students, staff, Elders and collaborators who identify as First Nations.

Commitment to Diversity and Inclusion

The Faculty of Engineering and Information Technology (FEIT) is committed to creating a diverse and inclusive environment that welcomes and values all people. We recognise that diversity is essential in contributing to the success of FEIT. Women, Aboriginal and Torres Strait Islanders, the LGBTIQ+ community, people living with disability and those from a culturally and linguistically diverse background, are strongly encouraged to apply.

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Position Summary

The Department of Electrical and Electronic Engineering at the University of Melbourne is seeking a dynamic early-career academic with expertise in power electronics, with the background to complement existing research capability in the Power and Energy Systems Research group and collaborate strongly with other research groups including Control and Signal Processing and Electronics and Photonics Research groups.

You will make a significant contribution to the teaching, research and administration of the School of EMI. You will teach in graduate and undergraduate programs and take on administrative roles commensurate with the position.

You will be an aspiring leader in power electronics research, with demonstrated ability to publish in high quality journals and conferences, mentor research students and secure independent grant funding to support a program of research. Our Departmental vision encompasses strong industry links and it is expected you will be capable of playing a significant role towards realising our industry engagement targets. Active collaboration with other research groups in the Department is expected and encouraged more broadly in the School and the Faculty of Engineering and Information Technology, as is interaction with industry and government agencies. You will be excited by the opportunity to drive new research collaborations to deliver greater impact.

The Faculty of Engineering and Technology 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.

1. Key Responsibilities

1.1 TEACHING AND LEARNING

- Act as Subject Coordinator with responsibility for the design, development, coordinated delivery and ongoing improvement of teaching quality;
 - Coordinate and conduct lectures and tutorials at undergraduate and postgraduate level;
 - Prepare projects, workshops and assignments work that support student learning;
 - Perform marking and assessment duties and be responsible for supervision of project marking in subjects as lecturer-in-charge;
 - Provide effective student consultation.
 - Be proactive in the development of subject materials and delivery, including the use of web resources as appropriate;
- Contribute to overall course improvement in degrees taught by the Department; and
- Supervise capstone student teams effectively.

1.2 RESEARCH AND RESEARCH TRAINING

 Provide significant scholarly research initiative and leadership in the discipline of power electronics;

- Participate in and (where appropriate) lead new collaborative multidisciplinary research activity within the Department and Faculty;
- Provide research impact by publishing papers in reputable international journals and conferences, and/or through patents or research commercialisation;
- Apply for and obtain external research grant income;
- Actively participate as a chief investigator on research projects; and
- Supervise and co-supervise higher degree research students towards timely completion.

1.3 ENGAGEMENT

- Build and foster partnerships with industry, government, collaborators at other Universities and other stakeholders that contribute to teaching and research in the wider community;
- Actively participate in professional activities including consulting, workshops, meetings of professional societies and short courses for external participants.

1.4 LEADERSHIP AND SERVICE

- Participate in industry and community liaison activities as required by the Department;
- Participate in Department activities such as student events and school visits; and
- Perform other tasks as requested by the supervisor or the Head of the Department.

1.5 RESPONSIBILITY AND COMPLIANCE

- Maintain a sound knowledge of current University Policy and Procedures, and reliably follow these or provide compliant advice to others;
- Reliably follow communications protocols and/or policies as appropriate;
- Understand Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in Section 4
- Behavioural Expectations All staff are expected to act fairly with staff and demonstrate respect for diversity; and be an effective team player who is cooperative and gains the trust and support of staff, peers and clients.

2. Selection Criteria

In order to be considered for interview by the Selection Panel, applicants <u>must</u> address the following Criteria in their application. Please visit the University website how to address Essential Selection Criteria

2.1 ESSENTIAL

- A PhD in Electrical Engineering, or equivalent.
- Experience in obtaining competitive research funding, either individually or as part of a team;
- A track record of quality research as evidenced by research publications in leading journals and conferences, and/or patents;

- Experience with undertaking collaborative research projects as part of a team especially in the areas of power systems, control systems and electronics;
- Capacity to teach effectively across a range of subjects, including the capacity to develop and deliver project-based teaching and learning activities;
- Excellent oral and written communication skills, including the ability to interact
 effectively with University staff at all levels and to build networks with industry and other
 researchers, both local and international;
- Ability to work as part of a team, and build rapport with all levels of staff within a diverse work environment; and
- Capability for interaction with the broader community on relevant industry and/or societal challenges, demonstrated through both research and teaching contributions.

2.2 DESIRABLE

- Experience in supervising graduate students and/or research assistants;
- Practical experience working with industry and research institutes related to research opportunities;
- Experience in driving new collaborations in research or teaching;
- Experience in curriculum development and implementation at undergraduate and postgraduate level at the highest international standards, including evidence of industryrelevant curriculum development.

2.3 SPECIAL REQUIREMENTS OF THE ROLE

- This position requires the incumbent to hold a current and valid Working with Children Check.
- Occasional work out of ordinary hours, travel, etc.

3. Equal Opportunity, Diversity and Inclusion

The University is an equal opportunity employer and is committed to providing a workplace free from all forms of unlawful discrimination, harassment, bullying, vilification and victimisation. The University makes decisions on employment, promotion, and reward on the basis of merit.

The University is committed to all aspects of equal opportunity, diversity and inclusion in the workplace and to providing all staff, students, contractors, honorary appointees, volunteers and visitors with a safe, respectful and rewarding environment free from all forms of unlawful discrimination, harassment, vilification and victimisation. This commitment is set out in the Advancing Melbourne strategy that addresses diversity and inclusion, equal employment opportunity, discrimination, sexual harassment, bullying and appropriate workplace behaviour. All staff are required to comply with all University policies.

The University values diversity because we recognise that the differences in our people's age, race, ethnicity, culture, gender, nationality, sexual orientation, physical ability and background bring richness to our work environment. Consequently, the People Strategy sets out the strategic aim to drive diversity and inclusion across the University to create an environment where the compounding benefits of a diverse workforce are recognised

as vital in our continuous desire to strive for excellence and reach the targets of Advancing Melbourne.

4. Occupational Health and Safety (OHS)

All staff are required to take reasonable care for their own health and safety and that of other personnel who may be affected by their conduct.

OHS responsibilities applicable to positions are published at:

https://safety.unimelb.edu.au/people/community/responsibilities-of-personnel

These include general staff responsibilities and those additional responsibilities that apply for Managers and Supervisors and other Personnel.

5. Other Information

5.1 SCHOOL OF ELECTRICAL, MECHANICAL AND INFRASTRUCTURE ENGINEERING

The School of Electrical, Mechanical and Infrastructure Engineering undertakes teaching and research across a range of disciplines that are internationally recognised for their contribution to fundamental research. It has a number of well-established industry linkages and international partnerships. It is building a vibrant profile of interdisciplinary research, working with industry with an aim to contribute to society. It offers a comprehensive range of accredited Masters of Engineering and Master of Information Technology programs taught through the Electrical, Mechanical and Infrastructure departments as well as professional Masters programs. It has a substantial cohort of research higher degree students. A major focus of the school is to attract and retain outstanding and internationally recognised academic staff. The School is committed through strategy, culture and mentorship to increasing the number of female engineers and scientists on its staff.

DEPARTMENT OF ELECTRICAL AND ELECTRONIC ENGINEERING

The Department of Electrical and Electronic Engineering is a vibrant community of internationally recognised researchers focused on addressing major challenges in Power and Energy Systems; Computation and Communication Networks; Electronic & Photonic Devices and Materials; and Systems Engineering. We have long-standing, strong partnerships with industry and government that support our researchers in conducting high impact research.

The Department offers both PhD and Masters level research degrees as well as the Master of Electrical Engineering, with specialisations in a range of areas. The Department also contributes to the Electrical Systems major in the Bachelor of Science, the Masters of Mechatronics Engineering and the Masters of Energy Systems.

Further information about the Department can be found under www.electrical.unimelb.edu.au/

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5.2 FACULTY OF ENGINEERING AND INFORMATION TECHNOLOGY

The Faculty of Engineering and Information Technology (FEIT) has been the leading Australian provider of engineering and IT education and research for over 150 years. We are a multidisciplinary School organised into three key areas; Computing and Information Systems (CIS), Chemical and Biomedical Engineering (CBE) and Electrical, Mechanical and Infrastructure Engineering (EMI). FEIT continues to attract top staff and students with a global reputation and has a commitment to knowledge for the betterment of society.

FEIT has never been better positioned as a global leader, anchored in the dynamic Asia Pacific region, creating and curating knowledge to address some of the world's biggest challenges. Through our students and our relationships with communities, we can not only respond to society's needs but anticipate and create engineering and IT solutions for the future.

https://eng.unimelb.edu.au/ https://eng.unimelb.edu.au/about/join-feit

Our ten-year strategy, FEIT 2025, is our School's commitment to bring to life the University-wide strategy Advancing Melbourne and reinforce the University of Melbourne's position as one of the best in the world.

To achieve our ambitions, we will continue to build new infrastructure to enable our teaching, research and engagement; we continue to recruit outstanding people from around the world; and we continue to attract high-quality students from across the globe who are at the heart of our enterprise.

https://eng.unimelb.edu.au/about/feit-2025

5.3 THE UNIVERSITY OF MELBOURNE

Established in 1853, the University of Melbourne is a leading international university with a tradition of excellence in teaching and research. The main campus in Parkville is recognised as the hub of Australia's premier knowledge precinct comprising eight hospitals, many leading research institutes and a wide-range of knowledge-based industries. With outstanding performance in international rankings, the University is at the forefront of higher education in the Asia-Pacific region and the world.

The University employs people of outstanding calibre and offers a unique environment where staff are valued and rewarded.

Further information about working at The University of Melbourne is available at http://about.unimelb.edu.au/careers

5.4 ADVANCING MELBOURNE

The University's strategic direction is grounded in its purpose. While its expression may change, our purpose is enduring: to benefit society through the transformative impact of education and research. Together, the vision and purpose inform the focus and scale of our aspirations for the coming decade.

Advancing Melbourne reflects the University's commitment to its people, its place, and its partners. Our aspiration for 2030 is to be known as a world-leading and globally connected Australian university, with our students at the heart of everything we do.

- We will offer students a distinctive and outstanding education and experience, preparing them for success as leaders, change agents and global citizens.
- We will be recognised locally and globally for our leadership on matters of national and global importance, through outstanding research and scholarship and a commitment to collaboration.
- We will be empowered by our sense of place and connections with communities. We will take opportunities to advance both the University and the City of Melbourne in close collaboration and synergy.
- We will deliver this through building a brilliant, diverse and vibrant University community, with strong connections to those we serve.

The means for achieving these goals include the development of the University of Melbourne's academic and professional staff and the capabilities needed to support a modern, world-class university. Those means require a commitment to ongoing financial sustainability and an ambitious infrastructure program which will reshape the campus and our contribution to the communities we engage with. This strategy, and the priorities proposed, is centred around five intersecting themes; place, community, education, discovery and global.

5.5 GOVERNANCE

The Vice Chancellor is the Chief Executive Officer of the University and responsible to Council for the good management of the University.

Comprehensive information about the University of Melbourne and its governance structure is available at https://about.unimelb.edu.au/strategy/governance