POSITION DESCRIPTION



School of Electrical, Mechanical and Infrastructure Engineering

Faculty of Engineering and Information Technology

Professor in Systems Engineering

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| Position No | 0063756 |
| Classification | Professor – Level E |
| Salary | Level E $226,517 p.a. (pro rata for part-time) |
| Superannuation | Employer contribution of 17% |
| WORKING HOURS | (xx 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. |
| contactFor enquiries only | Professor Chris ManzieEmail: manziec@unimelb.edu.auPlease do not send your application to this contact |

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

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.

Position Summary

The University of Melbourne is seeking an outstanding Academic with research leadership in control and optimisation, to join an internationally recognised group of academics within the Faculty of Engineering and Information Technology.

As a senior member of the Department of Electrical and Electronic Engineering, you will help foster relationships across the university and with industry. You will also engage globally, as well as within Australia.

You will lead substantial research programs, and collaborate with researchers within and external to the Department to demonstrate translation and impact of research. You will promote and develop an inclusive research culture, that develops the next generation of academics

You will be committed to teaching students of all levels, and seek to help them develop into outstanding graduates of the University of Melbourne who have the capabilities to lead productive careers.

You will ensure that research, teaching and engagement activities are flourishing, and act as a mentor for staff. You will actively collaborate in research within the Faculty and wider University and be expected to engage with industry and government.

This position reports to the Head of Department and includes regular interaction with the Dean of Engineering or delegate.

# Key Responsibilities

## education

* Enhance and develop teaching programs and methods to provide rational and cohesive courses for undergraduate and postgraduate students at the highest international level.
* Coordinate and teach subjects and courses as required by the Head of Department of Electrical and Electronic Engineering, in line with Faculty of Engineering and Information Technology workload models and Subject Evaluation Survey expectations.
* Guide the development of Masters course work, together with contributions to undergraduate and postgraduate teaching.

## Research and research training

* Build and sustain strong research activities in the Control and Signal Processing research group, with a focus on interdisciplinary activities where appropriate.
* Obtain significant research funding from sources outside the University.
* Publish in top-tiered refereed journals, books or monographs, reports and refereed conference proceedings.
* Supervise postgraduate students undertaking research projects or degrees.

## Leadership and service

* Provide leadership in your discipline area.
* Create a harmonious workplace environment that is conducive to productivity; that promotes creativity; and rewards and recognises individual and group achievement.
* Encourage and assist staff and research students to publish in top tiered refereed journals, books or monographs, reports and refereed conference proceedings.
* Foster excellence in research and teaching and develop best practice standards for the Department.
* Work actively with departmental industry advisory groups and with external industry bodies to ensure a productive relationship between the University and the community around the information-centric disciplines.
* Develop collaborative opportunities with Australian and international industry and research facilities.
* Undertake professional activities including the conduct and dissemination of research, publication, membership of committees and consultancies.
* Engage in ongoing professional development in your area and maintain knowledge of current research, resources and practice in that field.
* Contribute to strategic planning and policy decision making processes by actively participating on relevant committees;
* Provide leadership in the evaluation of curriculum development and renewal at School, Faculty and University level;
* Make a significant contribution to the governance and collegial life inside and outside of the School.

# Selection Criteria

Essential

A PhD in electrical engineering, with emphasis on systems engineering

A demonstrated relevant world-class track record of high quality research and scholarship in control systems, as evidenced by research publications in high-quality journals, conferences and technical reports;

A track record of leadership, including the organisation of workshops and conferences, development of enabling resources, and involvement in outreach activities;

A track record in attracting research funding from competitive grant agencies and other sources including industry;

A track record of teaching at the tertiary level in a top-100 ranked international university, including the development of new courses and teaching pedagogies;

Ability to develop strong links with industry and government;

Drive, energy, and a vision for building and leading a world-class research program;

Capacity to provide high quality research leadership, including leadership of interdisciplinary teams, and effective management of research and other staff;

Exceptional communication and interpersonal skills with the ability to establish and maintain effective working relationships that inspire students and staff and other members of the School, University and wider community;

## Desirable

Demonstrated excellence in academic leadership and management including an ability to build strong, sustainable teams;

Experience in practical implementations of systems theory in a laboratory or real world setting;

An international reputation in leading research innovation and fostering research collaboration with industry and with researchers from other organisations as part of multi-disciplinary teams;

Proven success in working collaboratively and an ability to engage and build highly productive relationships with corporate executives, staff and diverse stakeholders, both internal and external to the University and the ability to develop these networks at national and international levels;

Exhibited commitment to the highest standards of scientific and ethical integrity.

## 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.
* Perform other tasks as requested by the supervisor or the Head of the Department;

# 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.

# 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.

# Other Information

## 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 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 and the postgraduate coursework [Masters of Electrical Engineering](https://study.unimelb.edu.au/find/courses/graduate/master-of-electrical-engineering/). The Department also contributes to the [Electrical Engineering Systems](https://study.unimelb.edu.au/find/courses/major/electrical-engineering-systems/) major in the [Bachelor of Science](https://study.unimelb.edu.au/find/courses/undergraduate/bachelor-of-science/).

Further information about the Department is available at <https://electrical.eng.unimelb.edu.au/>

## 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>

## 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>

## 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.

## 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>