



**Australian
National
University**

Position Description

College/Division:	ANU College of Engineering, Computing and Cybernetics (CECC)
Faculty/School/Centre:	School of Engineering
Department/Unit:	
Position Title:	Professor
Classification:	Academic Level E
Position No:	TBC
Responsible to:	
Number of positions that report to this role:	
Delegation(s) Assigned:	Director, School of Engineering

PURPOSE STATEMENT:

The ANU College of Engineering, Computing and Cybernetics has embarked on a major initiative to reimagine the role of engineering and computing in the 21st century. As outlined in the [CECC Strategic Intent](#) – the College has a unique set of national responsibilities and an obligation to have a degree of impact befitting the only national university.

To achieve such impact our College embodies principles and values to guide the pursuit of excellence in education; research, engagement and impact; and collegiality. These principles include: collaborative teamwork, common strategic intent, nurturing peer and junior staff members, and acting with purpose and professionalism. These attributes are articulated in the CECC [Academic Performance Standards](#), which also indicate that each individual may pursue a unique path on the basis of their impact – which may cover a range of outputs and impact indicators. Our community contribute to making our environment the very best possible venue for all staff, stakeholder and student bodies.

KEY ACCOUNTABILITY AREAS:

The ANU College of Engineering, Computing and Cybernetics is an interdisciplinary venture, with the aim of housing the very best and brightest from around the world to find and solve problems – not just engineers or computer scientists, but also the brightest minds both from industry and other academic disciplines, with varied backgrounds and areas of expertise. We will reimagine the traditional engineering and computing disciplines. We believe the responsibility of engineers, cyberneticians, and computing experts in the 21st century is to bring together expertise on people, technological systems, and science, to put technology at the service of creating a more sustainable, responsible and safe world.

The School of Engineering has its foundations in systems, information, and renewable energy engineering at the ANU. It is a leading centre for research in renewable energy and related technologies, systems, control, and signal processing. Coupled with focussed growth in aerospace and environmental systems, there is a critical need to design, drive and sustain a fundamental program of strategic multi-disciplinary activities that will launch the new school. This is an opportunity to establish an innovative and forward-looking intellectual agenda, built on a diverse, inclusive culture.

The School of Engineering has five broad focus areas, or activity clusters: Aerospace Engineering, Energy Engineering, Environmental Engineering, Information & Signal Processing, and Mechatronics Engineering. Each cluster will have an Academic Lead who is responsible for shaping the education,

research and engagement activities in their cluster. This structure will allow for the concentration of resources and activities to increase potential for meaningful impact.

The purpose of this appointment is to:

- Support the establishment of innovative, interdisciplinary, outwardly-focused programs blending education, research and engagement;
- Support the development of partnerships with industry and engage with the wider research community to embed progressive engineering and computing research and education capabilities;
- Contribute to development of modern, unique programs that are globally relevant to equip our students with diverse and multidisciplinary skills.

Position Dimension & Relationships:

The academic will be a member of the School of Engineering within one of the five activity Clusters, accountable to or acting as the Cluster Lead and to the School Director, and (as relevant) will be responsible for relationships with industry, government, and other academic and professional staff across the University.

The Cluster Lead will help set the strategic agenda for education, research, and engagement within their Cluster, working in collaboration with the School Director, Deputy Director, Associate Directors, and other Cluster Leads to achieve the strategic goals of the School. They will foster new collaborations that strengthen the School as a whole, generating new cross-cutting research, education and engagement programs that are on par with the best in the world.

As a senior academic the role includes significant contributions to educational activities, outward-facing engagement and outreach, innovative and distinctive research, and organisational culture.

In this specific position, the appointee will also work in partnership with both professional and academic staff to support and contribute cooperatively to the strategic priorities of the School, College and University.

Role Statement:

In the role, the Professor will be expected to:

- Undertake and foster high impact collaborative and cross-disciplinary research, that generates creative works and body of unique intellectual knowledge as relevant to the Activity Cluster, School, and College, and aligned to the strategic directions of the School and College.
- Make a leading contribution to the educational activities of the Activity Cluster and School, at the undergraduate and graduate level, as well as to broader educational experiences. This includes, but is not limited to, taking a leadership role in curriculum design and review, design and implementation of innovative pedagogy, the curation and management of degree programs in collaboration with colleagues, the development and delivery of innovative professional and executive education experiences, and a willingness to take on the role of Activity Cluster Lead. This also includes, but is not limited to, supervision of research students and coursework students working on individual or group projects at undergraduate, honours, and graduate levels.
- Lead in establishing and maintaining relationships with industry, government and the wider research community to enhance cross-disciplinary collaborations and support the translation of research outcomes into applications, including taking a leadership role in seeking and generating resources to support the development of deep and transformational expertise in fields relevant to the Activity Cluster, School and College. This will be achieved through engagements with a range of funding bodies through the preparation of a combination of multi-party collaborative research proposals including state, national and international governmental schemes, philanthropic grants, industry funds, and approved consultancy arrangements.
- Lead and initiate engagement and impact activities of the School, in alignment to the College's strategic agenda, with the aim to engage and activate a stakeholder community in academia /

industry / start-ups / government / broader community, including communicating original, innovative and multi-disciplinary results in forums of international esteem (and with more extensive impact measures presented in the CECS Academic Performance Standards), and collaborating with others at an international level. Also, leading outreach activities including to prospective students, research institutes, industry, government, the media, and the general public.

- Lead, supervise, and develop staff within the Activity Cluster and School. Provide leadership, mentoring, and career development advice in alignment with the professional development process at the ANU.
- Maintain, actively promote and champion high academic standards and collegiality in all education, research, impact, engagement and administration endeavours of the School, College and University.
- Proactively contribute more broadly to all aspects of the operation of the School, College and University. This may include taking on leadership and broad supervisory roles.
- Take responsibility for workplace health and safety and not wilfully place at risk the health and safety of another person in the workplace.
- Other duties as required consistent with the classification level of the position.

SELECTION CRITERIA:

The breadth and depth of this role are illustrated in the below selection criteria. While candidates should ideally meet all selection criteria, the School of Engineering will consider all applications that demonstrate alignment with its mission.

1. A PhD or equivalent in a disciplinary area of the School, or a related area as relevant to the School, with an outstanding track record of either impact or independent research as evidenced by appropriate outputs and measures of esteem in industry, government or academic environments.
2. Outstanding track record of effective and innovative teaching, training, facilitation or other relevant knowledge transmission activity and of the ability to shape and contribute significantly to delivery of the educational agenda in the Activity Cluster, School, and College, including the capacity to foster graduate student education and inspire undergraduate students, along with a commitment to educational activities involving the general community, schools, public sector, industry and the wider research community.
3. Outstanding track record of leadership in engagement and impact activities involving government, industry, the wider research community and the general public, including establishing and maintaining collaborations and partnerships with a range of internal and external stakeholders.
4. A demonstrated commitment to and championing of the School's culture and work environment including a commitment to enhancing diversity and inclusion, characterised by an orientation to collaborative research; team-based projects; interdisciplinary activities and interests; strategic decision making; commitment to the success of peers and the team.
5. A demonstrated commitment to and excellence in collaboration, team-based projects and interdisciplinary activities and interests. In particular, evidence of ability and experience in effectively establishing on-going support for industry-academia engagement, collaboration and partnership, including the ability to develop and implement strategies to transform research and education outcomes into commercial or outreach applications.
6. An outstanding track record of independent and collaboration-based contributions, relative to opportunity, to their field of research, as evidenced by high impact outputs in relevant and leading venues; a record of developing and maintaining collaborations with world-leading practitioners, researchers, institutes and non-academic partners; and by other measures such as prestigious awards (professional, research, teaching, etc.), keynote addresses at leading conferences, elite membership of professional institutes, patents, exhibits, broadcasts, entrepreneurship, major policy or community work, etc.

7. An extensive record of leading and winning bids for external funding to support individual and collaborative research, education and engagement activities, and the ability to identify similar opportunities for others to pursue and to provide mentoring in the process.
8. Demonstrated capacity to effectively support the management of a research facility by setting a strategic vision, clear research directions, budgets and goals for all staff/students, driving domestic and international collaboration at the highest level that ensures continuity of research and field leadership positions.
9. Excellent communication skills with the ability to inspire a wide range of audiences, including in cross- disciplinary areas and to foster respectful and productive working relationships with staff, students and colleagues at all levels. Skills in other forms of communication (such as visual communication, podcasting, video, etc.) or a willingness to innovate in these areas will be well regarded.
10. Proven ability to provide leadership to early and mid-career staff and to mentor and develop colleagues to achieve goals in alignment with the College's strategic priorities, particularly in relation to building a diverse and inclusive community life.
11. A demonstrated high-level understanding of equal employment opportunity principles and a commitment to the application of these policies in a University context.

*Consistent with their relative opportunity to do so, a **Level E academic** is expected to possess advanced academic qualifications, broad expertise and deep knowledge in the relevant discipline area, and in this case, demonstrated capability to work beyond their own domains. They are expected to possess leadership skills in order to foster excellence in that field of education, research and engagement within the university, the discipline and/or the profession and within the scholarly and/or general community, and experience in directing significant research groups, either in academia, industry or government.*

The ANU conducts background checks on potential employees, and employment in this position is conditional on satisfactory results in accordance with the Background Checking Procedure which sets out the types of checks required by each type of position.

Supervisor/Delegate Signature:

Date:

Printed Name:

Uni ID:

References:

[Academic Minimum Standards](#)



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Pre-Employment Work Environment Report

Position Details

College/Div/Centre	ANU College of Engineering, Computing and Cybernetics	Dept/School/Section	School of Engineering
Position Title	Professor - Aerospace	Classification	Academic Level E
Position No.		Reference No.	

In accordance with the Work Health and Safety Act 2011 (Cth) the University has a primary duty of care, so far as reasonably practicable, to ensure the health and safety of all staff while they are at work in the University.

- This form must be completed by the supervisor of the advertised position and appended to the back of the Position Description.
- This form is used to advise potential applicants of work environment and health and safety hazards prior to application.
- Once an applicant has been selected for the position they must familiarise themselves with the University WHS Management System via Handbook guidance <https://services.anu.edu.au/human-resources/health-safety/whs-management-system-handbook>
- The hazards identified below are of generic nature in relation to the position. It is not correlated directly to training required for the specific staff to be engaged. Identification of individual WHS training needs must be in accordance with WHS Local Training Plan and through the WHS induction programs and Performance Development Review Process.
- 'Regular' hazards identified below must be listed as 'Essential' in the Selection Criteria - see 'Employment Medical Procedures' at http://info.anu.edu.au/Policies/_DHR/Procedures/Employment_Medical_Procedures.asp

Potential Hazards

<ul style="list-style-type: none"> • Please indicate whether the duties associated with appointment will result in exposure to any of the following potential hazards, either as a regular or occasional part of the duties. 			
TASK	regular	occasional	
key boarding	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
lifting, manual handling	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
repetitive manual tasks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Organizing events	<input type="checkbox"/>	<input type="checkbox"/>	
fieldwork & travel	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
driving a vehicle	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
NON-IONIZING RADIATION			
solar	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
ultraviolet	<input type="checkbox"/>	<input type="checkbox"/>	
infra red	<input type="checkbox"/>	<input type="checkbox"/>	
laser	<input type="checkbox"/>	<input type="checkbox"/>	
radio frequency	<input type="checkbox"/>	<input type="checkbox"/>	
CHEMICALS			
hazardous substances	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
allergens	<input type="checkbox"/>	<input type="checkbox"/>	
cytotoxics	<input type="checkbox"/>	<input type="checkbox"/>	
mutagens/teratogens/	<input type="checkbox"/>	<input type="checkbox"/>	
carcinogens			
pesticides / herbicides	<input type="checkbox"/>	<input type="checkbox"/>	
OTHER POTENTIAL HAZARDS (please specify):			
Supervisor/Delegate Name:			Date: