



## Position Description

<b>College:</b>	College of Engineering and Computer Science (CECS)
<b>Faculty/School/Centre:</b>	School of Cybernetics
<b>Department</b>	Institute for Water Futures (IWF)
<b>Position Title:</b>	Research Fellow / Fellow
<b>Classification:</b>	Academic Level B / Academic Level C
<b>Responsible To:</b>	Dr Amy McLennan (SoCy) and Prof Lorrae Van Kerkoff (IWF Director)

### PURPOSE STATEMENT

The Australian National University (ANU) made a major and on-going investment in water research through its National Institute Grant to establish the Institute for Water Futures (IWF). The IWF brings together researchers in from across sciences, social sciences, humanities, engineering and public policy within the ANU and has established research partnerships with state and federal water agencies, such as Commonwealth Scientific and Industrial Research Organisation (CSIRO), Murray Darling Basin Authority (MDBA), and other research organisations. The IWF mission is to support sustainable water futures and to identify transformative, innovative and robust strategies to resolve the water challenges of today and tomorrow.

This position is located in the new School of Cybernetics, within the College of Engineering and Computer Science (CECS).

The ANU College of Engineering and Computer Science has embarked on a major initiative to reimagine the role of engineering and computing in the 21st century. As outlined in the [CECS 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 CECS [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 Research Fellow/Fellow will be a member of the School of Cybernetics within the ANU College of Engineering and Computer Science, located in the Strategic Services Cluster and accountable to Dr Amy McLennan, Educational Experiences Lead in the School of Cybernetics, as well as the Institute for Water Futures leadership group and its Director Professor Lorrae Van Kerkhoff (IWF). The Research Fellow / Fellow will be expected to work collegially leading by example to develop and maintain effective, productive and beneficial workplace relationships within the all academic and professional School and College staff, students and honorary appointees, as well as with industry

stakeholders to support the strategic priorities of the School, Institute for Water Futures, College and University. This position will also have a mentoring role for students and will engage in collegial and productive collaborations with local, national and where possible, international colleagues.

The ANU College of Engineering and Computer Science 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 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 Cybernetics is a new organisation, and there is a critical need to design, drive and sustain a program of strategic activities that will launch the new School. The School will build on the foundational work of the Autonomy, Agency and Assurance Innovation Institute (3Ai). This is an opportunity to establish an innovative and forward-looking intellectual agenda, built on a diverse, inclusive culture.

The School of Cybernetics will initially have defined four broad focus areas, or activity clusters – 3Ai, Strategy, Systems and Design. Each cluster will have a Lead who is responsible for leading the education, research and engagement activities in their Cluster. This structure will allow for the concentration of resources and activities with a consequentially increased 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 in the area of water futures;
- Support the development of partnerships with industry and engage with the wider research community to embed progressive engineering and computing research and education capabilities in the area of water futures;
- Contribute to development of modern, unique programs that are globally relevant to equip our students with diverse and multidisciplinary skills.

### **Position Dimension & Relationships:**

The position will report to the Educational Experiences Lead, and the Director of the School of Cybernetics / Director of the Institute for Water Futures and as relevant, will be responsible for relationships with industry, government and other academic and professional staff across the University linked to water futures activities.

As an academic, the role involves educational activities, outward-facing engagement and outreach, innovative and distinctive research, and organizational culture. The staff member is expected to contribute cooperatively to the overall intellectual life of the School of Cybernetics, the College and University.

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 of Computing, College and University.

**Role Statement:**Academic Level B

Specific duties required of a **Level B Academic** may include:

1. Undertake high impact collaborative and cross-disciplinary research that generates creative works and body of unique intellectual knowledge as relevant to the Activity Cluster, the School, the College and the Institute for Water Futures.
2. Contribute to the educational activities of the Activity Cluster, the School and the Institute for Water Futures. This includes, but is not limited to, the preparation and delivery of lectures, tutorials, short courses and workshops; the preparation and delivery of professional and executive education courses; the preparation of online material; marking and assessment; and consultations with students. This also includes, but is not limited to, supervision of students working on individual or group projects at undergraduate, honours, graduate- coursework levels.
3. Take an active role in seeking and generating resources to support the development of deep and transformational expertise in fields relevant to the School, College and the Institute for Water Futures. Achieve impacts through engagements with a range of stakeholders and / or funding bodies and also through the preparation of research proposals.
4. Provide support to the engagement and impact activities of the School and the Institute for Water Futures, with the aim to engage and activate a stakeholder community in academia / industry / start-ups / government / broader community, including communicating or publishing original, innovative and multi-disciplinary results in either international refereed journals, academic seminars, national and international conferences, or appropriate fora for the field, and collaborate with other researchers at an international level. As well as, assisting in outreach activities including to prospective students, research institutes, industry, government, the media and the general public.
5. Supervise, mentor and develop careers of less senior staff and research support staff in your research area, as required.
6. Maintain high academic standards and collegiality in all education, research, impact, engagement and administration endeavours by the School, the College, and the Institute for Water Futures and the University.
7. Contribute broadly to all aspects of the operation of the School, College, and the Institute for Water Futures and University.
8. Take responsibility for their own workplace health and safety and not wilfully place at risk the health and safety of another person in the workplace.
9. Other duties as required consistent with the classification level of the position.

**Role Statement:**Academic Level C

Specific duties required of a **Level C Academic** may include:

1. Undertake high impact independent, collaborative and cross-disciplinary research that generate creative works and body of unique intellectual knowledge as relevant to the Activity Cluster, the School, the College, and the Institute for Water Futures and aligned to the strategic directions of the School, College, and the Institute for Water Futures.
2. Make a strong contribution to the educational activities of the Activity Cluster, the School and the Institute for Water Futures. This includes, but is not limited to, the preparation and delivery of lectures, tutorials, short courses and workshops; the preparation and delivery of professional and executive education courses; the preparation of online material; marking and assessment; and consultations with students. This also includes,

but is not limited to, supervision of students working on individual or group projects at undergraduate, honours, graduate- coursework levels.

3. Take an active role in seeking and generating resources to support the development of deep and transformational expertise in fields relevant to the Activity Cluster, School, College and the Institute for Water Futures. Achieve impact through engagements with a range of funding bodies and also through the preparation of a combination of state, national and international research proposals, industry funds and approved consultancy arrangements. Where appropriate, oversee the financial management of grants received for research projects.
4. Make a strong contribution to the engagement and impact activities of the School and the Institute for Water Futures, with the aim to engage and activate a stakeholder community in academia / industry / start-ups / government / broader community, including communicating or publishing original, innovative and multi-disciplinary results in either international refereed journals, academic seminars, national and international conferences, or appropriate fora for the field, and collaborate with other researchers at an international level. As well as, leading outreach activities including to prospective students, research institutes, industry, government, the media and the general public.
5. Supervise, mentor and develop careers of less-senior staff and research support staff in alignment with the performance development process at the ANU.
6. Proactively contribute more broadly the operation of the School, College, and the Institute for Water Futures and University. This may include representation through committee membership.
7. Maintain and actively high academic standards and collegiality in all education, research, impact, engagement and administration endeavours by the School, the College, and the Institute for Water Futures and the University.
8. Take responsibility for their own workplace health and safety and not wilfully place at risk the health and safety of another person in the workplace.
9. 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 Cybernetics and Institute for Water Futures will consider all applications that demonstrate alignment with their missions.

### Academic Level B:

1. A PhD or equivalent in the disciplinary areas of the School (cybernetics, systems, design) and Institute for Water Futures, or a related area as relevant to the School/Institute, with a competitive track record of either impact or research as evidenced by appropriate outputs in industry, government or academic environments
2. Evidence of effective teaching, training, facilitation, mentoring or other relevant knowledge transmission activities and of the ability to significantly contributing to the delivery of the educational agenda in the Activity Cluster and the School/Institute.
3. An ability to contribute to impact and engagement activities involving government, industry, the wider research community and the general public, including involvement in collaborations and partnerships with a range of internal and external stakeholders
4. A demonstrated alignment with the School's and Institute's cultures and work environments 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, and an ability to contribute to the strategic priorities and activities of the School and College, Institute for Water Futures and ANU.

5. Evidence of effective 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 partnerships.
6. An ability and commitment to win bids for competitive funding (if relevant in your industry) to bids for external funding (if relevant in your industry) to support individual and collaborative research, education and engagement activities with the Activity Cluster and School, and Institute for Water Futures.
7. Excellent communication skills with the ability to inspire a wide range of audiences, including in a 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.
8. Ability 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.
9. A demonstrated high-level understanding of equal opportunity principles and a commitment to the application of these policies in a University context.

*Consistent with their relative to opportunity to do so, a **Level B Academic** will have a relevant doctoral qualification or equivalent accreditation and standing together with subsequent research experience. This may not apply to candidates coming from different fields such as industry or government. Once in the role, there will be an expectation of academic excellence, making an outstanding contribution to research and, in this particular position, the ability to collaborate with internal and external stakeholders outside of your domain. A position at this level will require a demonstrated record of research output in academia, industry or government.*

## **SELECTION CRITERIA**

### Academic Level C

1. A PhD or equivalent in the disciplinary areas of the School (cybernetics, systems, design), and Institute for Water Futures or a related area as relevant to the School/Institute with an excellent track record of either impact or research as evidenced by appropriate outputs in industry, government or academic environments
2. Evidence of effective teaching, training, facilitation, mentoring or other relevant knowledge transmission activities and of the ability to shape and to significantly contribute to the delivery of the educational agenda in the Activity Cluster and the School/Institute.
3. Evidence of effective engagement and impact activities involving government, industry, the wider research community and the general public, helping to establish collaborations and partnerships with a range of internal and external stakeholders
4. A strong orientation to the School's and Institute'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, and an ability to contribute to the strategic priorities and activities of the School and College, Institute for Water Futures and ANU.
5. A strong orientation to 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 partnerships.

6. A record of winning bids for external funding (if relevant in your industry) to support individual and collaborative research, education and engagement activities with the Activity Cluster and School, and Institute for Water Futures, and the ability to identify similar opportunities for others to pursue and to provide mentoring in the process.
7. Outstanding communication skills with the ability to inspire a wide range of audiences, including in a 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.
8. Ability to provide leadership to early-career researchers and to mentor and develop colleagues to achieve goals in alignment with the College's and ANU's strategic priorities, particularly in relation to building a diverse and inclusive community life.
9. A demonstrated high-level understanding of equal opportunity principles and a commitment to the application of these policies in a University context.

*Consistent with their relative to opportunity to do so, a **Level C Academic** will have a relevant doctoral qualification or equivalent accreditation and standing together with subsequent research experience. This may not apply to candidates coming from different fields such as industry or government. Once in the role, there will be an expectation of academic excellence, making an outstanding contribution to research and, in this particular position, the ability to collaborate with internal and external stakeholders outside of your domain. A position at this level will require a demonstrated strong record of research output 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.

**References:**

[ANU Minimum Standards for Academic Levels](#)

[CECS Strategic Intent](#)

[CECS Academic Performance Standards](#)