POSITION DESCRIPTION

Senior Lecturer (Level C) / Associate Professor (Level D)
Teaching & Research

Faculty/Division	UNSW Canberra
Classification Level	Academic C
Hours & Span (Category)	ACADEMIC POSITION NO SPAN
Position number	00202544
Shiftwork status	NOT SHIFTWORKER
Allowances	N/A
On call arrangements	N/A
Original document creation	3 September 2024

Position Summary

UNSW Canberra has established a new initiative to spearhead academia-government-industry partnerships and collaborations in the emerging area of Digital Engineering. The initiative will enable and accelerate Australia's industry and societal digital transformation by delivering interdisciplinary research and innovation in Digital Engineering, educating the next generation of the digital workforce, and contributing to building a dynamic digital ecosystem. We will work with partners from industry, research, and government across several sectors to understand their digital transformation challenges and deliver Digital Engineering research and education solutions to address these problems.

The Senior Lecturer / or Associate Professor will play a key leadership role in driving the implementation of the initiative through the ideation, creation and delivery of an innovative education portfolio in Digital Engineering, driving an applied research program optimized towards industry as well as contributing to building a national and international profile. The Senior Lecturer / Associate Professor is expected to undertake work in all three areas of academic activity – research, education and service (including outreach). The allocation of time to each area will be discussed with the position supervisor regularly and be reflective of the growth opportunities available for rapidly building the Digital Engineering capability. This position will also have a mentoring role for students and staff.

Accountabilities Senior Lecturer (Level C)

Specific accountabilities for this role include:

- **Education and lifelong learning**
  - Contribute to the educational activities supporting the initiative. This includes, but is not limited to, the codesign of content; the preparation and delivery of professional education courses; online material; marking and assessment; and consultations with students.
  - Work collaboratively with industry and government groups to identify their needs and formulate educational solutions to meet these needs.
  - Contribute to UNSW's understanding of best practices in life-long learning, including a thorough understanding of appropriate pedagogies

- **Research translation and commercialisation**
  - Lead and conduct an applied digital engineering research program through attracting of delivery-focused and externally funded projects.
  - Translate high-quality research into real-world benefits for partners and end-users through government and industry partnerships.
  - Actively seek and secure external funding including the preparation and submission of academic consultation and research proposals to various funding bodies and partners.
  - Design and undertake an independent research agenda in the areas related to digital engineering with a view to publishing original and innovative results in refereed journals, present research at academic and industry seminars and at national and international conferences and collaborate with other researchers at a national and/or international level.

- **Multi-disciplinary collaborations and relationships**
  - Contribute to the growth of partnerships and multi-disciplinary collaborations with industry, government, and academia.
  - Lead and work within multi-disciplinary and diverse teams to achieve collective goals

- **Rasing profile**
  - Attract peer recognition and establish research network/s (based on the norms of the discipline) at the national level.

- **Administration**
  - Provide administrative leadership, including coordination of program, departmental and/or faculty meetings, open days and student recruitment activities.

- **Team building and mentoring**
  - Contribute to building and leading a research and/or education group to create critical mass in the Digital Engineering area.
  - Mentor and guide students, groups, and colleagues; supervise HDRs to timely completion as primary supervisor; and contribute to HDR review panels.

- Align with and actively demonstrate the [UNSW Values in Action: Our Behaviours](#) and the [UNSW Code of Conduct.](#)

- Ensure hazards and risks are identified and controlled for tasks, projects and activities that pose a health and safety risk within your area of responsibility.

Skills and Experience

- A PhD (in Systems Engineering, Computer Science, or a related discipline and application domain), or equivalent related work experience.

- Significant expertise in advanced systems engineering topics and application areas that will contribute to growing the field of Digital Engineering.

- Demonstrated ability to design, plan and deliver industry-focused education offerings and knowledge transfer activities.

- Demonstrated ability to conduct applied research, with experience in tailoring research challenges to meet client and end-user requirements. Evidence of the capacity to effectively translate research to practical outcomes is essential.

- Demonstrated leadership in building and maintaining effective relationships with industry or government partners to understand the challenges facing the sector and demonstrated ability to work with partners to deliver fit-for-purpose solutions.

- Demonstrated record of leading and contributing to multi-disciplinary collaborations, working across boundaries, and effectively working within diverse teams to achieve collective goals.

- A sustainable record of leading successful bids for competitive external funding and/or non-traditional funding sources to support individual and collaborative research activities.

- Demonstrated track record in research with outcomes of high quality and high impact with clear evidence of the desire and ability to continually achieve research excellence as well as the capacity for research leadership.

- A track record of successfully supervising high-quality PhD/Masters research students.

- Excellent interpersonal, oral and written communication skills appropriate for interacting effectively industry and government partners, team members, and colleagues across the Faculty.

- Evidence of highly developed interpersonal and organisational skills.

- An understanding of and commitment to UNSW's aims, objectives and values in action, together with relevant policies and guidelines.

- Knowledge of health and safety responsibilities and commitment to attending relevant health and safety training.

Accountabilities for Associate Professor (Level D)

Specific accountabilities for this role include:

- **Education and lifelong learning**
    - Lead the design and delivery of the educational activities supporting the initiative. This includes, but is not limited to, conceptualizing education pathways in digital engineering, the codesign of educational offerings; the preparation and delivery of professional education courses; and academic quality assurance.
    - Work collaboratively with industry and government groups to identify their needs and formulate educational solutions to meet these needs.

- o Lead advancements in UNSW's best practices in life-long learning, including creating and implementing innovative educational concepts and teaching pedagogies.
- **Research translation and commercialisation**
  - o Establish and lead a distinguished digital engineering research program through attracting of delivery-focused and externally funded projects.
  - o Prepare and execute effective research transition plans to translate and commercialize the initiative's high-quality research into real-world benefits for partners and end-users through government and industry partnerships.
  - o Actively seek and secure substantial external funding including the preparation and submission of academic consultation and research proposals to various funding bodies and partners.
  - o Work collaboratively to obtain research income from nationally competitive research grants (and/or research fellowships) and research end-users as a member or leader, at or above the level that is relevant to the discipline in leading universities.
  - o Design and undertake an independent research agenda in the areas related to digital engineering with a view to publishing original and innovative results in refereed journals, present research at academic and industry seminars and national and international conferences and collaborate with other researchers at a national and/or international level.
- **Multi-disciplinary collaborations and relationships**
  - o Contribute to the growth of partnerships and multi-disciplinary collaborations with industry, government, and academia.
  - o Lead and work within multi-disciplinary and diverse teams to achieve collective goals
  - o Work collaboratively with internal and external stakeholders to contribute to national dialogues in teaching and learning, advancing cooperation, developing partnerships and informing practice.
- **Rasing profile**
  - o Contribute to building UNSW Canberra thought leadership in digital engineering at national and international levels.
  - o Attract peer recognition and establish research network/s (based on the norms of the discipline) at the national level.
- **Administration**
  - o Provide administrative leadership, including coordination of program, departmental and/or faculty meetings, open days and student recruitment activities.
- **Team building and mentoring**
  - o Build and lead a research and/or education group to create critical mass in the Digital Engineering area.
  - o Mentor and guide students, groups, and colleagues; supervise HDRs to timely completion as primary supervisor; and contribute to HDR review panels.
- Align with and actively demonstrate the [UNSW Values in Action: Our Behaviours](#) and the [UNSW Code of Conduct.](#)

- Cooperate with all health and safety policies and procedures of the university and take all reasonable care to ensure that your actions or omissions do not impact on the health and safety of yourself or others.
- Ensure hazards and risks are identified and controlled for tasks, projects and activities that pose a health and safety risk within your area of responsibility.

Skills and Experience

- A PhD (in Systems Engineering, Computer Science, or a related discipline and application domain), or equivalent related work experience.
- Significant expertise in advanced systems engineering topics and application areas that will contribute to growing the field of Digital Engineering.
- Proven extensive expertise in the design, planning and delivery of industry-focused education offerings and knowledge transfer activities.
- Strong record of applied research program, with experience in tailoring research challenges to meet client and end-user requirements.
- Evidence of the outstanding capacity to effectively translate research to practical outcomes.
- Demonstrated extensive leadership in building and maintaining effective relationships with industry or government partners to understand the challenges facing the sector and demonstrated ability to work with partners to high-value outcomes.
- Strong record of leading and contributing to multi-disciplinary collaborations, working across boundaries, and effectively working within diverse teams to achieve collective goals.
- Significant track record of leading successful bids for competitive external funding and/or non-traditional funding sources to support individual and collaborative research activities.
- Significant track record in research with outcomes of high quality and high impact with clear evidence of the desire and ability to continually achieve research excellence as well as the capacity for research leadership.
- A significant track record of successfully supervising high-quality PhD/Masters research students or other research based projects is highly desirable.
- Excellent interpersonal, oral and written communication skills appropriate for interacting effectively industry and government partners, team members, and colleagues across the Faculty.
- Evidence of highly developed interpersonal and organisational skills.
- An understanding of and commitment to UNSW's aims, objectives and values in action, together with relevant policies and guidelines.
- Knowledge of health and safety responsibilities and commitment to attending relevant health and safety training.

Eligibility Requirements

The position holder will be required to meet and maintain ongoing employment clearances as determined

by the Faculty and includes, but is not limited to:

- Verification of qualifications
- Criminal History Check
- Identification Check
- Australian Work Rights Check

About this document

This Position Description outlines the objectives, desired outcomes, key responsibilities, accountabilities, required skills, experience and desired behaviours required to successfully perform the role.

This template is not intended to limit the scope or accountabilities of the position. Characteristics of the position may be altered in accordance with the changing requirements of the role.