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POSITION DESCRIPTION

Senior Lecturer in Nuclear Engineering Teaching & Research

Position Level	C
Faculty/Division	00201225
Position Number	ADMIN ONLY
Original document creation	21/08/ 2024

Position Summary

UNSW Nuclear Innovation Centre was formed in February 2024 to maximise the contribution of UNSW to the generational challenge creating a sovereign nuclear engineering capability for Australia. UNSW is growing its nuclear engineering capability in all aspects of research, education and social engagement. Located in the school of Mechanical and Manufacturing Engineering and working closely with leadership team of the Nuclear Innovation Centre, A Senior Lecturer (Level C) will conduct high quality research and make a significant contribution to educational excellence in the Centre, School and Faculty. The role of Senior Lecturer reports to Prof Chun Wang and has no direct reports.

Accountabilities

Specific accountabilities for this role include:

- Apply a well-defined teaching philosophy and a critically reflective teaching practice that inspires student learning.
- Conduct classes, assess student learning achievements, and support students in both postgraduate and undergraduate courses that are part of nuclear engineering programs at UNSW, and in bespoke training programmes and short courses in nuclear engineering, in line with UNSW policy.

- Design and develop learning activities and resources, and provide assessment and feedback at both course and program level using a range of suitable approaches and learning environments.
- Support learning progression with students as individuals (through such things as one-to-one consultation) and as a cohort (through general course related advice) to achieve positive learning and employability outcomes for students.
- Manage course administration as Course Authority, including academic quality assurance.
- Maintain and develop links within the discipline, industry and profession (e.g. contribute to professional development activities).
- Work collaboratively to identify and apply for internal education funding opportunities.
- Make a positive contribution by leading School and Centre meetings and seminars and be a member of School/Centre/Faculty committees as required.
- Make independent contributions to research in nuclear engineering that have a significant impact in their field of expertise and create a nationally recognised research track record.
- Undertake independent research in nuclear engineering or related area (as per the norms of the discipline), making an independent contribution through professional practice and expertise.
- Develop research groups in area of specialist expertise and research methods that are appropriate to the discipline of nuclear engineering
- Attract peer recognition and establish research network/s (based on the norms of the discipline) at national level.
- 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.
- Mentor and guide students, groups, and colleagues; supervise HDRs to timely completion as primary supervisor; and contribute to HDR review panels.
- Contribute to the management, activities, and over time leadership of the UNSW Nuclear Innovation Centre
- Communicate with donor(s) and donor organisations on a personal level and contribute to donor impact statements to build trusted and long-term relationships
- Communicate positively with journalists and media to further the aims of the School/Centre
- Align with and actively demonstrate the [Code of Conduct and Values](#)
- 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.

Skills and Experience

- A PhD in a related discipline, such as nuclear engineering, thermal hydraulics, reactor physics, nuclear materials, reactor control systems, nuclear chemical processes, or nuclear engineering design and/or relevant work experience.
- Breadth of experience and/or proven ability to develop and deliver new content commensurate with ability to integrate key aspects of nuclear engineering (e.g. reactor physics, control systems, thermal hydraulics or others, depending on background) into a signature capstone education experience for small to medium sized classes of nuclear engineering students.
- Proven commitment to proactively keeping up to date with discipline knowledge and developments.
- Demonstrated experience in teaching and learning design using a range of pedagogical approaches, development and delivery of courses and programs, at undergraduate and/or postgraduate level.
- Experience of implementing educational technologies and online delivery methods.
- Evidence of teaching effectiveness and passion for educational excellence and fostering this in others.
- Demonstrated success in initiating curriculum development and improvement.
- Demonstrated experience with industry or work-integrated learning.
- Evidence of ability to support and inspire students from diverse backgrounds and support student equity diversity and inclusion initiatives.
- 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.
- Experience in successfully recruiting and supervising high calibre students.
- Demonstrated ability to work in a team, collaborate across disciplines and build effective relationships.
- Evidence of highly developed interpersonal and organisational skills.
- Demonstrated ability to interact with the profession and industry and attract funding for learning and teaching initiatives.
- 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.

Pre-employment checks required for this position

- Verification of qualifications

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.