POSITION DESCRIPTION

Lecturer / Senior Lecturer - Mechatronics Teaching & Research

Position Level | B/C
Faculty/Division | School of Mechanical and Manufacturing Engineering, Faculty of Engineering
Position Number | 00056165
Original document creation | 25/08/ 2021

Position Summary

The School of Mechanical and Manufacturing Engineering is one of the largest and most prestigious in Australia, with 2500 student enrolments, 80 academic staff, 25 professional staff, and total annual budget of over $22 million including external research grants. Our mission is to prepare students for careers of leadership and innovation, create new scientific advances, and translate research outcomes to positively impact national and global industry and society. We are seeking to attract high-calibre researchers and educators to expand our thriving research programs and contribute to our education excellence in Aerospace, Mechanical Engineering, Advanced Manufacturing Engineering, Robotics and Mechatronics. For further information about the School, please visit http://www.engineering.unsw.edu.au/mechanical-engineering/.

The purpose of this role is to conduct independent research and deliver excellent teaching in the area of robotics and mechatronic engineering. This is to meet rising demands for autonomous systems in areas such as assistive health care, medical robotics, other assistive technologies such as exoskeletons and service robots, automation of operations in agriculture, mining, infrastructure asset management, maritime operations, aerospace, security, safety and rescue.
A Lecturer (Level B) is expected to carry out activities to develop their scholarly research and professional activities both nationally and internationally and to contribute significantly to achieving the teaching and service missions of the School and Faculty.

The role of Lecturer reports to the Head of School and has no direct reports.

A Senior Lecturer (Level C) will conduct high quality research and make a significant contribution to educational excellence in the School and Faculty.

The role of Senior Lecturer reports to the Head of School and has no direct reports.

**Accountabilities**

Specific accountabilities of the role of Lecturer (Level B) include:

- Conduct research of high quality and high impact including attainment of competitive government and industry research funding and publication of outcomes in high quality research outlets.
- Deliver high quality teaching and student experience utilising sound pedagogical methodologies and innovative technologies and from time to time, deliver teaching across a broad engineering discipline.
- High quality supervision of major honours and postgraduate research projects.
- Actively engage with industry and the community to develop significant productive relationships, attract industry funding and participate in professional activities.
- Work collaboratively with peers across the Faculty and UNSW in all aspects of academic endeavour and contribute to mentoring of other staff.
- Involvement in broad administrative functions of the School and/or University, coordination of subjects, attend departmental and/or faculty meetings, involvement in Open Days and recruitment activities and play a major role in planning and/or committee work or other responsibilities, as directed by the Head of School.
- 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.

Specific accountabilities of the Lecturer (Level C) role include:

- Conduct research of high quality and high international impact including attainment of competitive government and industry research funding and publication of outcomes in high quality research outlets.
- Play a significant role in research projects including, where appropriate, leadership of a research team.
- Deliver high quality teaching and student experience utilising sound pedagogical methodologies and innovative technologies and from time to time, deliver teaching across a broad engineering discipline.
- High quality supervision of honours and postgraduate research projects.
- Actively engage with industry and the community to develop significant productive relationships, attract industry funding and participate in professional activities.
- Work collaboratively with peers across the Faculty and UNSW in all aspects of academic endeavour and contribute to mentoring of other staff.
• Involvement in broad administrative functions of the School and/or University, coordination of subjects, attends departmental and/or faculty meetings, involvement in Open Days and recruitment activities and play a major role in planning and/or committee work or other responsibilities, as directed by Head of School
• 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 (Lecturer)
• A PhD in Mechatronic Engineering or Robotics or a related discipline, and/or relevant work experience.
• Proven commitment to proactively keeping up to date with discipline knowledge and developments.
• Demonstrated experience in teaching and learning design, development and delivery at undergraduate and/or postgraduate level.
• Experience using and/or designing with educational technologies and online delivery methods.
• Evidence of teaching effectiveness and passion for educational excellence (e.g. relevant discipline-based curriculum design and development at a variety of levels and scales).
• Demonstrated knowledge of industry or experience of work-integrated learning (desirable).
• 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 in the fields of mechatronic engineering, robotics, and autonomous systems, 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 significant involvement with the profession and/or industry.
• High level communication skills and ability to network effectively and interact with a diverse range of students and staff.
• Demonstrated ability to work in a team, collaborate across disciplines and build effective relationships.
• 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.

Skills and Experience (Senior Lecturer)
• PhD in Mechatronic Engineering or Robotics or related area.
• Demonstrated track record in research with outcomes of high quality and high international impact in the fields of mechatronic engineering, robotics, and autonomous systems, with clear evidences of the desire and ability to continually achieve research excellence as well as the capacity for research leadership.
• Demonstrated ability and willingness to deliver high quality and innovative teaching and student experience to both undergraduate and postgraduate students in mechatronic engineering.

• Experience in successfully recruiting and supervising high calibre students.

• A track record of significant involvement with the profession and/or industry.

• High level communication skills and ability to network effectively and interact with a diverse range of students and staff.

• Demonstrated ability to work in a team, collaborate across disciplines and build effective relationships.

• Willingness to undertake any compliance and supervisor training as required.

• Ability and capacity to implement required UNSW health and safety policies and procedures.

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.