Position Description

Senior Lecturer / Associate Professor / Professor in Multi-scale Mechanics of Materials Modelling School of Mechanical and Manufacturing Engineering

Never Stand Still | Human Resources

Level:	**C – E**	**Date:**	**April 2017**
School/Unit:	**Mechanical and Manufacturing Engineering**	**Faculty/Division:**	**Engineering**
Written by:	**Head of School**		

POSITION SUMMARY

The purpose of this role is to conduct high impact research in the area of multi-scale mechanics of materials modelling and deliver outstanding teaching and student experience in the discipline of Mechanical and Manufacturing Engineering. It will also contribute significantly to the leadership, service and engagement missions of the School and Faculty.

A Level C academic is expected to develop an internationally recognised research program in the field.

An academic at Level D plays a key role in leading and advancing outstanding research at national and international level.

An academic at Level E is expected to provide academic leadership and foster excellence in research, innovative teaching and professional activities.

ORGANISATIONAL ENVIRONMENT

Overview of the Faculty/School/Divisional Work Unit

The School of Mechanical and Manufacturing Engineering aims to bring high quality researchers and educators to UNSW to establish thriving research programs as well as contribute to the teaching and learning functions in the School. We have excellent staff that inspire and enrich the education of our students, state-of-the art research facilities and strong partnership with industry. For further information about the School, please visit http://www.engineering.unsw.edu.au/mechanical-engineering/

Reporting Relationships

Supervisor's title: Head of School

Other positions reporting to the supervisor: Academic and Professional staff in the Schools

Positions reporting to this position: Nil.

Other relationships: Academic staff are expected to work effectively with academic, professional and technical staff across UNSW. They will be required to build relationships with academics in other tertiary institutions internationally as well as Government and Industry bodies applicable to their discipline.

KEY DUTIES & RESPONSIBILITIES

It is expected that the appointee at level C will progress on a continual satisfactory and upward trajectory in their performance and specific performance expectations will be set individually with the Head of School/Supervisor**.**

The specific duties of the **Senior Lecturer** include (but are not limited to):

- 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
- Be involved in broad administrative functions in the School and/or University, including coordinating subjects, attending 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 duties as requested 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

It is expected that the appointee at level D will continue to provide a significant contribution to their discipline and deliver satisfactory performance and leadership. Specific performance expectations will be set individually with the Head of School/Supervisor.

The specific duties of the **Associate Professor** include (but are not limited to):

- 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 the leadership of 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
- Provide leadership in developing significant productive relationships and engagement with industry and the community, attract significant 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
- Provide high level contribution to broad administrative functions in the School and/or University, including course coordination, attending 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 duties as requested by the Head of School
- Provides a significant contribution to the profession and discipline
- 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

It is expected that the Level E academic will continue to make a distinguished contribution to their discipline and deliver satisfactory performance and leadership. Specific performance expectations will be set individually with the Head of School/Supervisor.

The specific duties of the **Professor** include (but are not limited to):

- Engage, lead and foster a culture of excellence in research and deliver outstanding research of international significance including attainment of significant competitive government and industry research funding and publication of outcomes in high quality research outlets
- Provide excellent leadership of research projects and leadership of research teams
- 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
- Provide leadership in developing significant productive relationships and engagement with industry and the community, attract significant industry funding and participate in professional activities
- Participate and provide leadership in community affairs in professional, commercial and industrial sectors
- Work collaboratively with peers across the Faculty and UNSW in all aspects of academic endeavour and play a leading role in the mentoring of other staff
- Play an active role in the maintenance and development of academic standards in the development of educational policy and curriculum areas within the discipline
- Provide high level contribution to development of policy and broad administrative functions within the School and/or University, including course coordination, attending departmental, Faculty and/ or University meetings, involvement in Open days and recruitment activities and play a major role in planning and/or committee work or other duties as requested 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

SELECTION CRITERIA

Applicants from industry and professional backgrounds should demonstrate their equivalent level of standing as demonstrated by professional experience.

Senior Lecturer

- PhD in mechanical engineering, applied mathematics, materials science, or related area
- Demonstrated track record in research with outcomes of high quality and high international impact with clear evidence 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
- Demonstrated ability to successfully recruit and supervise high calibre students
- Demonstrated ability to interact with the profession and 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 and knowledge of equal opportunity principles

Associate Professor

- PhD in mechanical engineering, applied mathematics, materials science, or related area
- Significant track record in research leadership with outcomes of high quality and high international impact with clear evidence of the desire and ability to continually achieve research excellence and deliver research leadership
- Record of outstanding delivery of high quality of teaching and student experience at both undergraduate and postgraduate levels and ability to develop innovative teaching methods
- Excellent record of recruiting and supervising high calibre students
- Demonstrated leadership in building engagement and partnerships with the profession and 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, mentor other staff, 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 and knowledge of equal opportunity principles

Professor

- PhD in mechanical engineering, applied mathematics, materials science, or related area
- A distinguished record in research leadership with outcomes of high quality and high international impact with clear evidence of the desire and ability to continually achieve research excellence and deliver research leadership
- Record of outstanding contribution to teaching and delivery of high quality and innovative teaching and student experience at both undergraduate and postgraduate levels
- Outstanding record of recruiting and supervising high calibre students
- Demonstrated leadership in building engagement and partnerships with the profession and 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, mentor other staff, 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 and knowledge of equal opportunity principles

PRE EMPLOYMENT CHECKS REQUIRED FOR THIS POSITION

Verification of qualifications

It is not the intention of the position description to limit the scope or accountabilities of the position but to highlight the most important aspects of the position. The aspects mentioned above may be altered in accordance with the changing requirements of the role.