Position Description
Associate Professor/Professor in Structural Engineering – Structural Health Monitoring

ORGANISATIONAL ENVIRONMENT

UNSW is currently implementing a ten year strategy to 2025 and our ambition for the next decade is nothing less than to establish UNSW as Australia’s global university. We aspire to this in the belief that a great university, which is a global leader in discovery, innovation, impact, education and thought leadership, can make an enormous difference to the lives of people in Australia and around the world.

Following extensive consultation in 2015, we identified three strategic priority areas. Firstly, a drive for academic excellence in research and education. Universities are often classified as ‘research intensive’ or ‘teaching intensive’. UNSW is proud to be an exemplar of both. We are amongst a limited group of universities worldwide capable of delivering research excellence alongside the highest quality education on a large scale. Secondly, a passion for social engagement, which improves lives through advancing equality, diversity, open debate and economic progress. Thirdly, a commitment to achieving global impact through sharing our capability in research and education in the highest quality partnerships with institutions in both developed and emerging societies. We regard the interplay of academic excellence, social engagement and global impact as the hallmarks of a great forward-looking 21st century university.

To achieve this ambition we are attracting the very best academic and professional staff to play leadership roles in our organisation.

UNSW BEHAVIOURS

UNSW recognises the role of employees in driving a high performance culture. The behavioural expectations for UNSW are below.

Please refer to the UNSW Behavioural Indicators for the expectations of your career level (D/E).
OVERVIEW OF RELEVANT AREA AND POSITION SUMMARY

The School of Civil and Environmental Engineering is the largest School in the Faculty of Engineering with over 3,300 students and an operating budget of over $23 million. The School has 48 full time academic staff, 30 professional and technical staff and 80 research only appointments. The School’s mission is to develop well-educated graduates with the essential skills, attributes and knowledge that will enable them to practice as professional civil or environmental engineers; and to conduct research and development of international distinction to meet the needs of the discipline, industry and society. For further information about the School, please visit http://www.civeng.unsw.edu.au/

The purpose of this role is to conduct independent research and deliver excellent teaching in the area of Structural Engineering and Structural Health Monitoring and to play a significant leadership role within the School in supporting the achievement the teaching and service missions of the School and Faculty.

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 in the area of expertise.

The role of position reports to the Head of School, and has nil direct reports.

RESPONSIBILITIES

It is expected that the appointee level D 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 Associate Professor (Level D) include (but 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.
- High level contribution to broad administrative functions in the School and/or University, 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** (Level E) include (but 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 educational policy and curriculum areas within the discipline.
- High level contribution to development of policy and broad administrative functions within the School and/or University, course coordination, attending departmental, faculty 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.

**Associate Professor**

- PhD in Structural Engineering 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.

Professor
• PhD in Structural Engineering 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.

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.