

Position Description

Lecturer/Senior Lecturer/Associate Professor in Geotechnical Engineering

Position Number: 00058319
Position Title: Lecturer/Senior Lecturer/Associate Professor
Date Written: September 2019

Faculty / Division: Faculty of Engineering
School / Unit: School of Civil and Environmental Engineering
Position Level: Level B/C/D

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.

VALUES IN ACTION: OUR UNSW BEHAVIOURS

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



Delivers high performance and demonstrates service excellence.



Thinks creatively and develops new ways of working. Initiates and embraces change.



Builds
Collaboration

Works effectively within and across teams. Builds relationships with internal and external stakeholders to deliver on outcomes.



Embraces
Diversity

Values individual differences and contributions of all people and promotes inclusion.



Displays
Respect

Treats others with dignity and empathy. Communicates with integrity and openness.

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 55 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 incumbent of this position will conduct independent research and deliver excellent teaching in the area of Geotechnical Engineering and, for Level D, play a significant leadership role within the School in supporting the achievement the teaching and service missions of the School and Faculty.

The School of Civil and Environmental Engineering is looking to recruit an exceptional candidate to conduct high impact research, deliver outstanding teaching and student experience and build industry engagement in the field of Geotechnical Engineering. Based within the School's internationally recognised Centre for Infrastructure Engineering and Safety (CIES), the appointees will join existing, dynamic discipline group with strong research.

Exceptional candidates with expertise in one or more of the following are encouraged to apply:

- Soil mechanics,
- Geotechnical earthquake engineering,
- Soft soils and rock engineering,
- Micro-mechanics of multi-phase porous media spanning solid-fluid interaction processes and scaled simulation techniques,
- Reservoir engineering,
- Uncertainty and geo-variability,
- Geo-energy,
- Sustainability and geo-environmental engineering.

A level B academic 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.

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

This position reports to the Head of School.

RESPONSIBILITIES

It is expected that the appointee 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.

Specific responsibilities for the role of **Lecturer** (Level B) include (but not limited to):

- 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.

The specific duties of the **Senior Lecturer** (Level C) 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 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.

It is expected that the appointee 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** (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 appointee 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.

SELECTION CRITERIA

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

Lecturer:

- PhD in Geotechnical Engineering or related area.
- 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.
- Demonstrated ability and willingness to deliver high quality and innovative teaching and student experience to both undergraduate and postgraduate 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.

Senior Lecturer:

- PhD in Geotechnical Engineering 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.
- Experience in successfully recruiting and supervising 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 policies and procedures.

Associate Professor:

- PhD in Geotechnical 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.

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.