

# **Position Description**

# Associate Professor / Professor in Geospatial Engineering

Position Number: 62063

Position Title: Associate Professor/Professor in

Geospatial Engineering Date Written: June 2018 Faculty / Division: Faculty of Engineering

School / Unit: School of Civil and Environmental

Engineering

Position Level: Level D/E

# 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 (level D/E).

# Demonstrates Excellence

Delivers high performance and demonstrates service excellence

# Drives Innovation

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

# Builds Collaboration

Works effectively within and across teams. Builds relationships with internal/external stakeholders to deliver 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, including Surveying, is the largest School in the Faculty of Engineering, with approximately 2600 student enrolments and a budget of over \$20 million. The School has 48 full time academic staff, 27 professional staff and technical staff and 75 research only appointments. The School 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 <a href="http://www.civeng.unsw.edu.au/">http://www.civeng.unsw.edu.au/</a>.

The purpose of this role is to deliver outstanding research and teaching in the area of Geospatial Engineering – Remote Sensing (including any of the sub-disciplines of Surveying, Geodesy, Remote Sensing/Photogrammetry or Mapping/GIS). The position will link between Geospatial Engineering and Civil and/or Environmental Engineering.

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 expertise.

The role of Associate Professor/Professor reports to the Head of School and has no direct reports.

# RESPONSIBILITIES

Specific responsibilities of the Associate Professor 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 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;
- Provide a significant contribution to the profession and discipline;

 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.

# Specific duties of the Professor include:

- 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;
- 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;
- 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.

### **SELECTION CRITERIA**

### Associate Professor:

- PhD in Geospatial Engineering, Remote Sensing, or a related field;
- 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;
- Knowledge of health and safety responsibilities and commitment to attending relevant health and safety training.

# Professor

- PhD in Geospatial Engineering, Remote Sensing, or a related field;
- 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;
- Knowledge of health and safety responsibilities and commitment to attending relevant health and safety training.

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.