POSITION DESCRIPTION

**School of Electrical, Mechanical and Infrastructure Engineering**
Melbourne School of Engineering

# Lecturer / Senior Lecturer in Surveying

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| **POSITION NO** | 0045650 |
| **CLASSIFICATION** | Lecturer (Level B) or Senior Lecturer (Level C) |
| **SALARY** | $95,434 - $113,323 p.a. (Level B)<br>$116,901 - $134,792 p.a. (Level C)<br>Appointment based on qualifications and experience |
| **SUPERANNUATION** | Employer contribution of 17% |
| **EMPLOYMENT TYPE** | Full-time continuing position available<br>The Melbourne School of Engineering is strongly committed to supporting diversity and flexibility in the workplace. Applications for part-time or other flexible working arrangements will be welcomed and will be fully considered subject to meeting the inherent requirements of the position. |
| **OTHER BENEFITS** | http://about.unimelb.edu.au/careers/working/benefits |
| **CONTACT FOR ENQUIRIES ONLY** | Prof Stephan Winter \| Tel +61 3 8344 7875 \| Email winter@unimelb.edu.au<br>*Please do not send your application to this contact* |

For information about working for the University of Melbourne, visit our websites:
about.unimelb.edu.au/careers

# Position Summary

The Department of Infrastructure Engineering in the School of Electrical, Mechanical and Infrastructure Engineering is seeking to appoint a Lecturer or Senior Lecturer in Surveying: A dynamic teaching-and-research team member that can develop a portfolio in surveying, positioning and mapping (for example, but not limited to, real-time high-accuracy positioning, cadastral surveying, UAVs, robotics /, GPS, LiDAR, indoor/underground/mining positioning, archeology, or digital construction). The candidate would contribute to the initiatives in Geomatic Engineering and in the Melbourne School of Engineering (MSE), such as the ones in BIM / asset management, in MUASIP, in autonomous systems, in smart cities, urban land administration, in intelligent transportation.

The appointee will contribute to the collaborative, inter-disciplinary research environment at the University of Melbourne, and also play a significant role towards realizing the Melbourne School of Engineering industry engagement targets. Consequently, the appointee will be expected to develop an internationally recognised research portfolio, as well as establish funding streams to support these portfolios. The appointee will also contribute to teaching and curriculum development within Geomatic Engineering and cognate disciplines.

The Melbourne School of Engineering is strongly committed to supporting diversity and flexibility in the workplace. Applications for part-time or other flexible working arrangements will be welcomed and will be fully considered subject to meeting the inherent requirements of the position. Consistent with this, the Melbourne School of Engineering is seeking to increase the diversity of the workforce and the representation of women in areas they have been traditionally under-represented. Consistent with this the School is seeking to increase the representation of women in the academic workforce across engineering disciplines. Under a Special Measure, under Section 12 (1) of the Equal Opportunity Act 2010 (Vic) the School is seeking to lift the representation of women from 20% in 2014 to at least 25% over the next 5 years, and strongly encourages applications from suitably qualified female candidates.

# 1.Selection Criteria

## 1.1 ESSENTIAL

- A PhD in Surveying and Geomatic Engineering or a cognate discipline;
- Independent research experience relevant to surveying and mapping;
- A track record of applying for competitive research funding;
- A track record of quality research as evidenced by research publications in high-quality journals, conferences and technical reports;
- Demonstrated potential to achieve the highest levels of scholarship in engineering research;
- Capacity to teach effectively and develop high quality learning experiences and assessment tools across a broad range of subjects, including the capacity to develop and deliver seminars and lectures and other teaching activities;
- Excellent communication and interpersonal skills to engage with industry, government, research groups, diverse student cohort and a variety of other stakeholders;
- Demonstrated ability to work as part of a team, and build rapport with all levels of staff within a diverse work environment;
- A willingness and ability to supervise graduate research students;
- Exhibited commitment to the highest standards of scientific and ethical integrity.

**In addition to the above for appointment at Level C:**

- A strong publication record and demonstrated independence of scholarship;
- Demonstrated ability to teach small and large classes effectively at tertiary level including design and project studies in civil and other infrastructure engineering disciplines and to develop courses and course material;
- A successful record of attracting competitive research funding;
- Experience with undertaking collaborative research projects as part of a team across institutions and/or disciplines;
- A successful record of engaging industry, government and/or the community in teaching and research;
- Experience in supervision of research higher degree students to timely completion.

### 1.2 DESIRABLE

- Relevant practical experience and track record of industry engagement;
- Experience in curriculum development and implementation at undergraduate and postgraduate level that will maintain the home Department's programs at the highest international standards.

## 2.Key Responsibilities

### 2.1RESEARCH

- Independently plan and carry out fundamental and application-oriented research;
- Generate conference papers for presentation at national and international conferences;
- Publish research outcomes on a regular basis by writing in high-impact journals, with the goal of submitting at least two per year as first-author;
- Develop independent research and apply for grants;
- Actively engage academic and industry partners to establish effective collaborations between multidisciplinary groups across the school, the university, and national and international research/industry partners in relevant areas of research;
- Supervise PhD, research masters, and coursework research projects;
- Contribute to knowledge through scholarship, publications in leading journals and with leading publishers, and presentations;
- Contribute to the success of the research and innovation program within the Melbourne School of Engineering;
- Actively seek funding opportunities to develop a program of research.

## 2.2 TEACHING AND LEARNING

- Contribute to the delivery of relevant subjects in the University's New Generation Undergraduate degrees and the Master of Engineering and Master of Information Technology (Spatial), as directed by the Head of Department;
- Contribute to the development and reviews of the curriculum, to project-based and field-based learning, to teaching innovation, and to the use of innovative technology in teaching;
- Perform marking and assessment duties and supervise casual teaching support staff in their teaching duties;
- Teach subjects to a standard that delivers a high-quality learning experience;
- Ensure availability for consultation with students that fosters their learning;
- Supervise coursework and higher-degree research students in their research projects;
- Strive for continued improvement of teaching quality, teaching practices, teaching material to enhance student learning.
- Contribute to teaching at undergraduate, honours and postgraduate level; engage in independent scholarship and/or research and/or professional activities appropriate to your profession or discipline.

## 2.3 ENGAGEMENT

- Build and foster partnerships with industry, government, collaborators at other universities, and other stakeholders that contribute to teaching and research;
- Actively participate in professional activities including consulting, workshops, meetings of professional societies, and short courses for external participants;
- Participate in external department activities such as student events, school visits and industry liaison activities;
- Engage in knowledge transfer and community activities beyond the university.

## 2.4 LEADERSHIP AND SERVICE

- Take a leading role in the department to actively foster and participate in industry liaison activities consistent with the Department of Infrastructure Engineering's business plan;
- Undertake administration primarily relating to your activities at the institution and may be required to perform the full academic responsibilities of and related administration for the coordination of an award program of the institution;
- Drive and lead departmental committees and/or projects as required;
- Participate in administrative functions as required;
- Participate in industry liaison activities as arranged by the department;
- Undertake other tasks as requested by the supervisor or the Head of Department;
- Undertake Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in Section 4.

### In addition to the above, responsibilities for Senior Lecturer will include:

- Make original and innovative contributions to scholarship, research and teaching in Geomatic Engineering;

- Supervise both undergraduate and graduate students and play a significant role in research projects including, where appropriate, leadership of a research team;
- Foster collaborations with other scientists to develop a multidisciplinary approach to research.
- Make a significant contribution to, and advancement of the profession/discipline;
- Make a significant contribution to the governance and collegial life inside and outside of the Melbourne School of Engineering and a significant role in knowledge transfer and community engagement;
- Contribute to strategic planning and policy decision making processes by actively participating in planning or committee work;
- Liaise with others in the university to develop a collaborative approach to enhance the educational and research programs of the Melbourne School of Engineering.

## 3.Equal Opportunity, Diversity and Inclusion

The University is an equal opportunity employer and is committed to providing a workplace free from all forms of unlawful discrimination, harassment, bullying, vilification and victimisation. The University makes decisions on employment, promotion and reward on the basis of merit.

The University is committed to all aspects of equal opportunity, diversity and inclusion in the workplace and to providing all staff, students, contractors, honorary appointees, volunteers and visitors with a safe, respectful and rewarding environment free from all forms of unlawful discrimination, harassment, vilification and victimisation. This commitment is set out in the University's People Strategy 2015-2020 and policies that address diversity and inclusion, equal employment opportunity, discrimination, sexual harassment, bullying and appropriate workplace behaviour. All staff are required to comply with all University policies.

The University values diversity because we recognise that the differences in our people's age, race, ethnicity, culture, gender, nationality, sexual orientation, physical ability and background bring richness to our work environment. Consequently, the People Strategy sets out the strategic aim to drive diversity and inclusion across the University to create an environment where the compounding benefits of a diverse workforce are recognised as vital in our continuous desire to strive for excellence and reach the targets of Growing Esteem.

## 4.Occupational Health and Safety (OHS)

All staff are required to take reasonable care for their own health and safety and that of other personnel who may be affected by their conduct.

OHS responsibilities applicable to positions are published at:

http://safety.unimelb.edu.au/topics/responsibilities/

These include general staff responsibilities and those additional responsibilities that apply for Managers and Supervisors and other Personnel.

# 5.Other Information

## 5.1.SCHOOL OF ELECTRICAL, MECHANICAL AND INFRASTRUCTURE ENGINEERING

The School of Electrical, Mechanical and Infrastructure Engineering undertakes teaching and research across a range of disciplines that are internationally recognised for their contribution to fundamental research. It has a number of well-established industry linkages and international partnerships. It is building a vibrant profile of interdisciplinary research, working with industry with an aim to contribute to society. It offers a comprehensive range of accredited Masters of Engineering and Master of Information Technology programs taught through the Electrical, Mechanical and Infrastructure departments as well as professional Masters programs. It has a substantial cohort of research higher degree students.

The School's aim is to attract and retain outstanding staff. The School is highly supportive of increasing the number of female staff.

## 5.2.DEPARTMENT OF INFRASTRUCTURE ENGINEERING

www.ie.unimelb.edu.au

Combining civil engineering, environmental engineering and geomatics in one department creates a broad scope for our research and engineering education. Our focus is to solve infrastructure problems in a sustainable way.

The Departmental philosophy is to attract and retain the highest quality staff available in order to maintain a vigorous research effort. Our strategic plan is to address the most urgent contemporary problems of our rapidly developing industrial society, with investigations into the engineered and natural environment.

## 5.3.MELBOURNE SCHOOL OF ENGINEERING

www.eng.unimelb.edu.au

The Melbourne School of Engineering is one of Australia's leading Engineering Schools and aims to be the school of choice for the highest performing students and research staff in Australia and within the Time Higher Education Supplement top twenty Schools of Engineering internationally by 2020.

## 5.4.THE UNIVERSITY OF MELBOURNE

The University of Melbourne is a leading international university with a tradition of excellence in teaching and research. The University offers staff many benefits and prospective staff are encouraged to view the following web links:

www.unimelb.edu.au

www.growingesteem.unimelb.edu.au

www.unimelb.edu.au/careers

http://research.unimelb.edu.au/research-at-melbourne/our-strategy

## 5.5.GOVERNANCE

The Vice Chancellor is the Chief Executive Officer of the University and responsible to Council for the good management of the University.

Comprehensive information about the University of Melbourne and its governance structure is available at www.unimelb.edu.au/unisec/governance.html.