

POSITION DESCRIPTION

Academic Positions

(In addition to the Position Classification Standards)

Position Title: Lecturer in Civil (Geotechnical) Engineering
 Level: B
 Faculty/Division: Engineering
 Department/Location: School of Civil, Mining and Environmental Engineering

Primary Purpose of the Position:

To contribute strongly to the geotechnical teaching and research programs of the School including ARC Centre of Excellence for Geotechnical Sciences and Engineering.

Position Environment:

The position is within the School of Civil, Mining & Environmental Engineering. The appointee will play a key role in teaching and research within the School. The appointee will contribute significantly to one or more of the research strengths with specific focus in the ARC Centre of Excellence for Geotechnical Science and Engineering (CGSE) and the Centre for Geomechanics and Railway Engineering (GRE). The main research directions within CGSE are: (a) Soft Clay Engineering (b) Railway Engineering

Major Accountabilities/Responsibilities:

Responsibilities		Outcome	Office Use Only
1.	Teach undergraduate and post-graduate core fundamental engineering and Geotechnical Engineering subjects to a high standard as assigned by the Head of School.	Completion of assigned teaching duties to a high standard as assessed by peer review, student surveys and other performance review systems.	
2.	Conduct original research in civil or geotechnical engineering	Quality journal publications and external grant funding	
3.	Leadership in Geotechnical Research; promote team efforts and being able to contribute to existing strengths in ground improvement, soft clay engineering, transportation Geomechanics, numerical modelling etc.	Collaborative research projects through nationally competitive grants	
4.	Effective academic supervision of postgraduate research projects and completion of high quality theses.	High quality theses , numbers of students, timeliness of completion	
5.	Proactively publish in highly ranked journal and peer reviewed conferences	An increase in quality publications and research impact	
6.	Obtain external national competitive grants and internal research funding.	Increase number and value of grants over a two year period.	
7.	To review and make recommendations in relation to research directions in association with members of the relevant Research Centres and other School staff.	An increase in publications, grants and consultancies.	
8.	Represent the geotechnical discipline at Faculty and University	Increased profile of geotechnical	

	levels, as well as in external forums	engineering discipline	
9.	Participate in a range of administrative functions connected with teaching and research, including attendance at School and Faculty meetings and membership of committees.	Assisting administration at School and Faculty levels	
10	Supervisory roles: Communicate and consult with staff on workplace and staffing matters.	To foster direct relationships with staff and enhance engagement with the organisation.	Ongoing
11.	Observe principles and practices of Equal Employment Opportunity	To ensure fair treatment in the workplace	Ongoing
12.	Have OH&S responsibilities, accountabilities and authorities as outlined in the http://Staff.uow.edu.au/ohs/commitment/responsibilities/ document	To ensure a safe working environment for self & others.	Ongoing

Inherent Requirements:

This position description outlines the major accountabilities/responsibilities and the selection criteria against which you will be assessed as suitable for the position. As such there will be specific job requirements that we refer to as Inherent Requirements.

Inherent Requirements refer to your ability to:

- Perform the essential duties and functional requirements of the job;
- Meet the productivity and quality requirements of the position;
- Work effectively in the team or other type of work organisation concerned; and
- Do the job without undue risk to your own or others health, safety and welfare at work.

If you have any injuries, illness, disorder, impairment, condition or incapacity that may affect your ability to perform the inherent requirements of the position, we encourage you to discuss this with the University to assist in the process of identifying reasonable adjustments to enable you to perform the duties of the position. The University wants to place you in the best situation to use your skills effectively in the position you are applying for at the University.

Reporting Relationships:

Position Reports to:	Professor Buddhima Indraratna
The position supervises the following positions:	Nil
Other Key Contacts:	Sub Dean Discipline Advisor Faculty Executive Manager

Key Relationships:

Contact/Organisation:

School Committee
Faculty Committee

Purpose & Frequency of contact

Quarterly meetings
Quarterly meetings

Key Challenges:

1. Contribute to teaching to undergraduate subjects in Civil Engineering- as specified by A/Prof Alex Remennikov , Head of School of Civil, Mining and Environmental Engineering.
2. Contribute strongly to research outputs and funding in the Faculty.
3. Demonstrate research leadership and forming teams for securing and conducting cutting-edge research projects.
4. Conduct research related to soft soil engineering, ground improvement, transportation geomechanics, numerical and

physical modelling of geotechnical processes or other complementary areas.

SELECTION CRITERIA - Knowledge & Skills:

Essential:

- Ability to teach undergraduate Civil Engineering subjects to a high standard.
- Expertise in research in the discipline of Geotechnical Engineering including soft soil engineering, ground improvement, transportation geomechanics, numerical and physical modelling of geotechnical processes or other complementary areas
- Sound analytical, experimental or numerical skills applied to geomechanics
- Strong written and oral communication skills

Desirable

- Practical experience Geotechnical and/or Geoenvironmental Engineering
- Demonstrated excellence in developing subjects, coordinating and teaching at mainly undergraduate level, including fundamental subjects in Civil Engineering
- Teaching skills at post graduate coursework level
- Numerical modelling using well-known software including FEM and FDM

SELECTION CRITERIA - Education & Experience:

Essential:

- PhD in Civil (specialised in Geotechnical Engineering or strongly related discipline)
- Proven research track record and/or management of research projects in Geotechnical Engineering or related disciplines, e.g. problematic soil improvements, constitutive modelling and behaviour of earth structures, transportation Geotechnics, and geotechnical modelling
- A strong scholarly publication record especially in reputed journals

Desirable:

- Experience in the supervision of research students and the management of research projects desirable.
- Ability to attract external grants through independent efforts as well as through team work.

Personal Attributes:

- Highly motivated and able to work effectively, both independently or in a team.

Special Job Requirements:

- May require some after hours work from time to time, e.g. field trips etc.

Approval:

Approved by Head of Unit: _____

Date: _____

Approved by Human Resources: _____

Date: _____

POSITION CLASSIFICATION STANDARD - Teaching and Research

Level: B
Title: Lecturer

Description

A position classification standard describes the broad categories of responsibility attached to academic staff at different levels. The standards are not exhaustive of all tasks in academic employment, which is by its nature multi-skilled and involves an overlap of duties between levels. **Therefore the standards should not be applied mechanistically. Quality of performance is the principal factor governing level of appointment of individuals, and a broadly-worded skill base is set out for each level.**

All levels of academic staff can expect to make a contribution to a diversity of functions within their institutions. Such functions include teaching research participation in professional activities and participation in the academic planning and governance of the institution. The balance of functions will vary according to level and position and over time.

- General Standard
- Specific Duties
- Skill Base

General Standard

A Level B academic is expected to make contributions to the teaching effort of the institution and to carry out activities to maintain and develop her/his scholarly, research and/or professional activities relevant to the profession or discipline.

Specific Duties

Specific duties required of a Level B academic may include

- The conduct of tutorials, practical classes, demonstrations, workshops, student field excursions, clinical sessions and studio sessions.
- Initiation and development of subject material.
- Acting as subject coordinators.
- The preparation and delivery of lectures and seminars.
- Supervision of the program of study of honours students or of postgraduate students engaged in course work.
- Supervision of major honours or postgraduate research projects.
- The conduct of research.
- Involvement in professional activity.
- Development of course material with appropriate advice from and support of more senior staff
- Marking and assessment.
- Consultation with students.
- A range of administrative functions the majority of which are connected with the subjects in which the academic teaches.
- Attendance at departmental and/or faculty meetings and/or membership of a number of committees.

Skill Base

A Level B academic shall have qualifications and/or experience recognised by the institution as appropriate for the relevant discipline area. In many cases a position at this level will require a doctoral or masters qualification or equivalent accreditation and standing. In determining experience relative to qualifications, regard is had to teaching experience, experience in research, experience outside tertiary education, creative achievement, professional contributions and/or to technical achievement.