

# POSITION DESCRIPTION

Position Title: Lecturer/Senior Lecturer in Geotechnical Engineering

Organisation Unit: School of Civil Engineering

Position Number: 1017114

Type of Employment: Full time, continuing

Classification: Academic Level B or C

**Application Closing Date:** 30 October 2015

# THE UNIVERSITY OF QUEENSLAND

The University of Queensland (UQ) contributes positively to society by engaging in the creation, preservation, transfer and application of knowledge. UQ helps shape the future by bringing together and developing leaders in their fields to inspire the next generation and to advance ideas that benefit the world. UQ strives for the personal and professional success of its students, staff and alumni. For more than a century, we have educated and worked with outstanding people to deliver **knowledge leadership for a better world.** 

UQ ranks well within the top 100 universities worldwide, measured through a number of major independent university rankings: the Academic Ranking of World Universities, Times Higher Education World University Rankings, US News Best Global Universities Rankings, QS World University Rankings and Performance Ranking of Scientific Papers for World Universities, and is indeed in the top 50 in some of these rankings. In 2013, UQ attracted more Australian Research Council funding than any other Australian university or research body.

UQ has an outstanding reputation for the quality of its teachers, its educational programs and employment outcomes for its students. Our students remain at the heart of what we do. The UQ experience –the *UQ Advantage* – is distinguished by a research enriched curriculum, international collaborations, industry engagement and opportunities that nurture and develop future leaders. UQ has a strong focus on teaching excellence, winning more national teaching excellence awards than any other in the country and attracting the majority of Queensland's highest academic achievers, as well as top interstate and overseas students.

UQ is one of Australia's Group of Eight, and a founding member of Universitas 21, an international consortium of leading research-intensive universities. UQ is also the largest university in Queensland.

Our 50,000-plus strong student community includes more than 13,000 postgraduate scholars and more than 12,000 international students from 144 countries, adding to its proud 215,000-plus alumni. The University has more than 7,000 academic and professional staff and a \$1.6 billion annual operating budget. Its major campuses are at St Lucia, Gatton and Herston, in addition to teaching and research sites around Queensland and Brisbane city. The University has six Faculties and four University-level Institutes. The Institutes, funded by

government and industry grants, philanthropy and commercialisation activities, have built scale and focus in research areas in neuroscience, biomolecular and biomedical sciences, sustainable minerals, bioengineering and nanotechnology, as well as social science research.

#### **Organisational Environment**

The School of Civil Engineering has a long and proud record of academic achievement and involvement with the profession and industry. It is among the leaders in civil engineering education and research in Australia and is renowned for teaching and research in water, environmental, geotechnical, structural and transportation engineering.

The School currently employs 33 academic and 39 research staff who contribute to its teaching and research programs, and is in a growth phase. The School's annual operating budget is approximately \$8.8 million, including annual industry funding of about \$1.5 million.

The School contributes to teaching in the Bachelor of Engineering (BE) with over 1,000 students enrolled in years 2, 3 and 4 of Civil Engineering, Civil & Geotechnical Engineering, Mining & Geotechnical Engineering, and Civil & Environmental Engineering. There are also approximately 80 students enrolled in research higher degrees, including almost 40 enrolees in Geotechnical Engineering. The School has extensive concrete, geotechnical, hydraulics, fire and structures laboratory facilities in the new Advanced Engineering Building that are used for teaching, research and commercial testing.

Further information and details of the research interests of academic staff may be accessed on the school's web site at <a href="https://www.civil.uq.edu.au">www.civil.uq.edu.au</a>

### The Geotechnical Engineering Centre

The Geotechnical Engineering Centre within the School of Civil Engineering at UQ currently numbers seven academic and three research staff, plus collaborators in other Schools. The Centre is co-funded by Golder Associates, Rio Tinto, AngloGold Ashanti, BHP Billiton and UQ, with total funding of \$6 million over 5 years. The Director of the Centre is Professor David Williams. The Centre aims to be recognised as a leader in its field, both nationally and internationally and is seeking up to two additional academic appointments that will complement the current skills and expertise in Geotechnical Engineering. The appointees will work closely with existing and future academic and research staff in the Geotechnical field within the Schools of Civil Engineering, Mechanical and Mining Engineering, and Earth Sciences at UQ.

The Geotechnical Engineering Centre supports the highly successful Civil & Geotechnical Engineering and Mining & Geotechnical Engineering Dual Major Degree Programs that commenced in 2012, which are unique in Australia. The Dual Major Degree Programs produce Civil and Mining Engineering graduates with a strong specialisation in Geotechnical Engineering to meet the ongoing high demand from Geotechnical and Mining Engineering Consultants, Mining Companies and Civil and Mining Contractors in Australia and overseas. The Geotechnical Engineering Programs are among the most sought after in the Faculty, and will graduate up to 70 students annually from 2015.

The Centre also promotes research in the Geotechnical Engineering field, providing enhanced applied and fundamental research opportunities, and facilitating the further growth of Postgraduate Research Student enrolments (which currently number almost 40), and future Continuing Professional Development courses. In addition, the Centre offers enhanced capacities for high-level consulting, such as expert peer review and expert witness, and enhanced testing facilities for both research and commercial testing.

Information about the Faculty and the School may be accessed on the Faculty's web site at <a href="http://www.ug.edu.au/faculty-school">http://www.ug.edu.au/faculty-school</a>.

Information about the Geotechnical Engineering Centre may be accessed on the Centre's web site at <a href="http://geotechnical.civil.uq.edu.au/">http://geotechnical.civil.uq.edu.au/</a>, or contact Professor David Williams by email at <a href="mailto:D.Williams@uq.edu.au">D.Williams@uq.edu.au</a>.

#### Information for Prospective Staff

Information about life at UQ including staff benefits, relocation and UQ campuses is available at http://www.uq.edu.au/current-staff/working-at-uq.

The University of Queensland <u>Enterprise Agreement</u> outlines the position classification standards for Levels A to E.

# **DUTY STATEMENT**

# **Primary Purpose of Position**

The primary purpose of the position is to complement and initiate leading teaching and research across the broad field of Geotechnical Engineering and to further develop the national and international profile of the School of Civil Engineering at UQ. Well qualified and experienced applicants in soil mechanics and/or in weak and hard rock mechanics are encouraged to apply.

#### **Duties**

Duties and responsibilities include, but are not limited to:

# **Teaching and Learning**

- Contribute to Geotechnical Engineering curriculum development and teaching quality assurance at undergraduate and postgraduate levels.
- Contribute to an improvement in the staff;student ratio within Capstone Geotechnical Engineering courses.
- Initiate and develop course material in a specialisation of Geotechnical Engineering.
- Coordinate courses.
- Supervise research students at honours and postgraduate levels.
- Consult with and mentor undergraduate and postgraduate students.
- Provide support for other positions during absences.

# Research

- Develop internationally leading research in the field of Geotechnical Engineering.
- Make a substantial contribution to research through publications in high quality, high impact journals and conferences.
- Liaise with government agencies and industry to initiate competitively-funded research and contract research relevant to industry and government.
- Work with colleagues and postgraduates in the development of joint research projects.

# **Service and Engagement**

- Perform a range of administrative functions within the School.
- Contribute to the processes that enable the academic team to manage the work of the School, including participating in School decision-making and serving on School committees.
- Foster the School's relationships with industry, government departments, professional bodies and the wider community.
- Any other duties as reasonably directed by your supervisor.

#### Other

Ensure you are aware of and comply with legislation and University policy relevant to the duties undertaken, including:

- The University's Code of Conduct.
- Requirements of the Queensland occupational health and safety (OH&S) legislation and related OH&S responsibilities and procedures developed by the University or School.
- The adoption of sustainable practices in all work activities and compliance with associated legislation and related University <u>sustainability responsibilities and</u> <u>procedures</u>.
- Requirements of the Education Services for Overseas Students Act 2000, the National Code 2007 and associated legislation, and related <u>responsibilities and</u> <u>procedures</u> developed by the University.

# **Organisational Relationships**

The position reports through the Director of the Geotechnical Engineering Centre to the Head of School.

### **SELECTION CRITERIA**

# **Essential**

- PhD in the field of Geotechnical Engineering or a closely related field.
- Demonstrated teaching skills at undergraduate and postgraduate levels, including innovation.
- Evidence of a contribution to research, including a strong publication record, successful external grant applications, and research supervision of students, appropriate to opportunity.
- Ability to work collaboratively with colleagues.
- Ability to establish effective relationships and to represent and promote the academic discipline at a university and wider community level, including industry, government and professional bodies.
- Ability to provide expert knowledge and advice to industry and government.
- High level of communication and interpersonal skills.

#### Desirable

- Developed industry liaisons and professional contacts.
- Experience in liaising and collaborating with external agencies to develop cooperative research initiatives.
- Chartered Engineer or Member of an appropriate professional organisation.

#### **Seminar**

Applicants invited for interview may be expected to present a seminar in conjunction with the selection interview process.

#### **Qualification Verification**

An appointment to this position is subject to the verification of the highest academic qualification from the conferring institution.

The University of Queensland is committed to equity, diversity and inclusion.