

Position description

Lecturer

Position number	
Department/Unit	Department of Civil Engineering
Faculty/Division	Faculty of Engineering
Classification (salary rates)	Level B
Employment type	Full-time
Work location	Clayton campus
Date document created or updated	19 September 2012

Position purpose

The Lecturer in Water Engineering is required to undertake academic duties that include lecturing in, and some administration of, the undergraduate and postgraduate teaching programs; and supervision of postgraduate research students. The successful applicant is also expected to be involved in the work of urban water group and in particular projects of the CRC for Water Sensitive Cities and Monash University's Centre for Water Sensitive Cities. The ultimate focus of the activities to be undertaken by the successful applicant is to refine and enhance the knowledge of engineering and science.

- Reporting Line: The position reports to the Head of Department, Professor Jeff Walker.
- Supervisory responsibilities: Postgraduate/PhD research students
- · Financial delegation and/or budget responsibilities: Nil

Organisational context

Monash University is an energetic and dynamic university committed to quality education, outstanding research and international engagement. A member of Australia's Group of Eight research intensive universities, it seeks to improve the human condition and is committed to a sustainable future. Monash has six campuses in Victoria, a campus in Malaysia, a campus in South Africa, a centre in Prato, Italy, and numerous international partnerships and cooperative ventures. Monash has over 63,000 equivalent full-time students spread across its Australian and off-shore campuses, and over 7,200 full time equivalent staff. Almost 3,000 of these staff members are academic staff.

The **Faculty of Engineering** is one of the largest in Australia, renowned worldwide for the quality of our teaching and research and the calibre of its graduates.

Our research activities provide a platform for establishing a thriving educational enterprise and our staff are committed to creating a dynamic learning environment. The research activities range from fundamental studies to research with a strong applications orientation.

The Faculty has five departments and one School operating from the Clayton campus of Monash University – Biological Engineering, Chemical Engineering, Civil Engineering, Electrical and Computer Systems Engineering, Materials Engineering and Mechanical and Aerospace Engineering. The School of Engineering operates from the Malaysian campus. In addition, there are 15 research institutes and centres with researchers involved in more than 12 cross institutional centres focusing on key technologies. Monash Engineering also has strong links with other research organisations including CSIRO and DSTO.

Monash Engineering offers a comprehensive range of education programs – bachelor degrees, graduate and postgraduate certificates, master degrees by coursework, masters by research and PhD in a wide range of disciplines including: aerospace, biological, chemical, civil, electrical and computer systems, environmental, materials, mechanical, mechatronics and telecommunications engineering.

A member of the influential Group-of-Eight (GO8) research universities, the Faculty of Engineering is involved in extensive research activities. To support this activity and the teaching program the Faculty has well-equipped laboratories and many items of large infrastructure, from advanced imaging and visualisation facilities and electron microscopes, to the largest wind tunnel in the southern hemisphere.

Monash Engineering currently has around 400 staff, 300 higher-degree research students and more than 4000 coursework students enrolled in Australia. The budget for the Faculty is approximately \$120M.

The **Department of Civil Engineering** at Monash University enjoys an international reputation for education and research in the four major disciplines of Geotechnical Engineering, Structural Engineering, Transport Engineering, and Water Engineering. It has 25 academic staff, 22 professional staff, 15 research staff, and ~80 (in 2011) postgraduate students working across these disciplines with undergraduate numbers of ~550. Details of the Department can be found <u>http://www.eng.monash.edu.au/civil/</u>

The Department is also a member of the Monash Centre for Water Sensitive Cities, see <u>http://watersensitivecities.org.au/</u> The Department's water group is one of the leading water research groups in Australia.

The Department has considerable physical facilities supporting its research and teaching activities. It is constantly evaluating these facilities in order to meet the level appropriate to the contemporary practice of engineering.

The Department is looking to build on existing research strengths in the areas of urban water systems and/or flooding. This includes any aspects of flooding, water supply, drainage, sewage, health of urban streams and bays, and/or integrated urban water management.

Key result areas and responsibility

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 with appropriate advice from, and support of, more senior staff;
- 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 honours or postgraduate research projects;
- the conduct of research;
- involvement in the projects of the CRC for Water Sensitive Cities and Monash University's Centre for Water Sensitive Cities;
- involvement in professional activity;
- 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; and
- attendance at departmental, school and/or faculty meetings and/or membership of a number of committees.

Key selection criteria

Essential

- 1. PhD qualification in Civil Engineering, Environmental Engineering, Agricultural Engineering or a related field.
- 2. Demonstrated ability to undertake outstanding research (e.g. published in top quality journals);
- 3. Demonstrated ability to successfully supervise postgraduate research students;
- 4. Demonstrated ability to effectively develop and deliver teaching materials at all level levels;
- 5. Demonstrated excellent written and verbal communication skills;
- **6.** Demonstrated ability to effectively work both independently and in multidisciplinary teams, and to make a contribution to research, scholarship and teaching.

Desirable

- 7. Demonstrated ability to obtain external grants for research;
- 8. Relevant industry experience

Other job-related information

• Travel to other campuses of the University may be required from time to time.

Legal compliance

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

- Equal Employment Opportunity, supporting equity and fairness
- Occupational Health and Safety, supporting a safe workplace
- Conflict of Interest (including Conflict of Interest in Research)
- Paid Outside Work
- Privacy
- Research Conduct
- Staff/Student Relationships