MONASH University

Position description

Associate Professor (Structural Engineering)

Department/Unit	Civil Engineering
Faculty	Faculty of Engineering
Classification	Level D
Employment type	Full-time
Work location	Clayton campus

Organisational context

Monash is a university of transformation, progress and optimism. Our people are our most valued asset, with our academics among the best in the world and our professional staff revolutionising the way we operate as an organisation. For more information about our University and our exciting future, please visit www.monash.edu

The Faculty of Engineering is one of the top in Australia, renowned worldwide for the quality and calibre of our teaching, research and graduates. We offer a comprehensive range of undergraduate, graduate, postgraduate and higher degree by research programs in a wide range of engineering disciplines. 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 operating from the Clayton campus of Monash University, Chemical Engineering, Civil Engineering, Electrical and Computer Systems Engineering, Materials Science and 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.

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 strong floor and wind tunnel in the southern hemisphere. To learn more about the Faculty of Engineering, please visit our website.

The **Department of Civil Engineering** at Monash University enjoys an international reputation for education and research in the six major disciplines of Geotechnical Engineering, Structural Engineering, Transport Engineering, Water Engineering, Environmental Engineering and Resources Engineering. It has 35 academic staff, 27 professional staff, 18 research staff, and approximately 160 postgraduate students working across these disciplines, with undergraduate numbers of approximately 650 across years 2 to 4. The Department has considerable physical facilities supporting its research and teaching activities, and is constantly evaluating and upgrading these facilities in order to meet the level appropriate to the contemporary practice of engineering. More information about the department and our research can be found through our website.

The department has recently launched three main research themes including 7 area of research focus. The department is also central to Monash Infrastructure (MI), an institute working with industry to deliver research in areas such as construction, public transport and water sensitive design. The Department is looking to build on existing and strategic research strengths of the University, including sustainable infrastructure. The Associate Professor will be expected to exercise a special responsibility in providing leadership in this field, including research, teaching, professional activities and industry engagement.

Position purpose

The Associate Professor is required to undertake academic duties that include lecturing in, and some administration of, the undergraduate and postgraduate teaching programs, and supervision of post-graduate research students. The successful applicant is expected to contribute to research and teaching of structural units in the context of civil infrastructure design, and construction.

Academics at this level may be appointed in recognition of distinction in their disciplinary area

- **Reporting line:** The position reports to the Head of Department within the Department of Civil Engineering
- **Supervisory responsibilities:** Postgraduate/PhD research students
- **Financial delegation and/or budget responsibilities:** Not applicable

Key responsibilities

The successful candidate will work within the Department of Civil Engineering and will have strong teaching, communication and research skills in the area of sustainable infrastructure including designing and building of structural elements in ways that do not diminish the social and economic processes required to maintain human equity, diversity, and the functionality of natural systems. The successful candidate's research area will be aligned with the structures group vision including "smarter, stronger, more durable structures – informing responsible future practices in structural engineering", within the context of new construction materials, construction techniques and/or reliability assessment for extending the life of new or existing infrastructure.

Specific duties required of a Level D academic may include:

Research and education

- Play a significant role in research projects, including providing leadership to research teams
- Actively engage in his or her specialist research area in line with the department's research strategy, by maintaining a substantial active publications record (high-quality refereed journals), and supervising and mentoring early career researchers and research students
- Monitor the quality of teaching in the relevant discipline and proactively maintain it at a high level
- Foster research excellence through procuring competitive research grants and working with other staff to develop research links
- Make a distinguished personal contribution to the Department teaching program at undergraduate and graduate levels
- Provide innovative and effective leadership for the expansion of the Department's HDR program by attracting high quality HDR students
- Take a leadership role in the department's research strength, where appropriate
- Participate in the department's curriculum planning and development processes, academic committees, and relevant examination processes

Leadership and management

- Contribute to academic and administrative leadership within the department and participate in the development of policy in the department, faculty, and University
- Conduct performance management reviews and engage in mentoring academic staff as appropriate
- Perform administrative and coordinator duties that are necessary for the effective operation of the programs
- Actively participate in the strategic development and administration of the department; and represent the department's interests, views and needs in the broader faculty and University contexts
- Attend departmental, school and/or faculty meetings and play a major role in planning or committee work

External relationships

- Strengthen links with relevant faculties and departments/schools within the University
- Appropriate liaison with campus and faculty administrative staff
- Develop and maintain strong links with the community
- Maintain links and make a significant contribution to the profession and external agencies both nationally and internationally
- Actively contribute to partnering with industry and diversifying the funding base

Key Selection criteria

1. A research doctorate with demonstrated expertise in the field of structural engineering or closely related field
2. An outstanding international reputation in the area of sustainable infrastructure research
3. An outstanding publication record in high impact journals, a consistent record of high level research engagement and productivity, and a demonstrated ongoing commitment to one or more programs of research
4. Demonstrated ability to generate research income, including from both traditional and innovative sources, including from industry
5. Proven professional leadership qualities and capacity for executive administrative responsibilities, and a willingness to make a substantial contribution to all activities of the department, including administration and planning
6. Evidence of sustained relationships with relevant industry, business, government agencies and professional bodies
7. Highly developed skills in leadership, networking and management, including interpersonal and communication skills, and the ability to liaise well with other academics
8. Record of successful supervision of postgraduate research students and the ability to make a significant contribution to postgraduate training programs
9. A demonstrated capability of teaching and education leadership in areas of relevance to infrastructure engineering

Other job related information

- Block teaching for our overseas education program may be required from time to time

Legal compliance

The appointee must be 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