



POSITION DESCRIPTION

Academic Positions

(In addition to the Position Classification Standards)

Position Title: Lecturer in Architectural Engineering/Digital Construction

Level: B

Faculty: Engineering and Information Sciences

School: Civil, Mining & Environmental Engineering (CME)

Primary Purpose of the Position:

This position will play a key role in (i) developing the new curriculum for the Bachelor of Architectural Engineering Honours program in the School of Civil, Mining and Environmental Engineering in the field of Architectural Engineering, (ii) working closely with colleagues in the School of CME and in the Sustainable Buildings Research Centre for the delivery of the program (iii) increasing the perceived value of the discipline in the professional community. The appointee will teach at both undergraduate and postgraduate levels in areas of core Architectural Engineering such as, but not limited to, Building Information Modelling, Architectural Engineering, Architectural Design of sustainable buildings, and Digital Construction Management.

The successful candidate will be expected to establish an extensive research program that *complements and enhances* our research capability in BIM for Sustainable Buildings and Construction. Also, the successful candidate will play a key role in the development and delivery of the Architectural Engineering teaching and research programs at the University of Wollongong.

Position Environment:

The School of Civil, Mining & Environmental Engineering (CME) is one of six schools within the Faculty of Engineering and Information Sciences (EIS) and provides quality undergraduate and postgraduate teaching programs to domestic and international students at the Wollongong Campus, as well as offshore delivery at UOWD.

UOW was rated New South Wales' leading public university for undergraduate student experience in the 2021 Good Universities Guide. It has a world class reputation in teaching and research, recognised with membership to the Group of Eight (Go8) Deans of Engineering and Associates.

Our teaching programs are designed to provide undergraduate and postgraduate students with up-to-date and high-quality training in both the foundations of engineering science and the application of the latest techniques and practices for ecologically and socially sustainable outcomes. We pride ourselves on giving our students a comprehensive education program that is not only relevant to the needs of both industry and the engineering profession with an international focus, but also provides them with lifelong learning attributes for a wide range of careers.

The Architectural Engineering undergraduate honours program was launched in 2020 and has developed from the successes of two Solar Decathlons and the ongoing strong relationship between the School of CME and the Sustainable Buildings Research Centre. Team UOW won entry to, and then went on to win, the Solar Decathlon China Competition held in 2013 with their 'Illawarra Flame House'. The second cohort of Team UOW students then entered and won second place in the Solar Decathlon Middle East competition in November 2018 with their dementia-friendly 'Desert Rose House'. Both the Illawarra Flame and Desert Rose houses are now located adjacent to the SBRC Building, where they function as Living Laboratories and a test-bed for many new technologies and systems.

One of the strengths of the School of CME is the high number of collaborative links with industries within our local region and also nationally and internationally. As a result, we have an extremely strong track record in developing collaborative research programs with industry and in attracting competitive grants from government and industry sources.

The successful applicant will be required to collaborate both with colleagues within the School of CME and those within the Sustainable Buildings Research Centre (SBRC), across research activities and in the delivery of the Architectural Engineering Program. The SBRC is a unique research facility, which organisationally is located within the Faculty of Engineering and Information Sciences, and has as a key focus on research for the improvement of the sustainability and resilience of our new build and existing building stock (see <http://sbrc.uow.edu.au/>). The SBRC works closely with the schools of the faculty, with especially strong links with the School of Civil Mining and Environmental Engineering

The successful candidate will benefit from the funding and research networking opportunities provided by the UOW Global Challenges Program, which is a significant investment by the university in inter-disciplinary research addressing major world problems. The Global Challenges Program is UOW's primary strategic research investment and has the specific aim to bring together researchers from a diverse range of disciplines. The researchers are encouraged to work together and exchange knowledge and skills, via collaborative projects and workshops, to address a significant real-world problem

Major Accountabilities/Responsibilities:

Responsibilities		Outcome
1.	Prepare and deliver lectures and seminars. Conduct tutorials, practical classes, demonstrations, workshops, student field excursions, and studio sessions. This includes initiating, developing, and producing subject/teaching materials for online and face-to-face delivery in BIM and sustainable digital construction subjects, construction management and specialised studio subjects core in Architectural Engineering.	Students are provided with high-quality educational experiences and materials as assessed by peer review, student surveys, and other performance review systems.
2.	Conduct research in Architectural Engineering, particularly in BIM for sustainable building design and construction management.	Remain research active in accordance with the Research Active Policy. Produce high-quality research.
3.	Consult with students.	Quality student experience is delivered.
4.	Collaborate strongly with various industry partners and research centres within and outside the School for both teaching and research.	Recruit local practices to contribute to studio workshops. Secure competitive grant funding to support research activities.
5.	Supervise the program of study of honours students and postgraduate students engaged in course work and/or supervision of major honours or higher degree research students.	Well supported students. Successful on-time completions of PhD and Masters by research students.
6.	Marking and assessment primarily connected with subjects in which the academic teaches.	Students are fairly assessed on their progress in a timely manner.
7.	Undertake limited administrative functions, the majority of which are connected with coordination and delivery of subjects and courses in which the academic teaches.	Subjects are well organised and administered, leading to a quality student experience.
8.	Demonstrate active and constructive participation in Governance and Service activities. This includes attendance at departmental and/or faculty meetings and/or membership of a limited number of Committees and community/professional engagement activities	Make a positive contribution to the Faculty, University, and professional/academic community.

9.	Maintain a standard and balance of performance across the core areas of academic work in accordance with the Academic Performance Framework.	Sustained contribution to the institution and field of expertise.
10.	Observe principles and practices of Equal Employment Opportunity	To ensure fair treatment in the workplace.
11.	Have WH&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.

Reporting Relationships:

Position Reports to:	Head of School, CME
The position supervises the following positions:	Part-time/casual tutors, Higher degree research students and Research Assistants
Other Key Contacts:	Director of SBRC

Key Relationships:

Contact/Organisation:	Purpose & Frequency of Contact:
CME School meetings/committees	The appointee is expected to participate in the School's regular meetings and contribute to academic governance and quality.
EIS 1 st Year Subject Coordinators	Regular contact with Subject Coordinators for the Engineering Common First Year subjects to ensure consistent student experience.
SBRC Academic Staff	Collaboration, attendance at SBRC workshops and staff meetings.

Key Challenges:

1. To help build a new degree program and develop a new breed of engineering professionals to meet the needs of the construction industry as it delivers more sustainable solutions.
2. To be an exemplary instructor and to enable Engineers Australia specified learning outcomes for all students. This will involve the delivery and coordination of subjects/programs that provide a strong link to both theory and practical application and provide students with strong motivation and interest.
3. To secure national and international competitive grants (e.g., ARC Discovery and Linkage Grants) and secure industry funding for applied research.
4. To maintain a high level of research productivity, including publications in high-impact factor journals.
5. To develop and enhance our research capability in sustainable construction and Architectural Engineering
6. To improve the image and perceived value of Architectural Engineering amongst the common first-year undergraduate students.
7. To attract and retain high-performing domestic students to be involved in higher degree research programs, including PhD.
8. To help maintain an enthusiastic and productive collegial environment.

Selection Criteria:

Essential:

- A doctoral qualification in Architecture, Architectural Engineering or Architectural Technology
- Demonstrated capability to teach undergraduate core Architectural design and Engineering subjects to a high standard and capability to supervise Higher Degree Research students, undergraduate and postgraduate research students in Architectural Engineering
- High-quality research experience in BIM/Sustainable Buildings/Architectural Engineering as evidenced through a strong track record of high-calibre scholarly publications, relative to experience and the capability to secure research funding from various bodies
- Expert knowledge of Building Information Modelling and optimisation tools (e.g., Rhinoceros 3D)
- Excellent interpersonal skills and proven ability to establish good working relationships with colleagues

Desirable

- Industrial experience or substantial engagement with industry (e.g., through academic/commercial research) in an area related to Architectural Engineering.

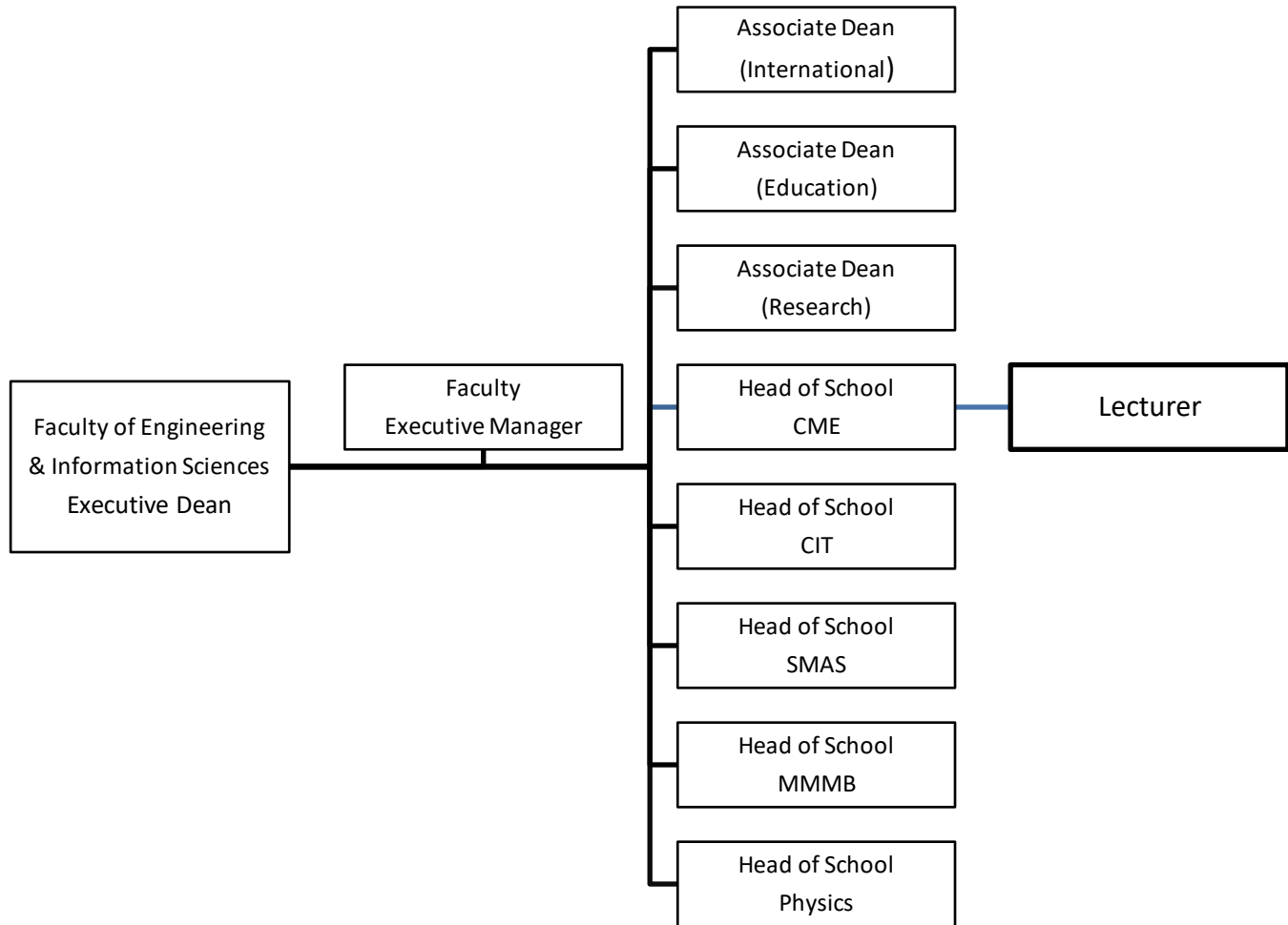
Personal Attributes:

- Team player
- Excellent time management skills
- Excellent interpersonal skills
- Excellent communication skills
- Flexibility and adaptability in a wide range of teaching requirements
- Understanding of international student needs
- Capacity to develop links with professional networks and the industrial community

Special Job Requirements:

- May be required to deliver subjects on flexible learning basis during week-ends and out of normal work hours
- May need to deliver courses on UOW satellite campuses and overseas on behalf of UOW.
- Attendance at international and national conferences
- May be required to work outside of standard business hours or across campuses and research partner facilities.

Organisational Chart:



Roles and Responsibilities in Relation to Workplace Health and Safety:

The University of Wollongong is committed to providing a safe and healthy workplace for its workers, students and visitors. All members of the University community have a collective and individual responsibility to work safely and be engaged in activities to help prevent injuries and illness.

In addition to the major accountabilities/responsibilities required for your position, you also hold the following roles and responsibilities in relation to Workplace Health and Safety:

All Staff

- Take reasonable care for your health and safety as well as others.
- Comply with any reasonable instruction by the University.
- Cooperate with any reasonable policies and procedures of the University including reporting of hazards or incidents via the University reporting process.
- Certain staff have specific responsibilities for Work Health and Safety (WHS), further information is available in the document [Roles And Responsibilities for WHS](#) and [WHS Management System](#).

Additional Responsibilities for Staff with supervisory responsibilities

- Ensure work area, equipment and practices are compliant with applicable legislation, standards, codes of practice and University guidelines.

- Ensure risk management activities are undertaken to minimise WHS risk including hazard and incident reporting, risk assessment and safe work procedures.
- Provide the necessary instruction, information, induction, training and supervision to enable work to be carried out safely.
- Ensure Work Health and Safety (WHS) activities and requirements are implemented for area as outlined in the [Roles And Responsibilities for WHS](#) and [WHS Management System](#).

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.



POSITION CLASSIFICATION STANDARD – Teaching and Research

Title: Lecturer

Level: B

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 major honours or postgraduate research projects.
- Supervision of the program of study of honours students and of postgraduate students engaged in course work.
- The conduct of research.
- Involvement in professional activity.
- Development of course material with appropriate advice from and support of more senior staff/
- Consultation with students.
- A range of administrative functions the majority of which are connected with the subjects in which the academic teaches.
- Marking and assessment.
- Attendance at departmental and/or faculty meetings and a major role in planning or committee work.

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.