



RESEARCH FELLOW

DEPARTMENT/UNIT Department of Civil Engineering

FACULTY/DIVISION Faculty of Engineering

CLASSIFICATION Level A

WORK LOCATION Clayton campus

ORGANISATIONAL CONTEXT

Everyone needs a platform to launch a satisfying career. At Monash, we give you the space and support to take your career in all kinds of exciting new directions. You'll have access to quality research, infrastructure and learning facilities, opportunities to collaborate internationally, as well as the grants you'll need to publish your work. We're a university full of energetic and enthusiastic minds, driven to challenge what's expected, expand what we know, and learn from other inspiring, empowering thinkers. Discover more at www.monash.edu.

The **Faculty of Engineering** is one of the largest 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. To learn more about the Faculty of Engineering, please visit our website.

The Department aims to provide high quality **Civil Engineering** education, research and professional services globally for the mutual benefit of the students, the staff, the University, industry, the profession and the wider community. We offer several undergraduate degrees as well as postgraduate coursework degrees via Off-Campus Learning. The Department actively pursues innovative and significant multi-disciplinary research to address the challenges for engineering in the 21st century. For more information about us and the work we do, please visit our <u>website</u>.

Modified date: August 2019

POSITION PURPOSE

The Research Fellow (RF) will conduct in-depth research relevant to an ARC discovery project which will tackle problems with Program Network Resources Allocation, in particular developing and extending existing mathematical models relating to efficient resource allocation (ie Network Utility Maximisation models). From this research the RF will be expected to publish high quality journal papers to communicate and disseminate the results. The RF is also expected to assist in the supervision of PhD students and the development of grant applications led by others, as well as to develop their own grant applications for national competitive grant schemes such as ARC DECRA.

Reporting Line: The position reports to a Professor within the Department of Civil Engineering

Supervisory Responsibilities: Not applicable

Financial Delegation: Not applicable

Budgetary Responsibilities: Not applicable

KEY RESPONSIBILITIES

Specific duties required of a Level A research-only academic may include:

- 1. The conduct of research under limited supervision either as a member of a team or, where appropriate, independently and the production or contribution to the production of conference and seminar papers and publications from that research
- 2. Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise
- 3. Limited administrative functions primarily connected with the area of research of the academic
- **4.** Development of a limited amount of research-related material for teaching or other purposes with appropriate guidance from other staff
- 5. Occasional contributions to teaching in relation to their research project(s)
- **6.** Experimental design and operation of advanced laboratory and technical equipment or conduct of advanced research procedures
- 7. Attendance at meetings associated with research or the work of the organisational unit to which the research is connected and/or at departmental, school and/or faculty meetings and/or membership of a limited number of committees
- 8. Advice within the field of the staff member's research to postgraduate students

KEY SELECTION CRITERIA

Education/Qualifications

- 1. The appointee will have:
 - A doctoral qualification in the relevant discipline or a closely related field

Knowledge and Skills

- 2. Demonstrated analytical and manuscript preparation skills
- 3. Ability to solve complex problems by using discretion, innovation and the exercise diagnostic skills and/or expertise
- **4.** Well-developed planning and organisational skills, with the ability to prioritise multiple tasks and set and meet deadlines

- **5.** Excellent written communication and verbal communication skills with proven ability to produce clear, succinct reports and documents
- 6. A demonstrated awareness of the principles of confidentiality, privacy and information handling
- 7. A demonstrated capacity to work in a collegiate manner with other staff in the workplace
- **8.** Demonstrated computer literacy and proficiency in the production of high level work using software such as Microsoft Office applications and specified University software programs, with the capability and willingness to learn new packages as appropriate

OTHER JOB RELATED INFORMATION

- Travel to other campuses of the University may be required
- There may be a requirement to work additional hours from time to time
- There may be peak periods of work during which taking of leave may be restricted

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; and Staff/Student Relationships.