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**Senior Lecturer, Internet of Things and Smart Infrastructure Systems**

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| **Department/Unit** | Electrical and Computer Systems Engineering |
| **Faculty/Division** | Faculty of Engineering |
| **Classification** | Level C |
| **Work location** | Clayton campus |
| **Date document created or updated** | 29 May 2017 |

**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](http://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](http://www.eng.monash.edu.au/).

The **Department of Electrical and Computer Systems Engineering** aims to provide high quality programs for undergraduate and research students as well as undertaking and publishing high quality research. We offer internationally recognised undergraduate and research programs in telecommunications, electronics, robotics, biomedical engineering and electrical power systems. We maintain strong links with engineering professionals to ensure our programs remain at the leading edge of professional practice. We have a vibrant research culture, with major research areas in communications and RF identification, intelligent robotics, biomedical engineering and power electronics and energy. For more information about us, [please visit our website](file:///C%3A%5Cvisit%20http%5C%3A%3Awww.eng.monash.edu.au%3Aecse%3A).

**Position purpose**

This position will be responsible for developing innovative applications in the area of Internet of Things for Smart Infrastructure Systems. Sensor technology with applications in designing scalable data analytic and control frameworks and market mechanisms for enabling sustainability and resiliency in societal infrastructure systems (e.g., smart cities, smart grid, transportation systems, smart homes).

The appointable candidate would ideally have some knowledge and experience in the following specific areas:

• Wireless sensor systems

• Embedded Systems Design

• Circuit/sensor/interface aspects of IoT

• RF integrated circuit design

• Data mining

A Level C academic is also expected to make significant contributions to the teaching effort of a department, school, faculty or other organisational unit or an interdisciplinary area. An academic at this level is also expected to play a major role in scholarship, research and/or professional activities. The incumbent to this position would be expected to complement and extend the existing strength of Electrical and Computer Systems Engineering on Optical Communications, Wireless Communications, and IoT.

**Reporting Line:** The position reports to the Head of Department

**Supervisory responsibilities:** This position may supervise Postgraduate/PhD research students

**Financial delegation and/or budget responsibilities:** Not applicable

**Key responsibilities**

Specific duties required of a Level C academic may include:

1. The conduct of tutorials, practical classes, demonstrations, workshops, student field excursions, clinical sessions and studio sessions
2. Initiation and development of course material
3. Course coordination
4. The preparation and delivery of lectures and seminars
5. Supervision of major honours or postgraduate research projects
6. Supervision of the program of study of honours students and of postgraduate students engaged in course work
7. The conduct of research
8. Significant role in research projects including, where appropriate, leadership of a research team
9. Involvement in professional activity
10. Consultation with students
11. Broad administrative functions
12. Marking and assessment
13. Attendance at departmental, school and/or faculty meetings and a major role in planning or committee work

A Level C academic will normally have advanced qualifications and/or recognised significant experience in the relevant discipline area. A position at this level will normally require a doctoral qualification or equivalent accreditation and standing. In determining experience relative to qualifications, regard shall be had to teaching experience, experience in research, experience outside tertiary education, creative achievement, professional contributions and/or contributions to technical achievement. In addition, a position at this level will normally require a record of demonstrable scholarly and professional achievement in the relevant discipline

**Key selection criteria**

**Qualifications/Education**

1. Completion of a PhD in the relevant field of study

**Knowledge and skills:**

1. Possess a high level of interpersonal skills and demonstrated ability to work independently and as part of a team across both the education and service sectors
2. Ability to work positively and cooperatively with students, internal and external teams and agencies
3. Demonstrated strong record of teaching experience in a tertiary environment
4. Demonstrated ability to stimulate, actively engage and educate a given audience
5. Proven ability, commitment and passion for engaging in scholarly and research activities
6. A demonstrated capacity to work in a collegiate manner with other staff in the workplace
7. Demonstrated statistical analysis and manuscript preparation skills; including a solid track record of refereed research publications

**Other job related information**

• Travel (e.g. to other campuses of the University) may be required

• There may be peak periods of work during which the taking of leave may be restricted

• Possession of a current Victorian driver licence is desirable

**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.