UNIVERSITY OF WARWICK

Job Description

Job title	Research Fellow
Department	Engineering
Grade	6

Job purpose (a brief summary of the role)	Undertake research in order to support the work of the School and develop and enhance its reputation, both internally and externally. Assist the Principal Investigator and, where appropriate, project collaborators in the successful execution of the project.
Duties and responsibilities	1. Development of portable, handheld (operator-controlled), integrated (based on combined CMOS-BAW ASIC technology) systems for Volatile Organic Compound (VOC) analysis. 2. Support researchers in delivering smart sensing solutions. 3. To publish research outcomes in appropriate journals of international standing and to publish and disseminate the result of research to other reputable outlets. 4. Translate knowledge of advances in the subject area into research activity. 5. May contribute to preparing proposals and applications to external bodies, e.g. for funding and contractual purposes, to support a developing research agenda. 6. May present information on research progress and outcomes to bodies supervising research, e.g. steering groups. 7. May contribute to the preparation of papers for steering groups and other bodies. 8. Communicate complex information (orally and in writing) and material of a specialist or highly technical nature. 9. Continually update own knowledge and understanding in field or specialism. **Teaching and Learning Support** 1. Could be expected to contribute to the teaching and learning programmes in the departments. 2. Assist in the supervision of student projects and the development of student research skills. 3. May be involved in the assessment of student knowledge and supervision of projects. **The below will always be included:** **Administration and Other Activities** 1. To contribute to School of Engineering committees and administrative duties and tasks. 2. Work within budget constraints. 3. To ensure compliance with Health and Safety, and other University regulations and good working practices in all aspects of work.

Person Specification

The Person Specification focuses on the essential and desirable knowledge, skills, experience and qualifications required to undertake the role effectively. This is measured by (a) Application Form, (b) Test/Exercise, (c) Interview, (d) Presentation.

Essential Criterion No.	Essential Criterion Description	Measured by
E1	Good honours degree (2.1 minimum) or equivalent in a relevant subject.	A
E2	A PhD or equivalent in electronic engineering or a relevant discipline (or nearing completion).	A
E3	Demonstrable ability in research and evidence of quality research output in field of mixed signal IC and RF ASIC design.	A,B & C
E4	Sufficient breadth or depth of specialist knowledge in electrical/electronic design and testing methods and techniques to work within established research or industry programmes.	A & C
E5	Proven ability in research and evidence of quality research output in relevant field.	A,C & D
E6	Ability or potential to contribute to the development of funding proposals in order to generate external funding (grants, contracts etc) to support research projects.	A,C & D
E7	Demonstrable ability to work collaboratively and effectively with academic and administrative colleagues, including those external to the University such as industrial partners.	A & C
E8	Able to demonstrate a capacity to contribute collegiately to the life and community of the School by undertaking a variety of duties, such as supporting offer holder days and outreach activities, which will occasionally require weekend work.	A,C & D
E9	Strong communication skills including the ability to communicate effectively in English, both verbally and in writing.	A,B,C & D
E10	Able to evidence excellent interpersonal skills with relevant experience of working independently and as part of a team, contributing positively.	A,C & D
E11	Able to evidence strong time management and organisational skills	A,C & D
E12	Good IT skills and proven ability to use IT to write technical papers and presentations.	A,C & D
E13	Proven quantitative and qualitative research skills in physical experimental work in both laboratory and fieldwork environments.	A,C & D
E14	Understanding of equal opportunity issues as they may impact on areas of research content.	C

Desirable Criterion No.	Desirable Criterion Description	*Measured by*
D1	Proven quantitative and qualitative research skills in physical experimental work in both laboratory and fieldwork environments.	A,C & D