

Academic Role Profile

Job Title:	Professor
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Responsible to:	Head of Department or Faculty
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Responsible for:	Research staff employed on programmes and awards directed by the post holder. May have supervisory responsibility for other staff.
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Job Summary and Purpose	
<p>To develop and lead a significant programme of research in line with the Faculty's research strategy, attracting and securing significant research funds.</p> <p>To provide academic leadership in undergraduate and postgraduate courses within area of expertise.</p>	

Main Responsibilities/Activities	
<p>To develop the research activities of the Faculty and the University by:</p> <p>Leading a significant programme of research, sustaining an extensive track record of published research findings in appropriate, peer reviewed research journals and/or monographs to maintain and enhance expert reputation in own subject area.</p> <p>Planning, co-ordinating and leading a significant programme of research in accordance with a specific project plan through a research team or a group of staff involved in research.</p> <p>Managing the financial and physical resources associated with the research activities.</p> <p>Supervising and guiding the work of staff and research and doctoral students on own specialist area.</p> <p>Leading innovative research proposals and submitting funding bids, winning support for them and planning the research to be taken, as a self-contained item or as part of a broader programme. Obtaining and sustaining research, consultancy and other additional funding</p> <p>Seeking collaborative research opportunities with other members of Faculty staff and develop multidisciplinary research links with other parts of the University where appropriate.</p> <p>Developing research activities which extend current thinking in the subject area, thereby enhancing the reputation of the Faculty and the University.</p> <p>Maintaining an expert reputation in own subject area and providing appropriate guidance to staff and students</p> <p>Engaging in external activities in accordance with the Faculty's research strategy at a national and international level. Such activities will include membership of committees of academic and professional bodies, external examining, editing journals and contribution to professional networks, national and international meetings, societies and bodies (including governmental ones).</p> <p>Engaging in external activities in accordance with the Faculty's research strategy at a national and international level. Such activities will include contribution to professional networks, national and international meetings, societies and bodies (including governmental ones).</p>	

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Attending appropriate national and international conferences for the purpose of disseminating research results.

Leading major funding bids which develop and sustain research support for the specialist area and advance the reputation of the Faculty and the University.

Sustaining and developing professional expertise and maintaining the requirements for registration with the appropriate body (*for academics with clinical links only*).

Contributing to the wider national and international academic community general life and work of the University through, for example, editing journals and refereeing papers.

To develop the teaching activities of the Faculty by:

Providing academic leadership at undergraduate and/or postgraduate level, as appropriate, by leading the development of new teaching methods and designing programme units and taking responsibility for the quality of programme units.

Taking an active role in teaching at undergraduate and postgraduate level; planning, delivering and critically reviewing a range of teaching and assessment activities including lectures.

Setting/marking programme work, practical sessions, supervisions, fieldwork and examinations according to own area of subject specialism, and providing appropriate feedback to students.

Taking part in activities such as validating and examining in relation to the University's associated institutions.

To engage in scholarship by:

Continually updating knowledge and understanding in the field or specialism. Extending, transforming and applying knowledge acquired from scholarship to teaching, research and appropriate external activities.

To undertake pastoral care of students by:

Using listening, interpersonal and pastoral care skills to deal with sensitive issues concerning students and provide support. Appreciating the needs of individual students and their circumstances. Acting as personal tutor and giving first line support. Taking responsibility for the initial resolution of all student issues within and outwith standard procedures, and ensuring that an appropriate framework is developed and used for pastoral care issues.

To contribute to the efficient management and administration of the Faculty, the University and the wider academic community by:

Performing personal administrative duties throughout the Faculty and the University as are recognised by the University as properly within the remit of role of professor, such as research group leader and roles associate with teaching programmes, as allocated by the Head and contributing to the general life and work of the University.

Advising, supervising and giving guidance to other staff. Taking overall responsibility for the welfare of staff drawing on specialist advice and support.

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Person Specification

The post holder must have:

A higher professional qualification, normally a doctoral degree or equivalent

Outstanding qualities and achievements in scholarship and research at a national and international level which have made a significant contribution to the advancement of their subject

Significant academic publication record

Evidence of leadership in research, including postgraduate research supervision

Teaching programmes, and/or internationally recognised textbooks.

Evidence of securing a significant amount of sustained research funding

Proven management and leadership qualities at a senior level

Proven administrative ability at a senior level

Evidence of contributions to conferences, professional meetings and societies at an international level and evidence of achievements in other external activities at an international level.

Evidence of high quality teaching at undergraduate and postgraduate level

Relationships and Contacts

Professors are expected to accept invitations to serve on national and international bodies, including governmental bodies. They will also be expected to contribute to the University by taking on roles that enable the University to meet its administrative needs.

To attract research funding, a Professor will be expected to liaise with existing and potential sponsors.

Teaching and administrative duties will be allocated by the Head of Faculty, within the context of the teaching programmes agreed by the Faculty Learning and Teaching Committee

Special Requirements

The post holder is expected to work outside normal office hours as necessary.

All staff are expected to:

- Positively support equality of opportunity and equity of treatment to colleagues and students in accordance with the University of Surrey Equal Opportunities policy.
- Help maintain a safe working environment by:
 - Attending training in Health and Safety requirements as necessary, both on appointment and as changes in duties and techniques demand

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- Following local codes of safe working practices and the University of Surrey Health and Safety Policy
- Undertake such other duties within the scope of the post as may be requested by your Manager.

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Addendum

This document provides additional information relating to both specific aspects of the post/Faculty and any post specific person specification criteria. The information contained within this document should always be read in conjunction with the accompanying generic Job Purpose.

Job Title:	Professor in Satellite Communications
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Background Information/Relationships

Faculty:

The University of Surrey is organised into three Faculties. The Faculty of Engineering and Physical Sciences (FEPS) comprises the Departments of Chemical and Process Engineering, Civil and Environmental Engineering, Computer Science, Electronic Engineering, Mathematics, Mechanical Engineering Sciences and Physics alongside the Centre for Environmental Strategy. All departments have a strong reputation for excellence in research and teaching, allied to a strong enterprise culture and an unrivalled record of graduate employment. Our members of academic staff are well respected, both nationally and internationally, amongst the many areas of academia and industry with which we interact. We believe strongly in the principle that a university should contribute to the cultural wealth of society by developing the basic sciences, whilst also developing the technology which will improve our overall quality of life.

ICS and Department of Electrical and Electronic Engineering:

The Institute for Communication Systems (ICS) and 5G Innovation Centre (5GIC) are within the Department of Electronic and Electrical Engineering (EEE). ICS has around 18 FTE academic staff and about more than 170 PhD, Postdocs. ICS research covers all aspects of Communication networks and systems. The communication systems range from Mobile communications, Satellite communications and broadcasting, Internet of Things, Connected Cars and Internet with extensive research on radio, antenna, propagation, MIMO, Core Network architectures and protocols. 5GIC is within ICS and is the world's first dedicated 5G centre on end to end aspects of future 5G system. ICS/5GIC enjoys close collaboration with industry in the UK, Europe and the rest of the world. 5GIC has developed many technologies including completely virtualised and programmable core network, massive MIMO base station and in addition to theoretical and fundamental research carried experimental research in 4km square open testbed on campus. ICS labs are equipped with state of the arts equipment and computing for research and proof of concepts for all aspects of a communication system.

The post holder is expected to complement our existing strengths in Satellite Communications, and have the potential to collaborate extensively with both internal and external partners, including Surrey Satellite Technology Ltd, particularly (but not exclusively) in the areas listed below:

- Satellite millimeter-wave communications and co-existence
- Satellites and The Internet of Things

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- Low Earth orbit mega constellations
- Large array Antenna design
- kW solar panel technology
- Electric ion propulsion
- In-orbit self-assembly technology

Person Specification

This section describes the sum total of knowledge, experience & competence required by the post holder that is necessary for standard acceptable performance in carrying out this role. This is in addition to the criteria contained within the accompanying generic Job Purpose.

	Essential/ Desirable
A higher research degree (PhD)	E
World class research performance (incl. an exceptional and continuing publication record, and a proven and continuing strong track record of external research grant income generation)	E
A proven track record in academic leadership	D
A proven track record in successfully supervising PhD students	E
Evidence of high quality teaching	D
Evidence of scholarly contributions to conferences, professional meetings and societies at an international level, and evidence of achievements in other external activities at an international level	E
Excellent communication, inter-personal and networking skills	E

Key Responsibilities

This document is not designed to be a list of all tasks undertaken but an outline record of any faculty/post specific responsibilities (5 to 8 maximum). This should be read in conjunction with those contained within the accompanying generic Job Purpose.

1. Make a significant contribution to the Faculty's strong research profile and to appropriate postgraduate and undergraduate teaching programmes.
2. Make a significant leadership contribution to the research direction of the ICS to ensure its future sustainability and research impact.
3. Develop strategic partnerships nationally and internationally.
4. Provide leadership in developing industrial and government collaborations for the ICS.
5. Mentor junior colleagues to develop their research potential and support their career development.

N.B. The above list is not exhaustive.