

Academic Role Profile Lecturer (A) (Research and Teaching Track) Responsible to: Head of Department or Faculty Responsible for: Not applicable

Job Summary and Purpose

To develop a personal research portfolio in line with the Faculty's research strategy, to teach at undergraduate and postgraduate level, and to participate in Faculty administration, as appropriate. The duties of the role may be carried out with the guidance of a mentor, if required.

Main Responsibilities/Activities

To support the research activities of the Faculty by:

Developing the research activities of the Faculty by developing an area of personal research and expertise, independently and/or in collaboration with others as part of a larger research team.

Undertaking research activities (sometimes under supervision) in accordance with a specific project plan, and supervising and guiding the work of staff and research students on own specialist area.

Assisting with the development of research proposals and funding bids, with appropriate support, as a self-contained item or as part of a broader programme.

Publishing original research in appropriate journals or other media, as appropriate.

Attending appropriate conferences for the purpose of disseminating research results or for personal development

Sustaining and developing professional expertise and maintaining the requirements for registration with the appropriate body under the guidance of a senior colleague (for academics with clinical links only).

May have responsibility for research staff employed on programmes and awards directed by the post holder.

To support the teaching objectives of the Faculty by:

Helping to develop new teaching methods and design programme units, and sharing responsibility for the quality of programme units.

Planning, delivering and critically reviewing a range of teaching and assessment activities including lectures.

Assisting with the training and supervision of students (including research students) and acting as a tutor for industrial/professional training year students, according to own area of subject specialism.

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 and translating the knowledge of advances in the subject area into the course of study.

To undertake pastoral care of students

Using listening, interpersonal and pastoral care skills to deal with sensitive issues concerning students and providing support. Appreciating the needs of individual students and their circumstances. Acting as personal tutor and giving first line support referring students as appropriate to services providing further help.

To contribute to the efficient management and administration of the Faculty by:

Performing such personal administrative duties throughout the Faculty as are recognised by the University as properly within the remit of the work of academic staff, as allocated by the Head of Faculty. Such duties may include, for example, library representative, year tutor.

Person Specification

The post holder must have:

An honours degree or an appropriate and equivalent professional qualification in a relevant subject.

Normally a doctoral degree or be working towards a doctoral degree or an equivalent research degree

Evidence of teaching and presentational skills or potential.

Evidence of administrative/organisational skills or potential.

Evidence of current research/scholarship at doctoral level or equivalent, and potential for development

Relationships and Contacts

The post holder will be a member of such Faculty Committees as may be relevant to their administrative duties, for example Faculty Board of Studies and Examination Board. New appointees will be assigned a senior colleague to guide their development and aid their integration into the Faculty and university. Research priorities will be agreed within the strategic framework of the research theme of which they are a member. 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 or similar body.



Special Requirements

To be able to participate in residential field work, in the UK or overseas, according to own area of subject specialism.

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
 - 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.



ADDENDUM

Job Title:	Lecturer in Space Applications, Exploration and
	Instrumentation

Main Responsibilities/Activities

This information sheet should be read in conjunction with the accompanying generic Role Profile and will be used for shortlisting processes.

Key responsibilities:

- Develop and lead a programme of academic research within Surrey Space Centre
- Secure external grants and attract researchers and students.
- Contribute to the teaching of the SSC's Space Engineering MSc course and selected undergraduate modules. The development of new modules is encouraged as well as contributions to existing programmes.
- Actively contribute to the successful daily running of the Space Centre.
- Undertake outreach and promotion activities for the Centre.

The following research areas are of particular interest:

- Safe and sustainable space environments, including space weather, space traffic/debris management, space-based power generation
- Remote sensing and earth observation including image processing and instrumentation
- Space exploration including planetary science, in-orbit servicing and manufacturing, landers, rovers, habitation, and in-situ resource utilisation
- Spacecraft engineering and mission design including orbital and attitude mechanics, guidance and navigation, propulsion, avionics and power, robotics.

We especially welcome applications from researchers whose work leads towards practical space experiments, instruments and missions, including, but not limited to:

- In-situ instrumentation for planetary science and environmental measurement Including radiation)
- Remote sensing instrumentation including optics (including instrumentation, optical navigation, imagery)
- Applied Machine Learning for Spacecraft Onboard Autonomy
- Robotics (e.g., rendezvous & docking, active debris removal)
- Power & Thermal management systems

The level of appointment (lecturer or senior lecturer) will be dependent on qualifications, experience and track record. Applicants from industry are welcome and it is recognised that working in industry can place limitations on publication opportunities. If a candidate is strong in teaching and can cover space systems engineering in depth, one post could be switched to a 'teaching track' which emphasises teaching over research.



Person Specification

In addition to the criteria outlined in the accompanying generic Role Profile, the post holder should have (E = Essential; D = Desirable):

Track record of independent research (E)

Extensive knowledge and experience of space-related disciplines (E)

Effective communications with students, staff and all stakeholders (E)

Proven track record in publishing journal papers (E for academic background, D for industry background)

The candidate will need to be highly motivated, adaptable and extremely well organised (E).

Experience of lecturing/teaching (D)

Experience of working in the space industry and space systems engineering (D)

Special Requirements

UK and non-UK travel is required (E).

Full UK driving license (D)

Overseas travel may be required.(D)

Background Information

This is a permanent full-time appointment.

The candidate will be supported in their work via access to the Space Centre's extensive research laboratories and resources (including technician and engineering support) and also by Faculty-level services (e.g. finance, IT, HR, library and business support).

SSC delivers a well-established and highly-successful MSc programme in Space Engineering attracting approximately 50 students annually in addition to a BEng/MEng Astronautics and Space Engineering course.

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