

<b>Post Details</b>	<b>Last Updated: 19/12/2025</b>		
<b>Faculty/Administrative/Service Department</b>	Surrey Space Institute		
<b>Job Title</b>	Space Mission Ground-station Engineer		
<b>Job Family</b>	Professional Services	<b>Job Level</b>	4
<b>Responsible to</b>	Surrey Space Institute Co-Director (Director of Surrey Space Centre)		
<b>Responsible for (Staff)</b>	None		
<b>Job Purpose Statement</b>			
Promoting and enabling usage of the ground station for academic research, student education and use by external partners through the Surrey Space Institute (SSI) and the Surrey Space Centre (SSC)			
<b>Key Responsibilities</b>			
<ol style="list-style-type: none"> <li>1. Take a leading role in the technical development of the ground station to ensure it is fully ready for up-coming operational missions by working closely with space project teams (e.g. on compatibility testing).</li> <li>2. Maintaining ground station facilities (mechanical and electrical hardware) and systems in an operational state.</li> <li>3. To take a leading role in technical upgrades to the SSC's satellite ground-station facility (hardware and software) in preparation for a variety of up-coming missions ranging from educational CubeSats to lunar experiments.</li> <li>4. Developing and maintaining Ground Station Control software, networking &amp; integration university IT systems with Software Defined Radio hardware.</li> <li>5. Supporting SSI, SSC and other University of Surrey research groups who need to use the Ground Station.</li> <li>6. Supporting operation and development of SSC-related missions including pre-flight ground testing.</li> <li>7. Supporting UG and PG final year projects &amp; Engineering Team projects where relevant.</li> <li>8. Development and maintenance of spacecraft data archives and analysis software and ensuring data are made available to the appropriate stakeholders and user communities.</li> <li>9. Provide tours of the Ground Station for students and visitors to the University, SSI &amp; SSC when required and to support public outreach (e.g. school and amateur radio group visits).</li> <li>10. Ensuring all RF transmissions from the Ground Station are legal with correct permissions.</li> <li>11. Support all H&amp;S aspects of the Ground Station.</li> </ol> <p><b>N.B. The above list is not exhaustive.</b></p>			
<b>All staff are expected to:</b>			
<ul style="list-style-type: none"> <li>• Positively support equality of opportunity and equity of treatment to colleagues and students in accordance with the University of Surrey Equal Opportunities Policy.</li> <li>• Work to achieve the aims of our Environmental Policy and promote awareness to colleagues and students.</li> <li>• Follow University/departmental policies and working practices in ensuring that no breaches of information security result from their actions.</li> <li>• Ensure they are aware of and abide by all relevant University Regulations and Policies relevant to the role.</li> <li>• Undertake such other duties within the scope of the post as may be requested by your Manager.</li> <li>• Work supportively with colleagues, operating in a collegiate manner at all times.</li> <li>• Help maintain a safe working environment by: <ul style="list-style-type: none"> <li>- Attending training in Health and Safety requirements as necessary, both on appointment and as changes in duties and techniques demand.</li> <li>- Following local codes of safe working practices and the University of Surrey Health and Safety Policy.</li> </ul> </li> </ul>			
<b>Elements of the Role</b>			
This section outlines some of the key elements of the role, which allow this role to be evaluated within the University's structure. It provides an overview of what is expected from the post holder in the day-to-day operation of the role.			

### **Planning and Organising**

- The post holder will organise and prioritise their work to ensure that the Ground Station and supporting test facilities are ready to meet long term targets such as mission deadlines and launch dates as well as ongoing facility use such as for research.
- The post will include successfully managing any conflicting demands, possessing an awareness of the options available and being able to communicate decisions in a timely manner.

### **Problem Solving and Decision Making**

- The post holder is expected to show initiative and apply their engineering and practical knowledge of the various systems involved. The post holder is however, required to recognise when problem/issues should be referred to a senior member of the team for guidance or resolution.
- The post holder is expected to confidently provide advice to all stakeholders and solutions to routine day-to-day problems in their specialist area.

### **Continuous Improvement**

- The post holder is expected to keep abreast of technical developments within the field and ensure that they keep their work at the leading edge.
- The post holder is expected to take a pro-active approach to their work, making appropriate technical improvements in working methods and implementing them.

### **Accountability**

- The post holder is expected to ensure compliance with safety standard procedures for all staff, students and visitors working on space engineering within the Surrey Space Centre.
- The post holder will work with personal initiative.

### **Dimensions of the role**

- The post will be based in the Surrey Space Centre on the Guildford campus. Occasional UK travel may be required with overnight stays.

### **Supplementary Information**

- Success in this role is dependent on involvement with the CubeSat and space arena, as well as building successful and strong relationships both within the University as well as the wider community.

**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.

### **Qualifications and Professional Memberships**

University Degree, Higher National Diploma (HND), NVQ 4 or equivalent in a relevant subject and relevant formal training, plus demonstrable experience in a relevant technical/scientific role.

OR

Significant vocational experience, demonstrating development through the acquisition of appropriate specialist knowledge and involvement in a series of progressively more demanding/relevant work/roles.

E

**Technical Competencies (Experience and Knowledge)** This section contains the level of competency required to carry out the role (please refer to the Competency Framework for clarification where needed and the Job Matching Guidance).

**Essential/  
Desirable**

**Level  
1-3**

Knowledge of the basic principles of satellite telemetry, telecommand and tracking.

E

3

Knowledge and experience of installing and maintaining satellite ground stations or similar systems.

D

2

Experience of integration and test of hardware and software systems (not necessarily in space sector)

D

2

Good practical working knowledge of relevant software tools (e.g. Linux, python, C/C++ & html programming and PC computer networking.)

D

2

Knowledge and experience of MS Office suite.

E

2

Experience of CubeSat and/or small satellites and mission operations covering mission development from concept to detailed design of the satellite.

D

2

Experience of radio systems and satellite communications systems.

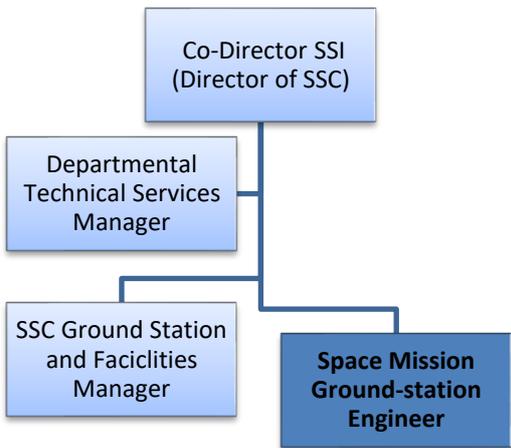
D

2

Full Amateur Radio license

D

2

<b>Special Requirements:</b>  Post-holder may be required to occasionally travel in UK as well as occasional overnight stays.	<b>Essential/ Desirable</b>  E
<b>Core Competencies</b> This section contains the level of competency required to carry out this role. (Please refer to the competency framework for clarification where needed). n/a (not applicable) should be placed, where the competency is not a requirement of the grade.	<b>Level 1-3</b>
Communication Adaptability / Flexibility Customer/Client service and support Planning and Organising Continuous Improvement Problem Solving and Decision Making Skills Managing and Developing Performance Creative and Analytical Thinking Influencing, Persuasion and Negotiation Skills Strategic Thinking & Leadership	3 3 2 2 2 2 N/A 2 2 N/A
<p>This Job Purpose reflects the core activities of the post. As the Department/Faculty and the post holder develop, there will inevitably be some changes to the duties for which the post is responsible, and possibly to the emphasis of the post itself. The University expects that the post holder will recognise this and will adopt a flexible approach to work. This could include undertaking relevant training where necessary.</p> <p>Should significant changes to the Job Purpose become necessary, the post holder will be consulted and the changes reflected in a revised Job Purpose.</p>	
<b>Organisational/Departmental Information &amp; Key Relationships</b>	
<p><b><u>Background Information.</u></b></p> <p>The University of Surrey has been a pioneer in space engineering and small satellite innovation for more than four decades. Building on this heritage, the Surrey Space Institute is the University's newest Pan-University Institute. This bold, interdisciplinary hub brings together world-leading expertise to shape the future of space research, policy, and innovation. The Surrey Space Centre (SSC) at the University of Surrey is a world leading Centre of Excellence for research and teaching in Space Engineering. We sometimes build satellites in-house (mainly cubesats) or have direct involvement in other missions: either can require use of our on-site ground station. As part of our courses, students also benefit from activities in the ground station to acquire hands-on training and it is also used for research projects.</p>	
<p><b><u>Department Structure Chart</u></b></p>  <pre> graph TD     A[Co-Director SSI (Director of SSC)] --- B[Departmental Technical Services Manager]     A --- C[SSC Ground Station and Facilities Manager]     A --- D[Space Mission Ground-station Engineer]       </pre>	

**Relationships****Internal**

- Academics, Technical and Professional services staff from across the University.
- The post holder is required to develop extensive relationships within the Space Centre with both academic and non-academic staff
- The post holder is expected to communicate with the other FEPS departmental staff and in particular liaison with Technical Officers in other fields.

**External**

- The post holder is expected to communicate effectively with a wide range of external partners and suppliers.