



Post Details		Last Updated: 16/03/2026	
Faculty/Administrative/Service Department	Faculty of Engineering and Physical Sciences/ Civil Engineering		
Job Title	Engineering Technician		
Job Family	Technical and Experimental	Job Level	3
Responsible to	Technical Support Manager		
Responsible for (Staff)	N/A		
<u>Job Purpose Statement</u>			
<p>The post holder will be responsible for the safe, efficient, and professional operation of laboratories across the Engineering Department, ensuring that all facilities support high-quality teaching, research, and innovation. They will take a leading role in maintaining an excellent working environment within the laboratories, including the upkeep, servicing, and readiness of engineering specialist equipment.</p> <p>They will prepare test samples using both conventional and rapid prototyping techniques, conduct testing using advanced protocols, and set up bespoke experimental arrangements tailored to a range of engineering applications. They will contribute to the delivery of laboratory classes across Engineering disciplines, with knowledge of materials such as concrete, mortar, metals, polymers, and composites considered an advantage.</p> <p>The post holder will apply practical engineering and mechanical testing expertise on a day-to-day basis, providing technical support to research grants, consultancy projects, and experimental work carried out by academic staff, researchers, and students at all levels.</p> <p>Working collaboratively with the wider technical team, they will help ensure the smooth and safe running of all Engineering laboratories and play an active role in showcasing the department's facilities and experimental capabilities to visitors, sponsors, and industry partners.</p>			
<u>Key Responsibilities</u> This document is not designed to be a list of all tasks undertaken but an outline record of the main responsibilities			
<ol style="list-style-type: none"> 1. To carry out testing and experimental work using a wide range of commonly used equipment across the Engineering laboratories. 2. To prepare and assemble test specimens, rigs and apparatus, and to ensure that all laboratory materials, equipment and systems are maintained, serviced and repaired as required, including raising purchase orders for lab-related supplies. 3. To use laboratory testing, monitoring, data acquisition and manufacturing software to operate facilities and install or configure associated systems. 4. To demonstrate equipment, laboratory procedures and experimental techniques to students, researchers, academics and technical colleagues, supporting high-quality teaching and research. 5. To help monitor and maintain a safe working environment in line with current health and safety legislation and departmental policies, including contributing to the professional upkeep and organisation of laboratory spaces. 6. To apply technical skills and engineering knowledge to recommend and implement improvements that enhance the efficiency, reliability and overall quality of laboratory services. 7. To exercise creativity and problem-solving ability by contributing to innovative solutions for research and teaching needs, for example, through the design, adaptation or manufacture of bespoke components, fixtures or experimental setups. 8. To undertake the above activities with an appropriate level of independence, seeking guidance from senior staff when more complex or non-routine issues arise. <p>N.B. The above list is not exhaustive</p>			



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.
- Work to achieve the aims of our Environmental Policy and promote awareness to colleagues and students.
- Follow University/departmental policies and working practices in ensuring that no breaches of information security result from their actions.
- Ensure they are aware of and abide by all relevant University Regulations and Policies relevant to the role.
- Undertake such other duties within the scope of the post as may be requested by the Lab manager.
- Work supportively with colleagues, operating in a collegiate manner at all times.

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.
- Monitor, maintain, repair or replace faulty equipment, and undertake work for the professional upkeep of the laboratories, which includes regular tidying up and maintenance work.

Elements of the Role

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 own workload within an established operating environment, working with limited guidance from the Lab Manager and other senior technical colleagues.
- They will have the autonomy to plan and manage tasks within the daily and weekly work routine, ensuring that key deadlines and objectives are met. This includes managing conflicting demands, understanding the options available, and making effective and appropriate decisions, referring to line management when issues fall outside standard practice.
- The post holder will support experimental activities across Engineering, contributing to projects at all levels that involve laboratory testing or hands-on practical work. They will also assist in preparing demonstrations and test setups for Open Days, Taster Days and other events that promote Engineering activities within the University.

Problem Solving and Decision Making

- The post will be expected to undertake the activities with limited guidance from line management; however, more complex problems should be referred to the Lab manager or an appropriate member of academic staff, either for advice, guidance or for resolution.
- The post holder is expected to 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 take a proactive approach to their work, making suggestions for improvements in working methods and facilities and implementing them under the guidance of the Lab manager.
- They are also expected to develop new technical skills as appropriate to the developing nature of research within the laboratory, so that they can contribute to the creation of innovative solutions to requirements.

Accountability

- The post holder will be responsible for ordering materials, parts and consumables and for maintaining adequate stock levels at an appropriate cost. Effective stock control is essential, since failure to do so would negatively impact student laboratory sessions, research activities undertaken by staff and postgraduates, and externally funded projects.
- The post holder will apply their technical expertise and practical understanding of laboratory and workshop practices to provide advice, training and assistance to staff and students. This includes supporting the safe and correct use of equipment and helping with the preparation and application of standard laboratory techniques. Although work will typically follow established patterns, the post holder should consult documented procedures when necessary and recognise when issues need to be escalated to senior technical colleagues or the Lab Manager.
- The post holder will be accountable for the safety, security and care of laboratory spaces and equipment. This includes monitoring and maintaining a safe working environment that complies with Health and Safety legislation and ensuring that procedures such as waste disposal and equipment handling follow regulatory and departmental requirements.
- The post holder will help familiarise staff and students with Health and Safety practices, contribute to the preparation of Risk and COSHH assessments and maintain accurate records of safety documentation. They are also responsible for the professional upkeep of laboratory areas, including



regular organisation, cleanliness and basic maintenance tasks. Incorrect advice or poor judgment in these areas could lead to equipment damage or pose risks to personal safety.

- The post holder is expected to respond promptly and confidently to routine issues such as equipment malfunction, user queries and prioritisation of tasks. They will communicate proactively and effectively with laboratory users and will make informed recommendations to improve the efficiency, safety and overall quality of the laboratory service.

Dimensions of the role

- The post holder will be working as part of a wider team supporting academic and research staff and associated postgraduate and undergraduate students. This may include L4 and L5 Engineering Experiments, L6 Group Design Projects, and L6 & L7 Individual Research Projects.
- The post holder will support PhD students and research staff in delivering the experimental content of research grants and contracts and PhD projects; with agreement from the line manager, they may assist with consultancy services undertaken in accordance with university guidance and rules.
- The post holder will also assist staff and students in the design and manufacture of apparatus for project-based teaching and may manufacture specimens and testing arrangements.
- The post holder does not have any budgetary or supervisory responsibility.
- They will directly interact internally with the Estates and Facilities team, as well as with the FEPS Workshop.
- They will interact externally with engineers from testing houses that undertake installation and maintenance of experimental facilities in the laboratories, and with sales representatives in relation to purchase orders placed.

Supplementary Information

- The post holder will be a member of the appropriate Faculty H&S Forum, in particular representing technical aspects of the Laboratory operations.

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

HNC/C&G in engineering and manufacture practice, together with several years practical experience	D
---	---

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
Experience in Engineering	E	3
An understanding of relevant Health and Safety requirements and procedures	E	2
Knowledge and experience of maintenance of and fault-finding in equipment	E	3
Ability to work independently and with minimal supervision	E	3
Experience of working in a mechanical workshop	D	2
Knowledge and experience of mechanical design	D	2

Special Requirements:

N/A	N/A
-----	-----

Core Competencies 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.	Level 1-3
Communication	3
Adaptability / Flexibility	2
Customer/Client service and support	2
Planning and Organising	2
Continuous Improvement	2
Problem Solving and Decision Making Skills	2
Managing and Developing Performance	1
Creative and Analytical Thinking	2



Influencing, Persuasion and Negotiation Skills Strategic Thinking & Leadership	1 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>	
Organisational/Departmental Information & Key Relationships	
<u>Background Information</u> <p>The Faculty of Engineering and Physical Sciences is built on the core engineering disciplines of aeronautical engineering, civil engineering, chemical engineering, electronic engineering and mechanical engineering, together with the core scientific disciplines of computing, mathematics and physics. Within these fields we enjoy a reputation for excellence in research and teaching.</p> <p>The post holder will be working as part of team supporting approximately 10 academic and research staff and associated postgraduate and undergraduate students. This commitment may include helping with Level M Individual Projects and MSc Individual Research Projects.</p>	
<u>Relationships</u>	
<u>Internal</u>	
<ul style="list-style-type: none">• The post holder will assist staff and postgraduate students in the design and manufacture of apparatus for the project.• The post holder will communicate with other users of the University services.• The post holder will communicate with the Estates and Facilities team as well as the FEPS workshop.	
<u>External</u>	
<ul style="list-style-type: none">• The post holder will liaise with external contractors and suppliers for the provision and price of services and goods.• The post holder may be the point of contact for mechanical assistance within mechanical testing by external customers.	