

Post Details		Last Updated: 16/10/18	
Faculty/Administrative/Service Department	Faculty of Engineering and Physical Sciences/ MES/ CEE		
Job Title	Laboratory Technician		
Job Family	Technical and Experimental	Job Level	3
Responsible to			
Responsible for (Staff)	N/A		

Job Purpose Statement *This should be an accurate, concise, un-detailed statement (short paragraph) of what the post is and why the post exists in terms of its contribution or result e.g. improved student/staff experience, increasing University funds etc.*

The post holder will manage the day-to-day operation of the Mechanical Testing Facility, and support associated activities in the Construction Materials Laboratory. They will apply an in-depth knowledge of mechanical testing on a day-to-day basis, providing technical support to grant, contract and personal research work of all academic and research staff, post graduate researchers, and students.

The post holder may be required to support other experimental facilities and projects (at all academic levels), as circumstances dictate and as requested by the Faculty Technical Support Manager.

Key Responsibilities This document is not designed to be a list of all tasks undertaken but an outline record of the main responsibilities (5 to 8 maximum)

1. To carry out duties in respect of specimen and apparatus preparation and assembly, and ensure that materials/equipment/apparatus in the laboratories are maintained, serviced and repaired as required
2. To use modern software to run lab facilities and be able to install basic electronics.
3. To demonstrate equipment and techniques to students, research staff, academics and other technicians.
4. To monitor and maintain a safe working environment in accordance with the latest health and safety legislation.
5. To apply appropriate skills and knowledge in order to make recommendations for improvements to the efficiency and effectiveness of the service offered.
6. To exercise creativity where appropriate to innovative solutions to requirements arising from research; for example, when working with staff on the design and manufacture of components and facilities.
7. To undertake the above activities with minimal guidance from line management; however, more complex problems should be referred to the appropriate member of academic staff, either for advice, guidance or for resolution.

N.B. The above list is not exhaustive.

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 your 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.

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 *Where does the work come from? What planning is required, how complex is the planning and over what timescale e.g. days/weeks/months/annually/longer?*

- Work will be organised and prioritised by the post holder within an established operating environment, with limited guidance from the Manager of the Mechanical Testing Facility and other senior colleagues.
- The post holder will have the latitude to organise and prioritise work within the daily/weekly work routine to ensure that key deadlines and objectives are met. This will include successfully managing any conflicting demands, possessing a basic awareness of the options available and being able to make effective and appropriate decisions, referring only to line management where appropriate

Problem Solving and Decision Making *What types of problems or challenges are faced by the post holder and how are they solved? What kind of guidance is in place to support the problem solving process e.g. policies/procedures/protocols/legislation. You should detail the nature of the post holder's role in solving these problems, indicating whether the post holder thinks independently or in collaboration with others and how much freedom there is to provide solutions/make these decisions. You should also state what the impact of wrong decisions/judgement is and what happens in cases where the post holder is unable to find a resolution.*

- The post will be expected to undertake the activities with minimal guidance from line management; however, more complex problems should be referred to the appropriate member of academic staff, either for advice, guidance or for 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 *You should state whether the post holder is responsible for making any improvements within their area of responsibility, what level of improvement they may be required to make and what freedom they have to make those changes independently.*

- The post holder is expected to take a pro-active approach to their work, making suggestions for improvements in working methods and facilities and implementing them under the guidance of the Manager of the Mechanical Testing Facility.
- They are also expected to develop new technical skills as appropriate to the developing nature of research within the laboratory, in order that they are able to contribute to the creation of innovative solutions to requirements.

Accountability

What level of control has the post holder got for the achievement of their end results? How frequently does the post holder require supervision? What freedom do they possess to act with or without reference to guidance/procedures and/or supervision? Detail the discretion given to the post holder to direct resources, their answerability for the consequences of decisions and actions taken by themselves/their team and the impact. Detail the nature of the impact which the role exerts on end results and the area of the institution on which the role has impact.

- The post holder will be required to order miscellaneous material, parts and consumables and ensure adequate stock levels at an appropriate cost. Failure to do so would affect the students' laboratory experience, the staff and postgraduates' research and external contracts.
- The post holder is expected to also apply their technical knowledge and practical knowledge of the required workshop practices in order to provide advice, training and assistance to staff and students regarding the application of techniques and use of common equipment for preparation and application of standard laboratory techniques. Whilst the work will usually follow an established pattern, the post holder is able to refer to well-defined procedures for guidance when required. The post holder is however, required to recognise when problem/issues should be referred to a senior member of the team or to their line manager for guidance or resolution. The post holder is expected to confidently provide advice and solutions to routine day-to-day problems in their specialist area.

Dimensions of the role *Dimensions describe the statistics relevant to the job. Where relevant, you should cover the operational, financial or staffing aspects of the role. Relevant factual, quantitative information that describes the scope of the role, e.g. number of staff directly/indirectly reporting to them, financial aspects (budgets, contract, cash handling etc. and approximate figures), approximate number and type of student/customers the job affects directly/indirectly should be given.*

- The post holder will be working as part of a wider team supporting approx. 10 academic and research staff and associated postgraduate and undergraduate students. This may include L1 and L2 Engineering Experiments, L3 Group Design Projects, and L3 & LM Individual Research Projects.
- The post holder does not have any budgetary or supervisory responsibility.

Supplementary Information *You may wish to include some information here that has not been captured in the other sections of the form, but still has a significant impact on the size of the job. This may include details such as for example the importance in some roles to influence, develop and change the motivation and behaviour of people.*

- 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		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
Experience of mechanical testing		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 1
Knowledge and experience of strain measurement techniques, especially digital image correlation		D 2
Knowledge and experience of mechanical design		D 2
Special Requirements:		Essential/ Desirable
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		1
Strategic Thinking & Leadership		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		
Background Information You should include a short statement on the background of the Faculty and/or the department in which the post holder will be operating. You may also wish to include any other useful information to an applicant e.g. why the project exists, what the strategy of the department is etc.		

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.

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.

Department Structure Chart *Please highlight the post holder's role by right clicking and selecting format shape, selecting solid fill and 2nd shade of blue in list. Boxes can be added/removed by right-clicking and selecting add shape or cut. Font should be Frutiger LT Std 45 Light (max font size 10).*

Relationships *This is not an exhaustive list of every relationship the post holder has, but is a brief description of those that play an important part in the post holder successfully carrying out the role. It should identify the significant internal and external relationships and contacts that the post holder has in their job and describe the overall purpose and nature of those relationships (i.e. exchanging information, negotiating, networking, etc.)*

Internal

- The post holder will assist staff and postgraduate students in design and manufacture of apparatus for project.
- The post holder will communicate with other users of the University services.

External

- The post holder will liaise with external contractors and suppliers for the provision and price of services and goods.
- The post holder is also the main point of contact for mechanical assistance within mechanical testing by external customers.