

# **CREST Laboratory Technician** REQ181044

As part of the University's ongoing commitment to redeployment, please note that this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.

### **Job Description**

Job Grade: Technical Services Grade 5

#### Job Purpose

To provide the staff and research students within the CREST Thermal Energy Storage team with skilled, technical support for the design and manufacture of unique devices, the repair, modification and construction of new and existing equipment and rigs and the manufacture of new components.

#### **Job Duties**

- The production of technical drawings at the design stage, for all levels of staff and students
- The design, manufacture, repair, development, construction, modification and commissioning of equipment, rigs and models using a full range of conventional, CNC machine tools and bench fitting equipment and skills.
- The use of conventional machine tools and CAD/CAM for post processing of their work into operational programs for the production of components using CNC machinery.
- The operation and maintenance of plant, equipment and machinery.
- The maintenance of a clean and safe workshop environment whilst using machinery, tools and material stocks
- Identify improvements to process, workflow and general efficiency gains.
- Providing general advice to both staff and students in relationship to component selection, sources of information, design, suitability of manufacture. Training of technical staff and students in the use of machine tools.
- The ordering of miscellaneous materials, parts and consumables and maintenance of adequate stock levels.

#### Wider Technical Duties & Responsibilities

• You will be responsible for the health, safety and welfare of all staff and students entering or using the mechanical workshop(s) or other workshops or laboratories that you are working in through the use of correct PPE and the appropriate use of equipment, in compliance with Health and Safety at Work

legislation and the University's operational procedures.

- Carry out Risk Assessments for teaching sessions and review and authorise project student risk assessments. Carry out COSHH assessments and maintain area specific records.
- To take responsibility for the maintenance of plant and machinery to ensure a clean and safe workshop environment whilst using machinery, tools, equipment and materials. Carrying out the regular testing and fault diagnosis of the equipment, portable appliance testing (PAT) *if appropriate*, to ensure maximum Overall Equipment Efficiency (OEE) is achieved.
- To support the activities of CREST by manufacturing components to drawings, sketches and verbal specifications for both post graduate and research activities.
- To work closely as a member of the CREST team in planning the future development of laboratory areas, identifying opportunities for improvements.

#### **Behavioural Expectations**

- To show and maintain and active approach to CPD (Continual Professional Development). Participate fully in the School's PDR (Performance and Development Review) Scheme, identifying and agreeing developmental opportunities for personal and professional development and in response to changing needs within the School.
- To support colleagues in the CREST team; to develop broader skills to help deliver CREST's research programmes.
- To fully engage with CREST and School life, by participating in open days, visit days and outreach activities when appropriate. Participation will include but not restricted to, the setting up & dismantling of events, giving demonstrations and acting as a Wolfson School ambassador giving help and guidance and using initiative.
- A positive "can do" attitude to enable postgraduate students and researchers to achieve their goals.
- A flexible approach to working hours is required due to the inevitable evening and occasional weekend working requirements of the position.
- To requisition miscellaneous materials, parts and consumables to ensure adequate maintenance of stock levels.

#### **Performance Measures**

Performance measures will be used to ensure delivery and performance are maintained. The PDR process will outline specific measures; however the following examples could be used in the first instance.

- To satisfactorily pass Health and Safety Audits within the specific area of responsibility.
- To satisfactorily pass House Keeping Audits within the specific area of responsibility.
- Carry out tasks with the utmost efficiency and quality
- The on-going development of area of responsibility, such as layout, process, workflow etc.
- Continual Personal Development (Expectation of 5 days per year as a minimum)
- Skills development, Multi-functional ability (Target to achieve three key functional areas)

#### **Points To Note**

The purpose of this job description is to indicate the general level of duties and responsibility of the post. The detailed duties may vary from time to time without changing the general character or level of responsibility entailed.

#### **Special Conditions**

Workshops and Laboratories are located across the Wolfson School. Due to the specialist nature of this position, there is a large proportion of autonomy in performing this role and therefore significant self-management will need to be demonstrated.

The lab areas remain open and appropriately staffed up to 6pm (when required) to support postgraduate students and researchers effectively.

There may be opportunities for accompanying postgraduate students, researchers and academics on industrial visits, however this is not a primary job function, therefore will be by volunteering only.

The Wolfson School has vehicles used to transport equipment across campus; therefore volunteering to become a registered driver will be welcomed.

All staff have a statutory responsibility to take reasonable care of themselves, others and the environment and to prevent harm by their acts or omissions. All staff are therefore required to adhere to the University's Health, Safety and Environmental Policy & Procedures.

All staff should hold a duty and commitment to observing the University's Equality & Diversity policy and procedures at all times. Duties must be carried out in accordance with relevant Equality & Diversity legislation and University policies/procedures.

Successful completion of probation will be dependent on attendance at the University's mandatory courses which include Respecting Diversity and, where appropriate, Recruitment and Selection.

#### **Organisational Responsibility**

Reports to: Dr Kevin Bass - CREST Project Officer

# **Person Specification**

Your application will be reviewed against the essential and desirable criteria listed below. Applicants are strongly advised to explicitly state and evidence how they meet each of the essential (and desirable) criteria in their application. Stages of assessment are as follows:

1 – Application

- 2 Test/Assessment Centre/Presentation
- 3 Interview

#### **Essential Criteria**

Area	Criteria	Stage
Experience	Served a recognised Engineering apprenticeship with substantial experience in an engineering environment.	1,3
Skills and abilities	Ability to use a full range of conventional and CNC machine tools.	1,3
	Ability to work independently with minimal supervision.	1,3
	Ability to work as part of a team with excellent interpersonal skills.	1,3
	Ability to work with efficiency and accuracy while prioritising workload to meet deadlines.	1,3
	Competence in IT skills and Internet usage.	1,3
	Experience of using Computer Aided Design software packages	1,3
	Design of Rigs and Fixtures/Tooling	1,2
Training	A willingness to undertake further training as appropriate and to adopt new procedures as and when required.	1,3
Qualifications	Advanced C&G	3
Other	Commitment to observing Health & Safety regulations and the University's Equal Opportunities policy at all times.	3

#### **Desirable Criteria**

Area	Criteria	Stage
Experience	Previous experience of working in an mechanical manufacturing or R&D workshop and an understanding of the issues to be faced in such a workshop	1,3
Skills and abilities	Previous experience of working in a tool room, manufacturing or research and development workshop	1,3
	Experience of using Computer Aided Manufacture (CAM) software packages	1,3
	Mechanical Fitting experience	1,3
	Basic electrical wiring	1,3
Qualifications	BTEC Higher National Certificate / Diploma in an engineering subject.	1

## **Conditions of Service**

The position is **full time** and **fixed term for a period of 12 months** (*term length to be reduced if appointed candidate commences employment closer to the project end date*). Salary will be on Technical Services Grade 5, (£24,771 - £29,515) per annum, at a starting salary to be confirmed on offer of appointment.

The appointment will be subject to the University's normal Terms and Grades 1-5 Staff, details of which can be found <u>here</u>.

The University is committed to enabling staff to maintain a healthy work-home balance and has a number of family-friendly policies which are available at <a href="http://www.lboro.ac.uk/services/hr/a-z/family-leave-policy-and-procedure---page.html">http://www.lboro.ac.uk/services/hr/a-z/family-leave-policy-and-procedure---page.html</a>.

We also offer an on-campus nursery with subsidised places, subsidised places at local holiday clubs and a childcare voucher scheme (further details are available at: <u>http://www.lboro.ac.uk/services/hr/a-z/childcare-information---page.html</u>

In addition, the University is supportive, wherever possible, of flexible working arrangements. We also strive to create a culture that supports equality and celebrates diversity throughout the campus. The University holds a Bronze Athena SWAN award which recognises the importance of support for women at all stages of their academic career. For further information on Athena SWAN see <a href="http://www.lboro.ac.uk/services/hr/athena-swan/">http://www.lboro.ac.uk/services/hr/athena-swan/</a>