

Electronics Workshop Technician

Job Ref: REQ17008

As part of the University's ongoing commitment to redeployment, please note that this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.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 a high standard of skilled technical support across for undergraduate and postgraduate students, research staff and academic staff in the area of Electrical and Electronic Engineering, working as part of a specialized team based within an electronics workshop environment. To liaise, help and develop student skills and assist academic staff on laboratory and workshop practices.

Job Duties

- To design, develop, build, test and calibrate unique electrical and electronic equipment
- And apparatus for teaching, research and contract purposes. Be able to Work from instructions, specifications, and circuit diagrams/drawings. Using a wide range of skills and where appropriate, assisting in the development / modification of circuit design, preparation and maintenance of documentation and/or drawings, the ordering of components and materials, in support of such work
- Providing general advice to both staff and students in relationship to component selection, sources of information, methods of construction, suitability and use of electronic equipment. Training of technical staff and students in methods of Printed Circuit design and layout. This includes the use of CAD software, fabrication of Circuit boards and to incorporate build and test techniques. Be able to maintain Data reference library for use of Departmental staff and Students.
- To manufacture, or as appropriate assist with the manufacture of Printed Circuit Boards from across Departmental and faculty work areas. Using either a traditional ferric chloride etching system, or a more recent development with specialised Miller/Router equipment. Whilst, maintaining strict adherence to all safety requirements and good working practises. Advice and appraisal is also given on design Specifications and types of software files required to complete an assignment.
- Fault diagnosis, Calibration, testing and repair down to component level of electronic and electrical equipment in daily use, recording of results and subsequent updating of the departmental equipment database register. Maintenance and repair of laboratory based equipment. E.g. Power supplies, digital multimeters, oscilloscopes, etc.
- To provide effective support in collaboration with the academic members of staff responsible for the undergraduate laboratories, or supervising during a laboratory session. Thus ensuring the smooth running of the School's undergraduate laboratories.

Position Ref: 1370

- Testing and Inspection of electrical equipment to be performed with strict adherence to university codes of practise, guidelines and procedures issued through the University Safety Office.
- The Training of technical staff in workshop procedure and the use of electronic equipment and CAD systems as directed by the workshop supervisor.
- To modify and maintain existing electrical and electronic equipment including items of specialist equipment such as lasers, electron microscopes and robotic systems.
- To advise and assist students, academic and research staff on electrical, electronic and IT aspects of experimental activity for projects and for timetabled teaching activities.
- To provide support to the technical staff directly responsible for IT related issues during periods of high workload.
- To maintain equipment, work areas, stocks of materials and tools used within predefined budgets.

Wider Technical Duties & Responsibilities

- You will be responsible for the health, safety and welfare of all staff and students entering or using the Electronic workshop or PCB laboratory 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), to ensure maximum OEE (Overall Equipment Efficiency) is achieved.
- To support the activities of the Mechanical Services Workshop by manufacturing components to drawings, sketches and verbal specifications for both undergraduate projects and post graduate research activities.
- To work closely as a member of the workshop team to support the Supervisor in planning the future development of the workshop areas and teaching activities, identifying opportunities for improvements.

Behavioural Expectations

- To show and maintain an 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 workshop team; to develop broader skills to deliver taught/ supervised sessions throughout the workshop and campus wide satellite facilities supported by the Wolfson School thus supplementing the School's succession plan.
- To fully engage with School life, by participating in open days, visit days and outreach activities. Participation will include but not be restricted to, the setting up & dismantling of events, giving demonstrations and act as a Wolfson School ambassador giving help and guidance and using initiative as
- A positive "can do" attitude to enable students 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
- Student Feedback scores (Student feedback from taught sessions, project sessions)
- 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

Laboratories are located in both 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 until 6pm to accommodate timetabled classes and during project periods to support students effectively.

There may be opportunities for accompanying students 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.

Position Ref: 1370

Organisational Responsibility

Reports to: David Wayment, Electronics Workshop Supervisor

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 Electrical / Electronics Engineering apprenticeship with significant experience in an engineering / electronics environment.	1,3
Skills and abilities	Ability to undertake diagnostic testing, repair and modification of electronic equipment.	1,3
	Ability to design and manufacture printed circuits and unique electronic devices to meet the needs of original research.	1,3
	Ability to use PCB and CAD software	1,3
	Competence in IT skills and Internet usage.	1,3
	Ability to work independently with minimal supervision.	1,3
	Ability to work as part of a team, excellent interpersonal skills.	1,3
	Ability to work with efficiency and accuracy while prioritising workload to meet deadlines.	3
Training	A willingness to undertake further training as appropriate and to adopt new procedures as and when required.	
Qualifications	Advanced C&G or BTEC Higher National Certificate / Diploma in an electronics or engineering subject.	1
	National Level H Units.	1
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 electronic component manufacturing R&D workshop and an understanding of the issues to be faced in such a workshop	1,3
Skills and abilities	Knowledge of instrumentation for experimental research.	1,3
	PAT testing Certificate.	1,3
	Knowledge of embedded software design.	1,3
	Previous experience working with students and / or researchers.	1,3

Position Ref: 1370

Conditions of Service

The position is **FULL TIME** and **OPEN-ENDED**. Salary will be on Grade 5, (£23,879 - £28,452) 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 Conditions of Technical staff, details of which can be found [here](#).

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 <http://www.lboro.ac.uk/services/hr/a-z/family-leave-policy-and-procedure---page.html>.

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: <http://www.lboro.ac.uk/services/hr/a-z/childcare-information---page.html>)

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 <http://www.lboro.ac.uk/services/hr/athena-swan/>

Informal Enquiries

Informal enquiries should be made to Mr David Wayment, Electronics Workshop Supervisor by email at D.R.Wayment@lboro.ac.uk or by telephone on +44(0)1509 227034

Applications

The closing date for receipt of applications is **14 February 2017**.