



## Candidate Information

<b>Position:</b>	Technician
<b>School/Department:</b>	School of Mechanical and Aerospace Engineering
<b>Reference:</b>	18/106977
<b>Closing Date:</b>	Wednesday 28 November 2018
<b>Salary:</b>	£24,028 - £27,831 per annum (potential to progress to £29,514 per annum through sustained exceptional contribution)
<b>Anticipated Interview Date:</b>	Friday 14 December 2018

### JOB PURPOSE:

To provide specialist technical services to academic staff, research staff and students to support research and teaching projects.

### MAJOR DUTIES:

1. Using instrumentation skills, design, modify, manufacture and install control circuits according to specifications for teaching and research related purposes. Ensuring work is of a sufficient quality and best practice is used.
2. Contribute to carrying out tests/experiments using measurement and instrumentation techniques for the purpose of logging data required for test result analysis.
3. Contribute to the development, testing, construction and modification of equipment and/or techniques used for projects and research, drawing on the skills from learning and experience.
4. Provide relevant technical information, advice, guidance and training/demonstration on the use of specialised instrumentation equipment or techniques to academic staff, students and others.
5. Maintain, test, fault find, rectify, and repair technical equipment/apparatus to ensure it is safe to use and complies with relevant statutory safety regulations. Ensure general workshop/laboratory services tidiness.
6. Be responsible for overseeing specific activities and processes of a work area/laboratory/research project and provide technical supervision of students.
7. Comply with Health and Safety procedures affecting self and others.
8. Contribute to compiling/updating technical information and documentation records of equipment and processes carried out in the laboratories.
9. Contribute to maintaining/monitoring stock levels in stores, to ensure there is always an adequate stock of materials and equipment to supply project and research areas.
10. Prepare materials, set up specialized equipment/apparatus for experiments and teaching demonstrations used by staff and students in laboratory practical classes and research.
11. Carry out any other duties which are appropriate to the post as may be reasonably requested by Supervisor.

### Planning and Organising:

1. Prioritise own work within a general plan or schedule to meet deadlines and appropriate standards and assist supervisors and other senior staff in planning for future work. Includes co-ordinating arrangement and allocating tasks to others.
2. • Plan layout of laboratories as well as assessing requirements and resources needed in advance.
3. • Organise the laboratories to enable a safe working environment.

### Resource Management Responsibilities:

1. Take delegated responsibility for the security, maintenance and repair of equipment in the laboratories.
2. Provide advice and recommendations on equipment selection for research and student projects.
3. Support student learning through the development and demonstration of standard equipment and techniques.
4. Where appropriate carry out some training of staff and students in the use of equipment and techniques in own area of expertise.

5. Allocate/delegate some work to others for specific activities; taking responsibility for ensuring work is completed to required standards and timescales.
6. Take responsibility for stocks/stores of equipment and supplies within a delegated budget, so that supplies/resources are available when required.

**Internal and External Relationships:**

1. Daily contact with supervisor, work colleagues, University staff and students.
2. Communicate and liaise with users of the technical service (e.g. staff, students, external users) to establish requirements.
3. Liaise with key contacts in the wider University body to support own activities/specific tasks, as required.

**ESSENTIAL CRITERIA:**

1. Hold at least a HNC or equivalent qualification in a relevant subject e.g. Electrical or Electronic engineering.  
OR a recognised apprenticeship completed in an engineering environment.
2. Three years recent relevant post qualification/apprenticeship experience in either engineering control systems, instrumentation or automation.
3. Experience of working with instrumentation equipment used in control engineering and/or automated processes. (E.g. strain gauges, various sensors such as pressure and temperature sensors. As well as load cells, thermocouples, stepper motors).
4. Competent manual soldering skills.
5. Good mechanical assembly skills and experience of using some workshop machinery e.g. pillar drills, band saws etc.
6. Ability to follow technical diagrams and instructions.
7. Good IT literacy skills.
8. Good communication and interpersonal skills.
9. Willingness to work in a team as well as own initiative.
10. Ability to prioritise own work to meet deadlines.
11. Ability to think logically and formulate plans to solve problems.
12. Willing to gain experience and learn new skills and techniques.

**DESIRABLE CRITERIA:**

1. Qualified in Portable Appliance Testing
2. Working with hobby electronics such as Arduino, Raspberry Pi or battery powered remote control models e.g. drones, aircraft or similar.
3. Working with 3 phase power.
4. Experience of electronic circuit design, assembly and fault finding.
5. Ability to write basic safe operating procedures and instructions for other staff and students to follow.
6. Knowledge of working with and manufacturing composites.
7. Well-developed understanding of relevant regulations and procedures including health and safety requirements.