

## **Powertrains Technician**

Job Ref: REQ231223

As part of the University's ongoing commitment to redeployment, please note that this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.

#### School/Department summary

The School of Aeronautical, Automotive, Chemical and Materials Engineering is one of ten Schools within the University providing teaching, research and enterprise to undergraduate and postgraduate students and staff. The School is staffed by a team of 30 technicians with wide ranging skills and expertise who provide support to academic, administrative and research staff and to students.

The Department of Aeronautical and Automotive Engineering collaborates closely with the Wolfson School of Mechanical and Manufacturing Engineering. It is staffed by approximately 12 skilled technicians specializing in mechanical, electronic, and laboratory work. Our powertrains facilities are impressive, featuring a recently acquired hub-mounted Chassis Dynamometer and 8 advanced engine test cells. These test cells accommodate cutting-edge thermodynamic and optical single and multi-cylinder car and heavy-duty engines, as well as sophisticated electrical drivetrain systems equipped with state-of-the-art instrumentation, including fully transient dynamometers. Working in this dynamic and diverse environment offers candidates an exciting opportunity to apply and enhance their skills.

### **Job Description**

Job Grade: Technical Services Grade 5

#### **Job Purpose**

To provide skilled electrical / electronic technical engineering support for academic staff, students and
researchers using the Powertrains research laboratories and workshops. The job posting is for individuals
who may not possess the skills initially but will thrive in an environment where these skills can be nurtured,
cultivated, and fostered.

#### **Job Duties**

- To work with academic, technical and research staff in a range of projects. To assist in the design of
  devices and experimental equipment; to test engines and electric vehicle systems and to assist with the
  running of experiments.
- To carry out testing and fault diagnosis on a variety of automotive and associated electrical systems, replacing, repairing and modifying component parts where necessary.
- To assist in the application of specialised electronic sampling, measuring and analytical equipment. To install instrumentation and data acquisition systems and to assist with analysis of results.
- To support the installation of electrical equipment including single phase and three phase items, assisting
  with electrical safety across the school.
- Contribute to project planning and management. For example, provide technical, design and manufacturing advice to the group in relation to new equipment and specialised training.
- To ensure all equipment and facilities are maintained to a high standard and ensure a safe working
  environment is maintained through compliance with Health and Safety regulations and the University's
  safety procedures.

- To assist with taught laboratory sessions and provide support as required. (Full training will be given)
- To undertake training as required meeting the needs of the research projects.
- To assist with technical duties in other workshops if requested due to variations in workload. To carry out any other duties reasonably required by the Engines and Powertrains Supervisor and are commensurate with the nature and grade of the role.

#### **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**

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 the Engines and Powertrains 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	Experience gained within an automotive or other engineering environment.	1, 3
Skills and abilities	Competent knowledge of automotive electrical and electronic systems and techniques.	1, 3
	Able to work with precision and safety and to meet deadlines.	1, 3
	Able to use own initiative to prioritise workload and deal with pressure at work.	1, 3
	High level of flexibility and dependability.	1, 3
Training	Be willing to adopt new procedures as and when required.	3
	Be prepared to undertake further training both internally and externally.	3
Qualifications	City & Guilds, ONC, BTEC or higher. If essential criteria not met, significant relevant experience will be considered.	1
Other	To observe the University's Equal Opportunities policy at all times.	3
	To comply with Health & Safety Regulations.	3
	To observe the University's Operational Procedures.	3
	Hold a full valid / current UK driving licence.	3

#### **Desirable Criteria**

Area	Criteria	Stage
Experience	Previous experience working within an electrical/electronic department, workshop, or a research and development environment.	1, 3
Skills and abilities	Ability to use conventional workshop machinery and hand tools.	1, 3
	Comprehension in the control of electric motors and drives.	1, 3
	IT literate and experience in the use of standard office software.	1, 3
	Experience in the use of 3D printing	1, 3
	Previous experience working with students and/or researchers.	1, 3
	Able to work at heights.	1, 3
Training	To be able to demonstrate continued vocational training.	3
Qualifications	Served a recognised automotive or engineering apprenticeship.	1

#### **Conditions of Service**

The position is full-time and open-ended. Salary will be on Technical Services Grade 5, £27,979 to £32,982 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 Employment for Academic and Related staff/Operational and Administrative 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 <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: <a href="http://www.lboro.ac.uk/services/hr/a-z/childcare-information---page.html">http://www.lboro.ac.uk/services/hr/a-z/childcare-information---page.html</a>

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>