

School of Aeronautical, Automotive, Chemical and Materials Engineering

Level 3 Mechanical Manufacturing Advanced Apprentice in Powertrains

Job Ref: REQ17759

As part of the University's ongoing commitment to redeployment, please note that this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.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 consists of three exceptional departments in one outstanding School, evidenced by high league table rankings, strong student recruitment at high average entry tariffs, well established partnerships with world leading companies. The Aeronautical and Automotive Engineering department is famed for its industrial partnerships and enjoys close working links with Rolls-Royce, Ford Motor Company, BAE Systems, Jaguar Land Rover, Caterpillar, JCB, Airbus, Lotus, Bentley and many others. The Automotive Powertrains team is key to delivering a number of these high profile projects.

Loughborough University is offering an opportunity for an Advanced Apprenticeship in a Technician role. You will be trained in the operation and maintenance of a wide range of equipment and instruments used in the study of engines and advanced powertrains. You will learn not only the mechanics of these systems but their underlying scientific principles. In addition to on-the-job training and development you will attend Loughborough College on day release to gain a recognised qualification in Science or Engineering.

This appointment is for a fixed term of three years. Whilst no guarantee can be made, it is hoped that a permanent position could be found for those who successfully complete the Advanced Apprenticeship.

Job Description

Job Grade:

Apprentice Technician at Grade AP31 starting salary £9,620 (full details here: <http://www.lboro.ac.uk/services/hr/a-z/apprentice-guidelines.html>)

Job Purpose

To complete a programme of training within the School of Aeronautical and Automotive Engineering. To support the learning environment for Loughborough University students in the relevant School laboratories and workshops. You will work as part of a team and will be supervised to ensure you are working safely at all times.

Job Duties

The working hours are Monday – Friday, 37 hours a week. For 1 day a week, you will attend mandatory courses as part of your Apprenticeship at Loughborough College. The duties will vary according the lab requirements and annual schedules but will include:

Technical

- To become proficient in the application and use of a wide range of machine tools and techniques including:
 - Inspection and assembly of engines & transmissions plus their associated test rigs.
 - Measurement, calibration and inspection techniques using appropriate testing equipment.
 - Fabrication - Basic sheet metalwork and jointing techniques including shearing, folding, crimping, brazing and soldering.
 - Welding techniques using MIG, TIG and oxyacetylene.
- Develop a basic understanding of 12 Volt vehicle systems using the appropriate testing equipment.
- Training in the use of Computer Aided Design (CAD) using proprietary software packages.

Health and Safety

- Keep up to date with current Health and Safety regulations by attending courses, reading relevant literature etc.
- Carry out risk assessments for technician activities.
- Carry out safety checks on equipment before and after use.
- Treat and dispose of spills and breakages safely.
- Store and check expiry of hazardous substances.
- Dispose of, disassemble redundant or unsafe equipment.
- Carry out Health and Safety checks in laboratories, prep rooms and stores.

Training, Development & General

- Deliver equipment to classrooms; collect, check and return equipment to stores after lessons.
- Assist in the preparation of demonstrations and trial activities.
- Assist in the smooth running of the lab – eg. stock management, equipment checks, maintenance and repair.
- Assist the lab with Open Days and student visits.
- To attend all mandatory courses at Loughborough College and achieve a minimum satisfactory standard in all modules.
- To conduct yourself at all times in a way which reflects well on Loughborough University as your employer; this also applies whilst attending college courses
- To attend and participate in development activities delivered by the University
- as required.
- To be aware of and comply with policies and procedures relating to employee conduct, health and safety, security, confidentiality and data protection, reporting all concerns to the appropriate person.
- To contribute to the ethos, work and aims of the School and the University
- To undertake any other activities requested by your supervisor appropriate with your duties

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 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	Due to the Health and Safety requirements of these roles, a minimum age of 18 years at 31 st August 2017 is required for successful candidates.	1
	Can demonstrate an interest in Automotive and/or Mechanical Engineering through hobbies or part time work while studying	1,2,3
Skills and abilities	Ability to take instruction and work as part of a team	1,2,3
	Excellent practical IT skills including Microsoft Office	1,2,3
	Excellent written and verbal English skills	1,2,3
	High level of numeracy including ability to handle complex data	1,2,3
	Can demonstrate a professional and self-motivated approach to learning in the workplace	2,3
Training	Adopt new procedures as and when required	3
Qualifications	BTEC or equivalent qualification in an Engineering subject	1
	5 GCSEs at Grades A* - C including Maths, English Language and a Science subject	1
Other	Candidates selected for assessment may be required to complete a colour blindness test and confirm they are able to fulfil the physical requirements of the role	2

Desirable Criteria

Area	Criteria	Stage
Experience	Experience of working in a Science or Engineering laboratory	1,3
Qualifications	Holds current relevant technical or safety training qualifications	1

Conditions of Service

The position is full time and fixed term for 3 years. Salary is on the Apprentice Grade as described here: <http://www.lboro.ac.uk/services/hr/a-z/apprentice-guidelines.html>. The starting salary will be confirmed on offer of appointment.

The appointment will be subject to the University's normal Terms and Conditions of Employment 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 Tom Carslake T.B.Carslake@lboro.ac.uk (Aeronautical and Automotive Engineering).

Applications

The closing date for receipt of applications is **31 August 2017**.

The assessment centre for this position will be held on 8 September 2017 and candidates must make themselves available all day.