

Technician (Thermo Fluids)

Job Ref: REQ260709

Loughborough University's Technician Commitment

Loughborough University is a signatory of the national Technician Commitment Scheme which pledges to ensure the visibility, recognition, career development and sustainability of their technical staff. The successful candidate will therefore be joining a thriving and visible community of staff with opportunities for collaboration and networking, and a clearly defined career pathway against which they can map and plan their own professional development and career progression.

School summary

The postholder will work in the Wolfson School of Mechanical, Electrical and Manufacturing Engineering based in the Thermo Fluids Labs. <https://www.lboro.ac.uk/departments/meme/>

Job Description

Job Grade: Grade 5, Technical Teaching and Specialist (TTS)

Job Purpose

The postholder will work as part of a team to support and co-ordinate the daily operation of School technical facilities, using their knowledge and expertise to ensure compliance with health and safety regulations and the effective use of technical facilities, equipment and resources. This position delivers an invaluable contribution to the learning, teaching, and research aims of the school.

Thermo Fluids encompasses two labs in disconnected buildings (Wolfson School and STEM). One lab is equipped with practical equipment and rigs covering both mechanical and fluid tutorials; the other lab houses equipment that is used in related taught classes but is also used for research purposes. You will provide technical support for hands on laboratory experiments facilitated by Module Leaders designed to promote self-learning and self-paced peer assisted tutorial work groups. Provide support to Academic teaching, PhD students, undergraduate students, and teaching staff within Wolfson School. Aid Research activities within the lab and enable the design and manufacture of various rigs and components. Provide supervision and advice to undergraduates when developing personal year projects.

The postholder will receive general guidance and instruction but will be required to plan and organise their work independently. Initially, tasks will be straightforward within well-established routines and procedures but will increase in complexity and level of responsibility as the postholder's knowledge, training and professional development progresses.

Job Duties

- Support and co-ordinate the daily operation of technical facilities, equipment, and resources within the school, assuming a higher level of responsibility for facilities aligned to your specialism.
- Assemble, evaluate, and maintain Thermo fluid lab equipment.
- Diagnose faults in test equipment, replacing or modifying components as required.

- Keep updated on Health and Safety regulations, implement them and escalate any issues. Conduct risk assessments and other compliance activities as required.
- Maintain good housekeeping and follow 'in house' protocols to monitor consumable and stock levels. Purchase consumables within budget and policy guidelines.
- Develop and maintain technical documentation, such as standard operating procedures, and instructional materials.
- Drawing on your own expertise, identify technical issues and suggest solutions.
- Help prepare for and assist with student visit days and outreach activities. Flexibility regarding working hours/days is required at times.
- Review or appraise project drawings at the design stage. Advise on amendments. Suggest suitable equipment and consumables to use.
- Complete role-specific training and continue with personal career development.
- Support the workshop supervisor in planning any future development of the workshop areas and identify opportunities for 'in house' improvements.
- Assist the workshop supervisor in maintaining specific records/logs to demonstrate compliance with University Health and Safety Policies - this may require external training.
- Maintain good working relationships and communicate effectively with technical staff, academics, students, and visitors, including communicating complex information effectively to varied audiences. Attend and contribute to team meetings within the school and attend University technician networking events.
- Undertake other general tasks and duties, commensurate with the grade level, as directed by the Line Manager.

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 always observe the University's Equality & Diversity Commitment and Equality legislation. Our Commitment is detailed here: <https://www.lboro.ac.uk/equity-diversity-inclusion/our-commitment/>.

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

Organisational Responsibility

Reports to: Technical Supervisor (Materials).

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 of working in a laboratory, workshop or other technical facility and applying good Health & Safety practices in both teaching and research labs	1,3
	Experience of complying with relevant standards and regulations, including PUWER 1998, PSSR 2000, COSHH	1,3
	Experience of establishing and maintaining effective documentation, such as standard operating procedures, maintenance logs, risk assessments	1,3
	Experience of providing teaching and learning support to students, including practical demonstration & instruction.	1,3
	Experience of organising and setting up equipment for timetabled teaching activities using established equipment such as that provided by TecQuipment teaching rigs	1,3
	Experience of operating, testing and maintaining equipment that demonstrate thermodynamics, heat transfer and fluid dynamics - includes wind tunnels (both supersonic and sub-sonic), refrigeration and boiling rigs, concentric tube heat exchangers, Reynolds analogy rig.	1,3
	Experience of working with hydraulic/pneumatic pressure systems, pressure vessels, hydrostatic pressure testing, cryogenics, gasses under pressure	1,3
Skills and abilities	Ability to work with professionalism and discretion, in accordance with university values and to use good communication and interpersonal skills to work effectively with others.	1,3
	Ability to work efficiently and accurately, planning and prioritising your own workload to deliver tasks within agreed timescales and timetables.	1,3
	Ability to be flexible and adapt to a changing work environment – your skillset will enable you to engage with other disciplines.	1,3
	Ability to establish, change or maintain existing effective documentation: e.g. standard operating procedures and instructional materials.	1,3
	Ability to use common Microsoft Office software to a good standard.	1,3
Training	Ability to learn new skills, techniques, processes - commitment to ongoing professional development, including mandatory and role-specific training.	1,3

Equity, Diversity and Inclusion (EDI)	Commitment to understanding EDI challenges and observing University EDI guidelines.	1,3
Qualifications	Level 3, or equivalent qualification, in a relevant subject, including but not limited to: SVQ/NVQ Level 3/Two A Levels in relevant subject(s) and 5 GCSEs (including Maths and English)/Level 3 Vocational Awards/Advanced Vocational Certificate of Education (AVCE)/BTEC National Diploma/Ordinary National Certificate/Diploma (ONC/OND)/or equivalent qualification in another country. <i>While a Level 3, or equivalent, qualification is preferred, we recognise the value of practical and 'real-world' knowledge and expertise, therefore candidates with a strong industry track record will be considered based on their demonstrated skills, achievements, and contributions to the field.</i>	1
Other	Willingness to provide support for events, such as University open and visit days (occasional Saturday working may be required).	1,3
	Willingness to travel for work purposes, such as visiting suppliers, training and professional development.	1,3

Desirable Criteria

Area	Criteria	Stage
Experience	Experience of providing technical support in a relevant setting, supporting either teaching and learning or research activities.	1,3
Desirable	Experience of providing teaching and learning support to students, including practical demonstration & instruction in Higher Education	1,3
	Experience of designing experimental rigs/systems and utilising available instrumentation/equipment to support this	1,3
	Knowledge of Materials testing (use of Instron testing equipment)	1,3
	Experience of working in a Thermo Fluids lab or similar at another HE institution or industry	1,3
	Use of CAD – Siemens NX, AutoCAD	1,3
Skills and abilities	Ability to co-ordinate and supervise the work of others.	1,3
Training	Willingness to take on wider University roles on behalf of the School/Service, such as Health & Safety or other roles.	1,3
Qualifications	Desirable that applicant possesses Physics qualification	1
	Hold recognised vocational qualification such as BFPA in stage 1 hydraulics, competency in pneumatics or Cetop competency	1
Other	Current driving license (to meet University requirements for driving University/hired vehicles).	1,3
	Licence to drive FLT or other plant in support of the school	1,3

Conditions of Service

The appointment will be subject to the [University's Terms and Conditions of Employment](#) relevant to the job grade.

Shared University Responsibilities

As a member of the Loughborough community, you are expected to:

- Take reasonable care of yourself, others and the environment, and to prevent harm by your acts or omissions. All staff are therefore required to adhere to the University's Health, Safety and Environmental Sustainability Policies & Procedures.
- Uphold and actively contribute to the [University's commitment to Equity, Diversity, and Inclusion](#), ensuring that all duties are carried out in alignment with this.

Our Purpose, Vision, and Values

Our purpose, Vision and Values underpin all that we do and shape how we work together at Loughborough. We're proud to promote our values: **Adventurous, Collaborative, Creative, Authentic and Responsible**. Our people bring these values to life every day, and they are central to the positive and supportive culture that makes Loughborough unique.

If you join us, you'll be encouraged to bring these values to life in your own work and contribute to the positive, supportive culture that makes Loughborough unique.

Read more about our [vision and values](#).

Our Accreditations



We 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.



We are proud to be a [Race Equality Charter Member](#). The Charter aims to improve the representation, progression and success of all minority ethnic staff and students within higher education and address issues of racism within higher education institutions (HEIs).



We are proud to be a Disability Confident Employer and have adopted a proactive approach to employing disabled people and to creating a more diverse workforce. We ensure that our recruitment processes are inclusive and accessible. We guarantee to offer an interview to all applicants who have declared themselves with a disability, provided they meet the essential criteria for a role. We proactively anticipate and provide reasonable adjustments and support existing employees who acquire a disability or long-term condition to thrive in the workplace.



We are a real living wage employer, and our Living Wage Employer Mark shows our commitment to paying our staff according to the cost of living.



We are proud supporters of the [City of Sanctuary movement](#) and delighted to be recognised as a University of Sanctuary. This national network brings together, university staff, lecturers, academics, and students, who together work to make Higher Education institutions places of safety, solidarity and empowerment for people seeking sanctuary.

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.