School of Architecture, Building
and Civil Engineering

Loughborough University

Technical Specialist Water Engineering - Hydraulics

Job Ref: REQ250700

As part of the University's ongoing commitment to redeployment, please note that this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.

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 School of Architecture, Building & Civil Engineering and be based within the Sir Frank Gibb Laboratories, which is one of the largest built-environment University laboratories in the UK. The facilities are used extensively for teaching, research and innovation and provide support for a broad range of Civil Engineering, Built Environment and Architecture activities.

Job Description

Job Grade: Grade 6, Technical Teaching and Specialist (TTS)

Job Purpose
The postholder will coordinate operations and facilities in an academic and research setting of hydrodynamics which primarily concerns the physics of water. This position plays a critical role in advancing the School's research endeavours through the provision of advanced technical expertise.

The postholder will work as part of a team to co-ordinate technical operations ensuring compliance with safety standards and the effective management of facilities, equipment, resources and technical expertise to enhance the school's teaching, research, innovation and learning aims.

They will be responsible for managing the day to day running and operation of the Water laboratories (Hydraulics) according to local codes of practice.

The postholder will be required to independently plan and organise their own work and the work of others, and to provide line supervision, mentoring and professional development support to colleagues. The level of responsibility will increase as the postholder's knowledge, training, and professional development progresses.

Job Duties

- Coordinate technical operations in the school's Hydraulics labs and occasionally in the field, ensuring the availability of equipment, materials, and resources necessary to successfully meet School research aims.
- Coordinate the maintenance, procurement, and upgrading of specialist research equipment and consumables, within allocated budgets and University procurement processes.
- Stay current with advancements in hydraulics and Water Engineering techniques and technologies. This may involve attending events and professional development courses to enhance knowledge and expertise.
- Build and maintain effective working relationships with academic, technical and operational staff, students, external stakeholders, and visitors, effectively communicating complex information to a range of audiences.

- Assist academic and other technical staff in designing and conducting research activities within the hydraulics and Water Engineering labs, providing expert technical support and troubleshooting complex technical issues.
- Identify, address, and escalate technical issues to the Technical Manager, offering solutions based on own knowledge and expertise.
- Maintain a thorough understanding of Health and Safety regulations, implementing and enforcing protocols to ensure safe working environments and operations across the hydraulics and Water Engineering facilities.
- Ensure compliance with regulatory standards and university policies, particularly related to health and safety, ethical research, and data security.
- Develop, maintain, and refine technical documentation, including standard operating procedures and experimental protocols, ensuring clear communication of technical processes.
- Line manage and/or supervise the work of technical staff at lower grades who work in the school's hydraulics and Water Engineering facilities fostering a collaborative work environment in line with research objectives. Escalate staffing issues to the Technical Manager as required.
- Participate in open days, visit days and other outreach activities, representing the School's technical capabilities and research strengths to a broad audience.
- To assist with technical duties in other areas of the laboratories, under the direction of the School's Technical Facilities Manager, in response to changing needs due to variations in workload, staff shortages or reorganisation.
- To assist the School's Biochemistry & Microbiology technician with technical and logistical operations when required relating to teaching, research and enterprise.
- To provide direct assistance to the Building Energy Technician when required and provide cover in their absence.
- To provide manufacturing support to the wider school in direct support to the Technical Supervisor (Manufacturing & Modelling) where required.
- To provide training and assistance to Apprentices and Junior technical staff where required.
- To assist staff and students in other schools where directed by the School's Technical Facilities Manager.
- To assist the wider school by driving University owned, leased or hired vehicles were appropriate
- Undertake other general tasks and duties, commensurate with the level of the position, 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 hold a duty and commitment to observing the University's Equity, Diversity & Inclusion policy and procedures at all times. Duties must be carried out in accordance with relevant Equity, Diversity & Inclusion legislation and University policies/procedures.

Successful completion of probation will be dependent on attendance at the University's mandatory courses which include Belonging and Inclusion, Health & Safety, etc.

Organisational Responsibility
Reports to: ABCE Technical Facilities Manager.

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 running specific laboratories, workshops and other technical facilities and associated activities related to your specialism, with minimal supervision.	1,3
	Experience of working effectively and collegiately with internal and external stakeholders at all levels.	1,3
	Experience of co-ordinating the effective and safe operation, maintenance and upgrade of equipment.	1,3
	Experience of co-ordinating the procurement of equipment and consumables within agreed budgets, in accordance with agreed policies.	1,3
	Experience of applying and co-ordinating relevant processes and techniques which includes having a high proficiency in fitting, plumbing and general mechanical engineering workshop skills	1,3
	Experience of working in a laboratory environment where developmental skills are often required to contribute to bespoke solutions.	1,3
	Experience of ensuring that correct Health & Safety procedures and practices are being followed by all stakeholders working in your specialist area.	1,3
	Experience of ensuring compliance with relevant standards and regulations directly relating to the use of workshop machinery and general tooling.	1,3
	Experience of carrying out or designing experiments and studies, and the instrumentation, equipment and facilities to support engineering research and development.	1,3
	Experience of working with and/or co-ordinating the maintenance and testing of fluid control equipment such as valves & pumps	1,3
	Experience of using office-based and specialist software such as MS Office and/or data logging software	1,3
	Experience of purchasing laboratory equipment/chemicals/consumables.	1,,3
Skills and abilities	Ability to work with professionalism and discretion, in accordance with University values, and to maintain confidentiality.	1,3
	Ability to use good communication to form and maintain effective relationships at all levels.	1,3
	Ability to communicate complex information in an effective and engaging way to a range of audiences, specifically in the areas of fluid control and mechanical methods.	1,2,3
	Ability to work efficiently and accurately, planning and prioritising your own workload to deliver tasks within agreed timescales.	1,3
	Ability to work independently, apply your own initiative, be self-motivated and lead own workload, projects and teams.	1,3
	Ability to learn new skills and solve problems, using initiative and judgement in more complex situations.	1,2,3
	Ability to establish, develop and maintain effective documentation, including risk, CoSHH & PUWER assessments plus standard operating procedures and purchasing information.	1,2,3
	Utilise mechanical workshop machinery to manufacture components for a wide range of uses in a variety of materials including metals, woods and plastics.	1,3

	Ability to coordinate staff to achieve appropriate deadlines and monitor performance and development.	1,2,3
Training	Proven commitment to ongoing professional development, including mandatory and role-specific training.	1,3
	Willingness to take on wider University roles on behalf of the School/Service, such as Health & Safety or other roles.	1,3
	Must have certified training with regard to the safe use of machine tools.	1,2,3
Equity, Diversity and Inclusion (EDI)	Commitment to understanding EDI challenges and observing University EDI guidelines.	1,3
Qualifications	Level 4, or equivalent qualification, in a relevant subject, including but not limited to: Certificate of higher education (CertHE); Higher apprenticeship; Higher national certificate (HNC); Level 4 award; Level 4 certificate; Level 4 diploma; Level 4 NVQ. *While a Level 4, 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.*	1
	Willingness to work towards a teaching qualification	1
	BTEC Higher National Certificate/Diploma/Advanced C&Gs in Mechanical Engineering or related subject	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 ensuring compliance with relevant standards and regulations the machinery directive, PSSR and PUWER	1,3
	Experience of carrying out or designing experiments and studies, and the instrumentation and equipment to support the field of fluid dynamics.	1,3
	Experience of using CAD and CNC.	1,3
	Experience of providing and developing teaching and learning support to students, including practical demonstration & instruction.	1,3
Other	Current driving license (to meet University requirements for driving University/hired vehicles).	1,3

Conditions of Service

The position is **full time** and **open-ended**. Salary will be on the **Technical Teaching and Specialist** job family at **Grade 6**, £35,116-£45,413 per annum, at a starting salary to be confirmed on offer of appointment. The appointment will be subject to the University's Terms and Conditions of Employment for staff grades 6 and above, which can be found at: https://www.lboro.ac.uk/services/hr/conditions-of-service/.

The University is committed to enabling staff to maintain a healthy work-home balance and has a number of family-friendly policies which can be found at: http://www.lboro.ac.uk/services/hr/support/

The University offers a wide range of employee benefits, which can be found at: http://www.lboro.ac.uk/services/hr/benefits/

We also offer an on-campus nursery with subsidised places, subsidised places at local holiday clubs and a childcare voucher scheme, which can be found at: https://www.lboro.ac.uk/services/hr/topics/childcare-support/

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. Further information on Athena SWAN can be found at: http://www.lboro.ac.uk/services/hr/athena-swan/

Applications

Informal enquiries should be directed to Technical Facilities Manager, Mark Harrod, m.harrod@lboro.ac.uk or call 01509 222638.

The closing date for receipt of applications is 1 September 2025.