



Technical Tutor (Engineering Machine Shop)

Job Ref: REQ260096

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/Department summary:

The School of Design and Creative Arts is seeking a new colleague to undertake a Technical Tutor role, primarily within the Engineering Machine Shop based in the Design School building. This is an intensive tutoring post that will deliver skills, knowledge and practice in support of project briefs and assessment tasks to significant student numbers. The post holder will work closely with Academic and Technical staff in developing high quality pedagogic approaches in facilitating the taught programmes, and to ensure outcomes of high standard.

The School of Design and Creative Arts delivers design education across a breadth of undergraduate programmes.

Job Description

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

Job Purpose

The postholder will support the delivery and enhancement of high-quality technical teaching and learning activities within the school, ensuring effective equipment and resource management in technical teaching facilities and managing technical staff, where required. This role is critical in creating a safe, compliant, and engaging environment for students and staff, with a focus on providing practical instruction, managing teaching facilities, and fostering continuous professional development for technical staff in their teaching activities.

The successful candidate will be a highly motivated, collegiate individual, with significant practical Engineering Machine Shop experience to provide technical tutoring, supervision and skilled mechanical technical support to undergraduate and postgraduate students, academic staff and other technical staff.

Job Duties

- Provide substantial Engineering Machine Shop technical tutoring and professional mechanical technical advice to undergraduate and postgraduate students during timetabled and non-timetabled sessions.
- Monitor the attendance and development of students
- To assess both practical and theoretical student project work.

- Coordinate technical operations in the Engineering Machine Shop, ensuring that teaching facilities and equipment are maintained, and updated as required, to provide an effective learning environment for students.
- Implement and enforce Health and Safety regulations within teaching facilities you have responsibility for, ensuring that staff, students, and equipment operate in compliance with safety standards and escalating issues when necessary
- Oversee the procurement and maintenance of equipment, including lathes, milling machines, surface grinders and consumables for your specialist area, ensuring resources are available, functional, and compliant with School guidelines and budget constraints.
- Ensure that complex technical information is communicated clearly and engagingly to diverse audiences and maintain effective communications with colleagues.
- Coordinate the development and maintenance of documentation, such as lesson plans and instructional materials to ensure effective and consistent delivery of technical teaching and learning activities.
- Collaborate with academic staff to contribute to curriculum design and the enhancement of technical activities required to deliver module and programme aims.
- To manufacture, assemble and install equipment in support of research projects, using Engineering Machine Shop and bench fitting skills.
- To support CAM / CNC machining and 3D printing activities and maintenance of associated equipment and facilities.
- Provide technical support for student outreach activities, including open days, visit days and other outreach activities, ensuring the effective presentation of the school's learning and teaching capabilities.
- Line manage and/or supervise the work of technical staff at lower grades who work in the Engineering Machine Shop, fostering a collaborative work environment in line with learning and teaching objectives. Escalate staffing issues to the Senior Technical Officer as required.
- Identify technical teaching issues and staff-related concerns that arise, escalating them to the Senior Technical Officer when appropriate and offering informed solutions.
- Engage in role-specific training and development, such as teaching qualifications, to ensure continued personal and team growth and development.
- To work within task-based teams of staff (e.g., on exhibition assembly and dismantling)
- 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 outlined in the document.

Organisational Responsibility

Reports to the: Senior Technical Officer
Direct Reports: N/A
Budget Responsibilities: N/A

Person Specification

Your application will be assessed based on the essential and desirable criteria listed below.

Applicants are strongly encouraged to explicitly demonstrate how they meet each essential (and desirable) criteria at the application stage. The criteria that you need to demonstrate in your application will be listed as Stage 1 in the table below.

Stages of assessment are as follows:

- 1 – Criteria measured within the Application
- 2 – Criteria measured at Test/Assessment Centre/Presentation
- 3 - Criteria measured at Interview

Essential Criteria

Area	Criteria	Stage
Experience	Experience of providing teaching and learning support to students, for example theoretical teaching and practical demonstrations & instruction (including in the safe use of equipment).	1,2,3
	Experience of applying and co-ordinating relevant processes and techniques used to support the delivery of the school's learning and teaching outcomes, including working with conventional machine tools/hand tools within an Engineering Machine Shop environment.	1,3
	Experience of running the effective delivery of teaching workshops and other facilities.	1,3
	Experience of working effectively and collegiately with internal and external stakeholders at all levels.	1,3
	Experience of working with other technical colleagues to ensure the effective and safe operation, maintenance and upgrade of teaching equipment.	1,3
	Experience of ensuring that correct Health, Safety and wellbeing procedures and practices are being followed by all stakeholders working in your specialist areas.	1,3
	Experience of ensuring compliance with relevant standards and regulations including PUWER.	1,3
	Experience of using office-based and specialist software including email & PowerPoint.	1,3
Skills and abilities	Demonstrable technical skills in the techniques, technologies, processes, and applications associated with the teaching specialisms.	1,2,3
	Ability to use good communication and interpersonal skills to work effectively with a range of stakeholders.	1,2,3

	Ability and passion for communicating specialist knowledge and complex information in an effective and engaging way to a range of audiences, in Engineering Machine Shop and associated techniques.	1,2,3
	Ability to contribute to the assessment of student work.	1,3
	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 establish, develop and maintain effective teaching related documentation.	1,2,3
	Ability to provide input into curriculum design and/or the design of technical activities to support teaching.	1,3
	Ability to liaise with School leadership teams and academic colleagues to effectively translate learning and teaching aims into technical outputs.	1,3
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
Equity, Diversity and Inclusion (EDI)	Commitment to understanding EDI challenges and observing University EDI guidelines.	1,3
Qualifications	<p>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</p> <p><i>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.</i></p>	1
	Willingness to work towards a teaching qualification	1,3
Other	Willingness to provide support for events, such as University open and visit days (occasional out of hours working may be requested).	1,3

Desirable Criteria

Area	Criteria	Stage
Experience	Experience of co-ordinating or supervising the work of others to achieve successful outputs and outcomes.	1,3

	Experience of carrying out or designing and manufacturing of mechanical instrumentation and equipment to support Research and Innovation activities.	1,3
	Previous experience of working/managing in a toolroom, manufacturing or research and development workshop.	1,3
	Experience in the use of Computer Numerical Control (CNC) machine tools and 3D Printing.	1,3
	Served a recognized Engineering Machine Shop/Mechanical Engineering Apprenticeship.	1,3
	Experience of using office-based and specialist software including SolidWorks or other CAD / CAM related	1,3
	Experience of instructing/teaching apprentices or students.	1,3
Skills and abilities	Ability to manage budgets	1,3
	Metal fabrication, woodworking and plastic moulding skills and knowledge.	1,3
Training	Instructional techniques/teaching qualification or certificate	1,2,3
Other	Willingness to travel for work purposes, such as site visits, field trips, visiting suppliers, professional development and external training.	1,3
Qualifications	Mechanical Higher National Diploma (HND) or Undergraduate Degree	1
Other	Current driving license (to meet University requirements for driving University/hired vehicles).	1,3
	First Aid at Work Certificate.	1

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 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 a disability, provided that the essential criteria for the role are met. 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.