# School of Architecture, Building and Civil Engineering



## Manufacturing, Modelling and Architectural Support Technician.

Job Ref: REQ240332

As part of the University's ongoing commitment to redeployment, please note that this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.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 Architecture, Building & Civil Engineering at Loughborough University has a firm vision to be the world's leading integrated centre for built environment research and education, attending to the entire lifecycle of both buildings and infrastructure through our research, teaching and enterprise programmes. It is an outstanding School, evidenced by high league table rankings, strong student recruitment at high entry tariffs and well-established partnerships with world leading companies.

Teaching, Research and Enterprise within the School of Architecture, Building and Civil Engineering covers all disciplines in the construction and transport industries. The School thus benefits by having academic staff from a wide variety of backgrounds, offering a rich diversity of perspectives. Significant activity is based around our Innovative Manufacturing and modelling workshops, labs and studios.

Loughborough University is offering an opportunity in a Technician role to support the School with manufacturing and modelling as well as providing close support for our flagship Architecture programmes. In addition to some on-the-job training and development, the successful candidate will be offered the opportunity to attend relevant courses to further develop in relevant fields of expertise.

## **Job Description**

## Job Grade

Technician at Grade 4

## **Job Purpose**

To support the learning environment for Loughborough University students in the School laboratories, workshops and studios.

You will work as part of a team performing a variety of tasks across disciplines. This will include:

- Providing technical support to staff, researchers and students in the School's workshops and laboratories under general supervision of senior technical staff in those areas
- Assisting in the instruction of students in timetabled laboratory classes in the architecture, structures and geotechnics laboratories. This will involve explaining procedures, clarifying facts or seeking additional information.
- Providing technical advice to undergraduate and postgraduate students, staff and outside users of the laboratories, workshops and studios as appropriate.
- Providing mechanical services, woodworking and plastics workshop support to the School as required.

#### **Job Duties**

The duties will vary according to the School requirements and annual schedules but will include:

#### Technical

- Safe and proficient use of conventional mechanical workshop machinery e.g., manual lathes, milling and drilling machines and CNC machines in an analogue environment using a wide variety of materials.
- The safe use a wide selection of hand tools.
- To be trained in and provide training for the use of Computer Aided Design (CAD) using proprietary software packages.
- To use and develop a good understanding of 3D printing processes and provide direct support in all aspects.
- To operate Laser Cutters, panel, bench and band saws together with sanders and routers.
- To provide specific support to manufacturing and automation research themes by utilising manufacturing and modelling skills together with the provision of general Technical support.
- To support the Architecture students both BArch & MArch with the manufacture and design of models.
- To participate in fieldwork and undertake site visits.
- To assist and support other technical staff in delivering a high quality comprehensive technical service when directed by the Technical Supervisor and/or School Technical Manager.

#### 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 appropriate 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
- Disassemble and/or dispose of redundant or unsafe equipment
- Carry out Health and Safety checks in laboratories, prep rooms and stores

#### Training, Development & General

- Assist in the preparation of laboratory demonstrations and trial activities
- Assist in the smooth running of the laboratory / workshop e.g. stock management, equipment checks, maintenance and repair
- Assist in the laboratory with Open Days and student visits
- Deliver equipment to classrooms; collect, check and return equipment to stores after lessons.
- To attend all mandatory courses and achieve a minimum satisfactory standard to perform the role.
- To be aware of and comply with policies and procedures relating to employee conduct, health and safety, environment, security, confidentiality and data protection, reporting all concerns to the appropriate person
- To conduct yourself at all times in a way which reflects well on Loughborough University as your employer;
  this also applies whilst working away from the University.
- To attend and participate in development activities delivered by the University as required
- To assist with the School's 'Goods-in' and Inventory procedures.
- To undertake minor repair work within capability in the School's offices and study areas.
- To contribute to the vision and aims of the School and the University
- To undertake any other activities requested your supervisor commensurate with your duties.
- Hold a clean full driving license and drive University vehicles for the purposes of supporting the school with work off-campus, making collections and deliveries etc.

#### **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 commitment to the University's Equity, Diversity, and Inclusion policies' at all times.

Successful completion of probation will be dependent on attendance at the University's mandatory courses which include Respecting Diversity and Information Security training.

## **Organisational Responsibility**

Reports to: School Technical Facilities Manager.

Supervised by: Technical Supervisor: Manufacturing & Modelling

## **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
Education, Qualifications	ONC or Equivalent, plus recognised apprenticeship in a manufacturing environment.	1
Experience	Can demonstrate proven track record in Model making, manufacturing and/or Mechanical Engineering through work experience and training.	1,2,3
Skills and abilities	Ability to take instruction, use initiative and work as part of a team.	1,2,3
	Good practical IT skills including Microsoft Office (Word, Excel, email).	1,2,3
	Good written and verbal English skills.	1,2,3
	Good level of numeracy including ability to handle and report data.	1,2,3
	Can demonstrate a professional and self-motivated approach to learning in the workplace	2,3
Training	Able to adopt new procedures as and when required	3
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
Qualifications	HNC or equivalent qualification in an Engineering subject at NVQ level 4 or other relevant vocational qualification.	1
	Holds current relevant technical or safety training qualifications such as CoSHH & First aid	1
Experience	Experience in the use of CNC tools	1,3
	Experience in the use 3D printers and laser cutters	1,3
	Experience of Instruction to students.	1
	Previous experience of working in a higher education environment.	1

#### **Conditions of Service**

The position will be on a full time (annualised hours), open ended contract on Technical Services Grade 4 (£23,700 - £27,181 per annum) at a starting salary to be confirmed on offer of appointment.

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="https://www.lboro.ac.uk/services/hr/topics/family-leave/">https://www.lboro.ac.uk/services/hr/topics/family-leave/</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="https://www.lboro.ac.uk/services/hr/topics/childcare-support/">https://www.lboro.ac.uk/services/hr/topics/childcare-support/</a>

In addition, the University is supportive, wherever possible, of flexible working arrangements. We also strive to create a culture that supports equity 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="https://www.lboro.ac.uk/equity-diversity-inclusion/gender-equity/athena-swan/">https://www.lboro.ac.uk/equity-diversity-inclusion/gender-equity/athena-swan/</a>