



Role Title: Makerspace Technician / Demonstrator

Reports To: Dean of College of Engineering & Technology

Grade: (depending on qualifications and experience)

Role's Purpose

The opportunity

An opportunity to become an integral part of the 3D Makerspace team. You will be required to design and operate a set of 3D fabrication workshops. You will plan and deliver a variety of workshop activities while ensuring that students as well as staff produce in an environment that is both safe and creative.

While contributing to the continuous development of the Makerspace you will bring key skills to the processes of fabrication of products, ensuring finesse and efficiency. This is also an opportunity to develop new skills for student support across a wide range of tools and technical workshops.

About you

The perfect candidate would have a BA in a relevant Art and Design subject, (or a professional equivalent) and relevant experience, gained through working in industry/practice and or education. You must be able to demonstrate and pass on technical skills to a wide range of students, have an in-depth knowledge of traditional fabrication as well as working experience with digital fabrication techniques across wood, metal and plastics. An awareness and appreciation of the need for high levels of customer care, and professional experience in the discipline or with open-access approaches to workshop learning environments.

Purpose of the role

As a member of the College's technical team, provide professional technical expertise, guidance and knowledge relating to both traditional fabrication and digital fabrication: supporting teaching, research, and commercial activities.

To contribute critical input to student concept and expressive/creative intention, including giving feedback to students and contributing to student formative assessments, with reference to appropriate learning outcomes of the course or project.

To provide support for student learning, informal and formal training and instruction, and the development of proficiency of relevant platforms, tools, and methods.

The post holder will be responsible for specialist equipment and consumables usage and maintenance, in accordance with relevant legislation, health and safety policy and University policy. This includes the administration of systems, Health and Safety documentation, orders, bookings, and maintenance records.

Responsibilities

Technical Delivery

- Support the supervision of learning activities within the technical environment ensuring safe use and compliance with local rules and Health and Safety regulations. Providing expert guidance and advice to students, helping students to identify and supply appropriate techniques, processes, materials, resources, and equipment to meet learning outcomes.
- To contribute to the delivery of technical provision and specialist knowledge of fabrication, and related digital technologies across wood, metal and plastics workshops.
- To provide student facing technical support for both traditional and digital making. Sharing responsibility for the

day-to-day operation and the staff that work within the areas.

- Contribute, as a member of the technical team, with the planning and development of the area including the identification of learning needs, implementation of learning outcomes, research, and commercial activities.
- Co-ordinate technical activities (which may include co-ordination of other technical staff) to enable the technical areas to operate effectively (e.g. timetabling, attendance, online digital resources.)
- Co-ordinate allocated resources efficiently, ensuring continual availability of consumables and equipment. Collaborate with other staff across the disciplines as the role required to support the development and delivery of teaching and learning.
- To undertake or arrange planned maintenance and repairs liaising with suppliers and contractors to meet statutory and recognised professional procedures and guidelines. Perform routine housekeeping activities to keep all work areas in a safe, orderly, and clean condition. Keep maintenance logs and records up to date.
- To assist in the planning, preparation, mounting and dismantling of exhibitions and other public events.

Teaching and Learning

- To contribute with the design, production and development of appropriate teaching and learning materials to suit areas of specialist activity and service delivery.
- To be responsible for inducting new users into the facilities, providing training on all aspects of use including health and safety. Provide formal or informal sessions to users that may include one or more of the following – induction, demonstration, instruction with a process/technique, coaching with the development and proficiency of skills, techniques, and process.

Research and Development

- Contribute, as a member of the technical team, with the planning and development of the area including the identification of learning needs, implementation of learning outcomes, research, and commercial activities.
- Though continuous personal and professional development maintain a keen interest in technical developments that are relevant to the technical support of the academic programmes.

Leadership, Management and Engagement

- Take a lead in your area of expertise and support less experienced colleagues in developing their teaching and delivery
- Lead and coordinate the work of others to ensure delivery to high standards and to ensure student needs and expectations are met and exceeded
- Deploy strategies to maximise student engagement in learning and to drive strong student performance and progression outcomes for a diverse range of students
- Collaborate with external organisations such as industry, public sector, charity, and local community groups and organise external facing activities such as field trips and student placements
- Discharge administrative duties in an efficient and timely manner.
- Engage in and participate in performance review processes and enhancement strategies.

Other Responsibilities

- Perform any other duties appropriate to the grade as may be required by the Dean of College of Engineering & Technology and the President of BUB;
- Comply with the personal health and safety responsibilities specified in the University Health and Safety policy;
- Undertake continuous personal and professional development, and to support it for any staff you manage through effective use of the University's Planning, Review and Appraisal scheme and staff development opportunities
- Make full use of all information and communication technologies in adherence to data protection policies to meet the requirements of the role and to promote organisational effectiveness
- Engage with the University's commitment to put our students first and deliver services which are customer orientated, represent value for money and contribute to the financial

and environmental sustainability of the University when undertaking all duties and aspects of the role;

- Promote equality and diversity for students and staff and sustain an inclusive and supportive study and work environment in accordance with University policy;
- Contribute to student recruitment and conversion strategies including any outreach activity as required;
- Contribute to the promotion of University programmes through promotion media and external events;
- This role descriptor is a guide to the work you will initially be required to undertake. It may be changed from time to time to meet changing business needs. It does not form part of your Contract of Employment.

Person Specification

Consideration should be given to the following themes which will be tested at each stage of the recruitment process

- Teaching and learning
- Scholarship and innovation
- Engagement

Qualifications

	The successful candidate should have:	Essential/ Desirable	Tested by* A, I, P, T
1	Quantifiable industrial experience in 3d fabrication and model making	Essential	A, I
2	An undergraduate degree and/or relevant industrial experience in a related subject area	Essential	A, I
3	Membership of subject related professional bodies and or relevant professional certification	Desirable	A, I

Background & Experience

	The successful candidate should have:	Essential/ Desirable	Tested by* A, I, P, T
4	Experience of planning, preparing, and delivering high teaching, demonstration and/ or training in a workshop environment	Essential	A, I
5	Understanding of the metrics for evaluation of teaching quality and student experience in contemporary UK HE	Desirable	A, I
6	Industry engagement / experience in the subject domain	Desirable	A, I, P

Knowledge

	The successful candidate should have demonstrable knowledge of:	Essential/ Desirable	Tested by* A, I, P, T
7	Knowledge and understanding the current industry, social and contextual issues affecting the subject domain	Essential	A, I
8	Experience in the demonstration and fabrication with the use of hand tools	Essential	A, I, P
9	Experience in the demonstration and fabrication with the use of machine tools	Essential	A, I, P
10	Experience in the demonstration and fabrication with the use of machine tools 3D printer and laser cutter	Desirable	A, I, P
11	Tools, technologies, approaches, and best practice in the subject domain	Essential	A, I

Skills & Competencies

	The successful candidate should demonstrate:	Essential/ Desirable	Tested by* A, I, P, T
13	Excellent English language skills both written and verbal	Essential	A, I, P
14	Ability to communicate complex ideas to a diverse range of students using a variety of teaching methods	Essential	A, I, P
15	Demonstrable ability to motivate, coach and support students and have knowledge of individual learning styles and development needs.	Essential	A, I
16	Ability to plan prepare and deliver high quality teaching in pedagogy appropriate for the subject domain within contemporary UK HE	Essential	A, I, P
17	Ability to undertake advanced scholarship and high-quality research in the subject domain	Desirable	A, I
18	Demonstrable commitment to ongoing personal and professional development	Essential	A, I
19	Demonstrable commitment to the wider team and ability to work collaboratively with a diverse range of people to generate innovative and practical solutions to address complex challenges	Essential	A, I
20	Quantifiable evidence of teaching excellence driving strong student outcomes	Desirable	A, I
21	Experience of supervision of and assessment of student projects in the subject domain	Desirable	A, I
22	Excellent organisational and time management skills	Essential	A, I
23	Hold and maintain CPD in relevant professional body/ies	Desirable	A, I
24	An understanding of the needs of students from different cultural and educational backgrounds	Essential	A, I
25	Flexibility and adaptability in terms of working and teaching in different contexts and environments	Essential	A, I

A = Application form, I = Interview, P = Presentation, T = Test

Candidate guidance

*****To fully meet the essential criteria candidates must show clear evidence of how they meet the criteria. Simply stating that you have a skill or experience in an area is not sufficient, you must provide a clear example to demonstrate and evidence how you have met each of the criterion you address.***