
Technical Tutor in Metalwork & Casting



School/Department:	Technical Services
Grade:	6
Reports to:	Technical Services Manager
Responsible for:	Providing Technical support for student learning and academic teaching

Job Summary and Purpose:	To provide technical support and instruction in the areas of metalwork and casting which meet the needs of the course portfolio and students and enable optimum use of technical facilities while actively encouraging cross-disciplinary activity.
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01 MAIN DUTIES

This professional role will encompass all of the following, but the balance of duties and responsibilities will be determined in agreement with your line manager and the principles of the stated job purpose.

1.1 General Duties

- 1.1.1. To work within guidelines provided by the Technical Services Manager, including those for the allocation of duties, authorisation of hours of work, sickness, annual leave etc.
- 1.1.2. To plan and deliver technical skill workshops in support of the academic aims of the courses.
- 1.1.3. Develop and prepare materials for students in support of technical tuition e.g. handouts, video tutorials, sample work etc.
- 1.1.4. Tutor students on the technical components of their projects. The tutoring role typically encompasses the following:
 - 1.1.4.1. Technician Tutors teach processes as part of the delivery of named units.
 - 1.1.4.2. A Technician Tutor aligns the level of instruction with the required learning outcomes of particular units.
 - 1.1.4.3. Liaison with Course Leaders to define processes and depth of knowledge that need to be taught to support the course curriculum.
 - 1.1.4.4. Support academic staff in the technical support required for teaching and research.

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- 1.1.5. To develop approaches that demonstrate facilities and skills to students wishing to adopt and engage with cross-disciplinary practice.
 - 1.1.6. To induct students, through demonstration, into the designated area's safe working practices, basic processes, and proper use of equipment and materials, and record the achievement of these basic competencies.
 - 1.1.7. To assist in the organisation and preparation of external and internal shows and student exhibitions.
 - 1.1.8. To ensure the security and supervision of the designated areas and the equipment contained within them.
 - 1.1.9. To undertake and maintain a record of risk assessments and COSHH necessary for the operation of the designated areas.
 - 1.1.10. To construct a schedule for the maintenance and repair of equipment within the defined areas and carry out routine work, which is not covered by service contracts.
 - 1.2. Specialist Duties
 - 1.2.1. To provide professional expertise, guidance, support and demonstrations in the area of metalwork and casting, processes and equipment to include:
 - 1.2.1.1. Metal working: equipment and processes used in cutting, forming, fabrication and finishing techniques.
 - 1.2.1.2. Mould making and Foundry work: ceramic shell moulding, metal casting and heat process, metal finishing and use of chemicals.
 - 1.2.2. Provide Health and Safety Inductions to students, including hazards associated with equipment, processes and substances. Supervise designated areas; permitting access to only those students who are recorded as having completed an induction and ensure safe working practices are always followed.
 - 1.2.3. Compliance with relevant COSHH regulations and control materials and chemical processes, ensuring safety equipment is available, maintained, in good working order and used appropriately. Regular safety audits are undertaken as required.
 - 1.2.4. Ensure safe lifting procedures are followed, and safe lifting equipment is used when carrying out Manual Handling tasks.
 - 1.2.5. To prepare teaching rooms and workshops for staff and students in line with academic needs.
 - 1.2.6. Manage various stores such as material, loan equipment, chemicals and consumables.
 - 1.2.7. To maintain adequate stock levels of consumables and tools in consultation with the budget holder, raise purchase orders in accordance with Finances Policies and Procedures, and take deliveries.
 - 1.2.8. Advise on the long-term development of facilities and when appropriate remove or install equipment.
 - 1.2.9. To cover for short-term absence of colleagues within your sphere of competence.
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02 DUTIES OF ALL STAFF

- 2.1 To undertake such other duties as are within the scope and spirit of the job purpose, the job title, and the grade.
- 2.2 Maintain and promote health, safety & wellbeing awareness and commitment within the framework of the University's Health, Safety & Wellbeing policy.
- 2.3 Take responsibility for health and safety of yourself and others in carrying out the duties of the role.
- 2.4 To promote equality, diversity and inclusion in your performance of your duties.
- 2.5 Undertake any other work and hours of work as required to commensurate with the level and responsibility of the post.
- 2.6 To actively participate in learning and development to meet the requirements of your role and the University.

03 SELECTION MATRIX

Essential Desirable Used to
shortlist

Qualifications

1	Level 5 or above qualification commensurate in the relevant discipline or equivalent experience and skills	x		x
2	PGCE or equivalent teaching qualification, or the willingness to undertake the development to be qualified.		x	

Knowledge & Experience

3	Experience of work in a similar environment	x		
4	Experience of supporting hot and cold metal working and related practice	x		
5	Experience in Metalworking techniques including, cutting, fabricating, Patination (Chemical Heat), MIG, TIG, Oxy – Acetylene and Spot Welding, Fettling/ finishing and de – burring, Polishing and abrasive techniques	x		x
6	Experience in day-to-day operation in Metalwork, Forge, and foundry Workshops	x		
7	Experience in use of metalwork equipment such as band saw, pillar drills, power hammer and pedestal grinders	x		
8	Knowledge and practice in maintenance procedures and management of specialist equipment	x		
9	Experience of relevant safe working practices and high degree of knowledge in all appropriate H&S procedures	x		x
10	Experience in creating teaching/training material for a range of skill levels, designing and delivering technical workshops to mixed ability groups	x		x

Personal Attributes and Behaviours

7	Customer focussed approach, ensuring activities are identified and presented with the customer in mind and in a timely manner.	x	
8	Excellent team working skills identifying opportunities to work and support colleagues within and outside of own function	x	
9	Excellent problem-solving skills, resourcefulness, responsibility, and the ability to demonstrate initiative and self-motivation.	x	x
10	Excellent administrative skills. Computer literate with working knowledge of the Microsoft office software: Word, Excel, e-mail, and internet skills.	x	
11	Excellent written and verbal communication skills, able to explain technical information in an accessible way	x	
12	Excellent organizational, time management and planning skills with the ability to work under pressure and prioritise as appropriate	x	

Does the role require a DBS? No