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| Last updated: | June 2021 |

**JOB DESCRIPTION**

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| Post title: | **Apprentice Mechanical Workshop Technician** | | |
| Schools: | School of Engineering | | |
| Faculty: | Faculty of Engineering and Physical Sciences | | |
| Career Pathway: | Technical and Experimental (TAE) | Level: | 3(Apprentice) |
| Posts responsible to: | Mechanical Workshop Technical Manager/Deputy | | |
| Posts responsible for: | N/A | | |
| Post base: | Non Office-based | | |

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| Job purpose |
| To complete the required academic and practical training requirements of the L4 standard Engineering Manufacturing Technician apprenticeship, as provided for by the University’s nominated training provider, in order to successfully achieve a Pearson BTEC Level 4 Higher National Certificate in Engineering or Pearson BTEC Level 4 Higher National Certificate in Manufacturing Operations and be able to complete the job role of a Mechanical Workshop Technician:  Gain knowledge and understanding to be able to provide effective and efficient technical support in the manufacture of specialised experimental and research equipment to a school and its external customers for the Educational, Research and Enterprise portfolio. |

| Key accountabilities/primary responsibilities | | % Time |
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|  | To be able, through training and experienced gained throughout the apprenticeship: Provide specialist mechanical manufacturing support for defined research, consultancy or educational projects, interpreting and meeting the requirements of the customer, and deploying defined resources to ensure operational and cost-efficiency to internal staff and external customers. Gain experience and confidence to be able to discuss customer requirements and advise on suitable technical manufacturing processes. Take on work in own right as experience increases. | 55 % |
|  | Gain experience and knowledge to be able to make accurate and effective use of computerised systems to record hours worked on tasks, procure materials for work to commence as well as produce CAD drawings and CAM files as necessary to be used in the manufacture process. Maintain accurate records and documents for future reference to allow for design re-use, repeat orders and scrutiny by funders. | 15% |
|  | Assist workshop staff to ensure equipment in the work environment is maintained, calibrated and inspected in order to keep machines accurate and safe in accordance with technical and health and safety procedures. Contribute to the workshop environment by helping to keep SOP’s up to date in the area and advising line supervisors or line managers if changes are needed. | 5% |
|  | To comply with health and safety processes within work environment. | 5% |
|  | To assist supervisors and managers in the pricing of jobs in order to provide estimates of costings for labour and materials. To advise manager of consumables that are needed to ensure adequate stocks of supplies, making sure finances and work resources are monitored efficiently and appropriately. | 5% |
|  | To support experienced staff in the supervision of students and non-technical staff when they are in this post holders working area, monitoring work and freely imparting knowledge gained regarding equipment, specific techniques and safe procedures. | 5% |
|  | Participate in training and development opportunities as necessary to increase skills, knowledge and qualifications appropriate to the role and in addition to the apprenticeship. Attend prescribed training in the use of equipment and the procedures required to ensure the safe and efficient work. | 5% |
|  | Any other duties as allocated by the line manager following consultation with the post holder. | 5% |

| Internal and external relationships |
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| Other members of the department/University staff.  External customers  Students  Suppliers  Training provider – attending academic and practical training sessions and receiving advice and instructions regarding work |

| Special Requirements |
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| To complete the required academic and practical training requirements of the L4 standard Engineering Manufacturing Technician apprenticeship (20% off the job training).  Able, over the apprenticeship, to develop a flexible and supportive approach to students, researchers and staff, focussing on the range of requirements for modules, projects and other activities in the Faculty eventually including demonstration of equipment use if required by the role.  A proactive approach to developing a welcoming and productive environment within workshops  Ability to maintain a safe working environment in accordance with Health and Safety procedures, within an engineering workshop.  Please note this role could require substantial moving and handling. |

**PERSON SPECIFICATION**

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| Criteria | Essential | Desirable | How to be assessed |
| Qualifications, knowledge and experience | Qualification in engineering or engineering related subjects to Level 3 of the NQF [**comparison** chart](https://www.gov.uk/what-different-qualification-levels-mean/compare-different-qualification-levels),  *or* NVQ Level 3,  *or* 1A Level,  *or* 2 AS levels  *or* T level in design and development for engineering and manufacturing  *And* Minimum 5 GCSE including Maths, English and Science at Grades 5-9  Able to sit aptitude tests. | Experience of Mechanical, technical or practical work/hobbies.  Experience of working in a mechanical/machine/fitting workshop.  CNC machine experience including milling machines and lathes  Experienced in using Computer Aided Design (CAD) and Computer Aided Manufacture (CAM)  Experience of 3D drawing packages  Ability to make effective use of standard office computer systems including word-processing and spreadsheets.  Ability to understand specialist technical equipment, processes and procedures. | Application/training provider aptitude tests/interview. |
| Planning and organising | Self-starting and motivated with a positive attitude. | Able to plan and organise own work in addition to taking instruction from others | Interview/application |
| Problem solving and initiative | Enquiring and inquisitive mind. | Experience of contributing ideas in order to solve technical problems.  Experience of using judgement to find solutions to problems for which no standard procedure exist. | Interview/Application |
| Management and teamwork |  | Present/Previous membership of group: Sports, scouting etc. | Interview/Application |
| Communicating and influencing | Good written and verbal skills | Able to elicit information to identify specific customer needs e.g.gained through customer facing role in any previous work experience  Previous experience of demonstrating skills to others e.g. sports/group captain etc. | Interview/Application |
| Other skills and behaviours | Proactive in promoting a working environment that is inclusive and engaging; recognising the value diversity brings. | Previous work experience/voluntary work | Interview/Application |
| Special requirements | Willingness to undertake Health and Safety training specific to role.  Willingness to engage with the opportunities the Technician Commitment brings.  Ability to attend off-site learning / training by own methods. |  | Interview/Application |

**JOB HAZARD ANALYSIS**

**Is this an office-based post?**

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| Yes | If this post is an office-based job with routine office hazards (eg: use of VDU), no further information needs to be supplied. Do not complete the section below. |
| No | If this post is not office-based or has some hazards other than routine office (eg: more than use of VDU) please complete the analysis below.  Hiring managers are asked to complete this section as accurately as possible to ensure the safety of the post-holder. |

## - HR will send a full PEHQ to all applicants for this position. Please note, if full health clearance is required for a role, this will apply to all individuals, including existing members of staff.

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| **ENVIRONMENTAL EXPOSURES** | **Occasionally**  (<30% of time) | **Frequently**  (30-60% of time) | **Constantly**  (> 60% of time) |
| Outside work | ✓ |  |  |
| Extremes of temperature (eg: fridge/ furnace) |  |  |  |
| ## Potential for exposure to body fluids |  |  |  |
| ## Noise (greater than 80 dba - 8 hrs twa) |  |  |  |
| ## Exposure to hazardous substances (eg: solvents, liquids, dust, fumes, biohazards). Specify below:  General engineering solvents as per Risk Assessments  Machine coolant as per Risk Assessments  Welding fume as per Risk Assessments/extraction | ✓ |  |  |
| Frequent hand washing |  |  |  |
| Ionising radiation |  |  |  |
| **EQUIPMENT/TOOLS/MACHINES USED** | | | |
| ## Food handling |  |  |  |
| ## Driving university vehicles(eg: car/van/LGV/PCV) |  |  |  |
| ## Use of latex gloves (prohibited unless specific clinical necessity) |  |  |  |
| ## Vibrating tools (eg: strimmers, hammer drill, lawnmowers) | ✓ |  |  |
| **PHYSICAL ABILITIES** | | | |
| Load manual handling | ✓ |  |  |
| Repetitive crouching/kneeling/stooping | ✓ |  |  |
| Repetitive pulling/pushing | ✓ |  |  |
| Repetitive lifting | ✓ |  |  |
| Standing for prolonged periods | ✓ |  |  |
| Repetitive climbing (ie: steps, stools, ladders, stairs) | ✓ |  |  |
| Fine motor grips (eg: pipetting) |  |  |  |
| Gross motor grips |  |  |  |
| Repetitive reaching below shoulder height | ✓ |  |  |
| Repetitive reaching at shoulder height | ✓ |  |  |
| Repetitive reaching above shoulder height | ✓ |  |  |
| **PSYCHOSOCIAL ISSUES** | | | |
| Face to face contact with public | ✓ |  |  |
| Lone working |  |  |  |
| ## Shift work/night work/on call duties |  |  |  |