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| Last updated: | 05.11.2024 |

**JOB DESCRIPTION**

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| Post title: | **Biomedical Engineering Teaching Laboratory Supervisor** | | |
| School/Department: | Faculty of Physical Sciences and Engineering (FPSE) | | |
| Faculty: | Technical and Experimental (TAE) | | |
| Career Pathway: | TAE |  | 4 |
| Posts responsible to: | Technical Manager for ECS Education (L5) | | |
| Posts responsible for: | Teaching Technician (L3) | | |
| Post base: | Non Office-based (see job hazard analysis) | | |

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| Job purpose |
| To responsibly plan, sustain and organise the technical delivery of core undergraduate and taught undergraduate specialist Biomedical Engineering (BE) and electronics labs in the BE Teaching labs, associated with the ECS BE BEng and MEng degrees.  Support the strategic growth of the new ECS BE Teaching laboratory, this includes procurement of specialist equipment, installation, commission tests, inventories, chemical management and storage.  To manage and maintain the safe day-to-day running and house services of the ECS BE Teaching laboratory. Provision of technical staff, resources and student bench set-ups to support Teaching requirements and student experience.  This includes but not limited to resolve technical issues, ensure H&S compliance, arrange laboratory access and inductions to staff, students and visitors. Supervise Technical staff and train demonstrators to be proficient in their duties. Arrange approved contractor service visits and keep records. Buy and maintain laboratory consumables, procure new equipment and manage warranties.  To provide specialist technical support and advice to the BE department for associated practical education activities undertaken in the teaching laboratory. Successful delivery in this role will significantly contribute to protecting the £2M+ capital investment to the ECS teaching facilities and to deliver the maximum education value from the facility of ECS Biomedical Engineering BEng and MEng |

| Key accountabilities/primary responsibilities | | % Time |
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|  | Manage the day-to-day running of each lab area, ensure house services functions as expected, organised and safely used as intended, authorised access and resources.  To plan, sustain and deliver as timetabled, resources and working student benches set-up to support the required Teaching activities equipment, resolve technical issues, and the student experience.  To assess, test, monitor, evaluate and revise student technical/skills-based teaching laboratory exercises in close collaboration with Programme lead, module leaders and Technical Manager for ECS Education to ensure excellence and teaching coherence.  To assist with the development and testing of new student lab practicals in close collaboration with module leaders and Technical Manager.  Ensure H&S compliance. Document, maintain and make accessible all technical equipment procedures, chemical & reagent protocols, experimental set-ups and associated H&S files (RA, COSHH, SOPs), Inductions and training records.  Support the strategic relocation of the CHB teaching laboratory to the new ECS BE Teaching laboratory | 45% |
|  | To organise timetabled laboratory sessions, are suitably staffed with academics, technicians and postgraduate demonstrators. To be responsible for associated laboratory budgets. Procure laboratory consumables and specialist equipment. Forward plan for growth and advise of anticipated procurement to support delivery of degree Programme. | 15 % |
|  | Monitor BE specialist teaching laboratory experiments, equipment/devices and infrastructure and resolve trouble shooting issues. Oversee repair works and regular equipment service maintenance.  To technically instruct and assist students on a variety of practical activities, which are associated with assessed specialist BE laboratory experiments.  Ensure staff, students and visitors comply with health and safety standards to best practices and use the lab areas as intended. | 10 % |
|  | To line manage associated BE technical staff with teaching associated responsibilities of the teaching laboratory-based activities. To ensure that the appropriate line manager responsibilities are undertaken as required by the University (includes but not limited to probation, conduct appraisal rand staff development). | 10 % |
|  | Conduct regular laboratory inspections, address actions in timely manner, ensure written records are kept and accessible. Ensure all staff training records are kept to date and accessible. | 5 % |
|  | To contribute to the efficient management and administration of the ECS Teaching Facilities by performing personal administrative duties as allocated by Technical Manager for ECS Education. Contribute to the Education and Finanical planning horizon of the ECS Teaching Laboratories. To administer the budget of laboratory consumable and maintain appropriate records. | 5 % |
|  | To plan, organise and manage the work environment; recruiting, training and developing own technical team, and train supervising non-technical staff i.e. PhD demonstrators. | 5 % |
|  | Any other duties as allocated by the line manager following consultation with the post holder e.g. UCAS, University Open days and ECS outreach activities. | 5 % |

| Internal and external relationships |
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| ECS Teaching Technical Team  Other members of staff in ECS  Undergraduate and PGT students  Postgraduate researchers  University Professional Services (Buy, Procurement, Central Health and Safety, Estates)  External suppliers and contractors  Open Day Visitors  Outreach students |

| Special Requirements |
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| Chemical knowledge and practical skills. Soldering and electronics experience. Willingness to undertake Health and Safety training specific to this role. |

**PERSON SPECIFICATION**

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| Criteria | Essential | Desirable | How to be assessed |
| Qualifications, knowledge and experience | Skill level equivalent to achievement of HND, Degree, NVQ4 or basic professional qualification.  Substantial experience in a relevant technical field, with proven experience of successfully planning and progressing work activities.  Understanding of how the specialist technical services provided by the post holder support the objectives of the University.  Ability to make effective use of standard and specialist computer systems | Membership and Registered Scientist of relevant technical professional body. IOSH or NEBOSH General certificate  Experience of working in Higher Education |  |
| Planning and organising | Able to progress a broad range of activities within professional guidelines and in support of University policy.  Experience of successful project management. |  |  |
| Problem solving and initiative | Ability to apply specialist technical knowledge to analyse complex problems and recommend solutions/plans of action.  Able to apply originality in modifying existing approaches to solve problems |  |  |
| Management and teamwork | Able to proactively work with colleagues in other work areas to achieve outcomes.  Able to delegate effectively, understanding the strengths and weaknesses of team members to build effective teamwork.  Able to formulate development plans for own staff to meet required skills. | Experience of successfully managing and developing staff. |  |
| Communicating and influencing | Able to provide accurate and timely specialist guidance on complex issues.  Able to use influencing and negotiating skills to develop understanding and gain co-operation.  Proactive in promoting a working environment that is inclusive and engaging; recognising the value that diversity brings |  |  |
| Other skills and behaviours |  | Willingness to undertake LEAF registration |  |
| Special requirements | Willingness to undertake Health and Safety training specific to role.  Chemical knowledge and practical skills. Soldering and electronics experience |  |  |

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