Mechanical Engineering Technician

Role Description

GRADE
Grade 5

LOCATION
Merchiston Campus, Edinburgh

LINE MANAGER
Technical Services Manager

Role Summary

The School of Computing, Engineering and Built Environment (SCEBE) utilises a team of technicians to support its workshops, laboratories and infrastructure supporting the academic and research activities within the school. Technicians provide practical support and expert knowledge to enhance the excellent teaching and student experience. The post holder will be part of this team and will provide technical support for activities associated with the School.

The post holder will be part of a team of a large Technical Team supporting a wide range of academic staff from more than one discipline in the School of Computing, Engineering & Built Environment. The role holder will support practical classes in our largest Engineering teaching Laboratory, as well as support our Fluid Dynamics and Solar Research Labs.

Working with the full technical group to provide mutual support to facilitate the wider activities of the School.

Line Management Responsibility for:

This role does not have any line management responsibilities currently

Main Duties and Responsibilities

Role specific duties:

- Responsible for the day to day running of the Environmental Engineering Teaching Laboratory. Coordinating and preparing the practical teaching sessions of different subject groups.

- Support practical classes in our Engineering Teaching Laboratory, maintain & run a wide range of equipment to support undergraduate, post graduate classes as well as contribute to the work of research students and general student project works.

- Maintenance of specialised equipment, inventories, and resource purchasing to facilitate activities within the laboratory, in liaison with academic staff and procurement staff, Technical Team and line manager.

Technician general duties:

- Provide technical support for academic staff delivering undergraduate laboratory teaching sessions including content advice, practical demonstrations, preparing physical and written materials and teaching some data analysis to give the best teaching and student experience possible.

- Work with academic staff to provide support to students undertaking practical undergraduate project work, working with other technical staff as required to provide this practical support across the school.

- Keep up to date with all aspects of the work pertinent to their subject area, including methodology, latest specialised equipment, immerging technologies, academic papers, relevant British Standards, and methods of data analysis.

- Technical support for the design and manufacture of prototype test rigs for undergraduate students, research students, and academic staff in liaison with other members of the technical team.

- Support Research Students undertaking projects, provide advice and technical support in liaison with academic supervisors, discuss data analysis and results with students and supervisors, determining appropriate future testing and analysis. Undertake additional background research as necessary to facilitate support for research in new topic areas.

- Identify, monitor, and resolve Health and Safety issues within laboratory in liaison with line manager. Provision and maintenance of Risk and COSHH assessments, Manual Handling assessments etc. Support Technical Services Leadership Group in ensuring all statutory safety inspections are carried out as required.

- Technical support of staff and students in teaching and/or research, including preparation of materials e.g. manuals, SOPs, risk assessments and COSHH documents as required.

- Keep up to date with all relevant training requirements for the services and machinery associated with the lab and other relevant work areas. Undertake additional statutory training required by the university.

- Provide advice and guidance in liaison with academic staff to Technical Services Leadership Group or the Dean in the context of capital expenditure planning for the laboratory.

- Sourcing and ordering of equipment and consumables, and the related maintenance of necessary records/databases/service contracts.
- Work with the Technical Manager and colleagues to develop the most suitable methods of operating in support of the school's objectives, while maintaining awareness of wider university issues and their potential impact on the role/team
- Continual professional development, awareness of emerging technologies and developments to improve service delivery.
- Responsibility for H&S of the section, including dealing with hazardous waste.
- Other duties associated with the role as may be required
- Role model the University's values & behaviours.
- Be responsible for ensuring that the information and records processed (received, created, used, stored, destroyed) on behalf of the University are managed in compliance with ALL applicable legislation, codes and policies e.g. Data Protection, Information Security and Records Management.

PERSON SPECIFICATION

	ESSENTIAL	DESIRABLE

Education / Qualifications

	ESSENTIAL	DESIRABLE
Degree (or equivalent) in a relevant subject, or equivalent professional experience (emphasis is on practical experience of mechanical engineering)	✔	

Skills / Experience

	ESSENTIAL	DESIRABLE
Practical and theoretical Mechanical Engineering knowledge with experience of relevant technical equipment.	✔	
Practical experience of working in a Workshop or Research lab environment	✔	
Knowledge and experience of working with electronics, electrics, motors, pumps, valves, pipe fitting, plumbing, data loggers, and general fluid mechanics equipment	✔	
Expert diagnostic and troubleshooting abilities	✔	
Knowledge of Health and Safety procedures, and the safe handling of hazardous solutions and chemicals.	✔	

• Experience of working in a busy environment and responding to conflicting demands.	✔
• Good problem-solving skills, with the ability to work flexibly.	✔
• Ability to work effectively on own initiative and within a team.	✔
• Excellent communication skills, both verbal and written.	✔
• Excellent interpersonal skills, with the ability to relate successfully to colleagues, students and those external to the University.	✔
• Good organisational skills, with the ability to be proactive and prioritise own workload.	✔
• Well-developed IT skills in relation to standard Microsoft Office software.	✔
• Able to work with students and staff at all levels in order to impart technical knowledge effectively.	✔
• Experience of working in Higher Education institutions.	✔