

JOB DESCRIPTION

Job Title:	Embedded Electronic Systems Technician	Grade:	SG8
Department:	Faculty of Engineering and Science	Date of Job Evaluation:	
Role reports to:	Laboratories and Technical Services Director		
Direct Reports			
Indirect Reports:	Faculty IT Teams, ILS IT teams; key contacts from Faculties and Directorates; third party contractor and suppliers.		
Other Key contacts:			
This role profile is non-contractual and provided for guidance. It will be updated and amended from time to time in accordance with the changing needs of the University and the requirements of the job.			

PURPOSE OF ROLE:

- To work within the Faculty of Engineering and Science Technical Support team providing relevant support to both academic staff and students.
- To engage with suppliers and vendors of engineering and scientific technical equipment.
- To take responsibility for the upgrade, renewal and installation of technical equipment, focusing on those within engineering and scientific disciplines.
- To develop, document and implement modern and future solutions for electronic engineering education, research, connectivity, and security.
- To analyse user or system needs and requirements and make recommendations on appropriate support procedures, technical standards, information and other developments as appropriate.
- To engage with key stakeholders within the Faculty of Engineering and Science and within ILS to build strong working relationships with effective feedback channels.
- To assist the Faculty Laboratories and Technical Support teams with achieving service-based strategic objectives.
- To ensure services are aligned with University strategies and the changing demands of the users and technological and service developments.

KEY ACCOUNTABILITIES:**Team Specific:**

- Act as a leader for team members and provide advice and expertise within the team as required
- Conduct regular staff appraisals and performance reviews of team members
- Contribute to the coaching, development and instruction of others and/or identify training or development requirements
- Work with faculty resources to audit, upgrade, refresh and install new engineering and scientific equipment
- To participate in the production and review of procedures and documentation relating to engineering and scientific equipment
- To assist in maintaining inventory of specialist equipment and associated supporting consumables and materials
- To work within service level agreements and KPIs as promoted by the Faculty Technical Support Management structure
- To provide operational advice and guidance to academic staff members regarding teaching requirement and provisioning.
- To ensure service users' queries are dealt with in an appropriate, effective and timely fashion and that all support requests are correctly and accurately recorded
- To provide regular reports as requested by member of the Faculty Technical Support Management structure
- To liaise with key external organisations to resolve user or operational issues

Generic:

- To keep up to date with current engineering, scientific and information technology developments in order to improve and enhance the users' experience
- To establish and maintain professional working relationships with colleagues within the University at all levels and with external organisations and individuals
- To use judgement and initiative to resolve common and infrequent problems that may arise
- To identify the priorities that the service must support, particularly with regard to the student experience
- To act fully in the interests of the University

Managing Self:

- To recognise and celebrate successes of team members and colleagues
- To understand and promote the need to be able to respond to users in a calm and understanding manner at all times, inspiring confidence in the users to ensure their needs are understood and acted upon

- To understand the strategies and targets of the University in changing economic climates.
- To be self-motivated, flexible and show resourcefulness when dealing with tasks.
- To be accountable for own actions and take ownership of issues as they arise.
- To be a responsive and supportive member of the overall Faculty Technical Support teams.
- To work to service deadlines and project timelines.
- To be responsible for maintaining own professional development including advancing knowledge of 'best practice' in IT and equipment support and emerging technological advances.

Core Requirements:

- Adhere to and promote the University's policies on Equality, Diversity and Inclusion and Information Security;
- Ensure compliance with Health & Safety and Data Protection Legislation;
- Support and promote the University's Sustainability policies, including the Carbon Management Plan, and carry out duties in a resource efficient way, recognising the shared responsibility of minimising the university's negative environmental impacts wherever possible.
- Adhere to current legal requirements and best practice relating to digital content and accessibility, including Web Content Accessibility Guidelines when creating digital content.

Additional Requirements:

Undertake any other duties as requested by the [e.g. PVC, FOO etc.] or their line manager, commensurate with the grade.

This is a professional, demanding role within a complex organisation with an ambitious strategic plan and agenda for change. The role holder will be expected to show flexibility in working arrangements, including working hours, to ensure that the Faculty of Engineering and Science delivers the required level of service.

KEY PERFORMANCE INDICATORS:

- Existing equipment upgrade success
- Reduction of number of legacy systems
- Improved interoperability of systems and data
- Improved equipment service levels
- Improved methodologies to ensure resolution of issues, or ease of access to relevant user information with documentation
- Show commitment to the philosophy of the University Strategic Plan and Mission
- User satisfaction levels rise steadily

KEY RELATIONSHIPS (Internal & External):

- Staff and student users at all levels, on campus and supported remotely
- Faculty Technical Support Teams
- Third Line support teams within ILS such as Networks, Systems
- External IT and audio-visual hardware companies
- External vendors of engineering and scientific equipment
- External software suppliers

PERSON SPECIFICATION	
Essential	Desirable
Experience <ul style="list-style-type: none"> • Experience working in an engineering or scientific discipline • Experience using with technical equipment such as bench test equipment or scientific instruments and their connectivity. • Experience in design, analysis and production of small scale electronic systems or hobby projects • A working knowledge of computer aided circuit design and simulation software, such as KiCAD or Proteus. • Experience in technologies with long lifespans, encompassing legacy connection methods and software. • Upgrading legacy equipment and software to modern standards. • Practical experience with PC connected hardware systems and their required software components, such as Arduino. • Embedded and microcontroller systems development, integration, and evaluation of fitness • Writing briefs and specifications for electronic systems from concept to implementation • Understanding PC internal hardware makeup, and 	Experience <ul style="list-style-type: none"> • Working in the Higher Education sector in a service delivery role • Proficiency with operating systems other than Microsoft Windows, such as Linux, Unix, Mac OS. • Proficiency with Microsoft management tools such as Active Directory, SCCM or Intune • Practical understanding of virtualisation technologies such as VMware, HyperV, VirtualBox • Programming language skills such as C, and use of IDE's for embedded and microcontroller systems • Embedded and microcontroller systems debugging, fault tracing, reworking and break/fix • An understanding of computer networking and its use in embedded systems • Awareness of electronics data interconnect standards such as SPI, I2C, I2S, PCI-E, RS232/422/485/UART • Proficiency with other programming or scripting language such as Batch files, PowerShell, C#, Python • Experience with Arduino, Teensy, Raspberry Pi, Pico, Microbit or other simplified electronics

<p>component compatibility concepts.</p> <ul style="list-style-type: none"> • Experience in the process of project management and delivery. <p>Skills</p> <ul style="list-style-type: none"> • Strong technical equipment diagnostic and maintenance skills, such as fault diagnosis across various platforms and connection standards • Excellent organisational skills and the ability to prioritise and manage a wide and varied workload • Ability to take initiative but also to distinguish between the need to make a decision and when to defer • Ability to provide information and opinions to contribute to others' decision-making processes • Excellent communication and presentation skills • Clear user focused approach to work with ability to respond flexibly to change • Ability to provide clear, concise and persuasive written and oral communication • Ability to adapt services and systems to meet users' needs and to identify improvements • Willingness to maintain and develop technical and personal skills in line with the evolving nature of the work <p>Qualifications</p> <p>Educated to Degree standard or equivalent and demonstrable experiential learning within a relevant technical, educational management or business discipline</p>	<p>systems for learning and hobbyists.</p> <p>Skills</p> <ul style="list-style-type: none"> • Experience of working within an environmental sustainability context • Robust technical knowledge, troubleshooting and problem-solving skills for engineering or scientific equipment and their interfaces with IT systems <p>Qualifications</p> <p>A relevant post graduate qualification</p>
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Personal attributes

- We are looking for people who can help us deliver the [values](#) of the University of Greenwich: Inclusive, Collaborative and Impactful

Personal attributes

- N/A