

JOB DESCRIPTION

Job Title: Computer/Electronic Systems Technician

Grade: SG5

Department: Faculty of Engineering and Science, Technical Support

Responsible to: Senior Technical Manager

Responsible for: N/A

Key Contacts: Senior Technical Manager

Standard Occupational Classification (SoC code): N/A

Non-Contractual Nature of Role Profile: 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.
- To work as part of the Engineering School electronic engineering team using in-depth technical knowledge, and experience in electronics to provide specialist support across a range of activities. Work with limited guidance and instruction. Set and maintain technical standards, aiding in teaching and research.
- To assess user or system needs and requirements and make recommendations on appropriate support procedures, technical standards, information, and other developments as appropriate.
- To assist the Faculty Laboratories and Technical Support teams with achieving service-based strategic objectives by liaising with staff at all levels across the wider University, as well as external service providers to ensure that detailed technical requirements are understood in the design and implementation of all activities relating to electronic engineering.
- To ensure services are aligned with the University's strategies and the changing demands of the users and technological and service developments.

KEY ACCOUNTABILITIES

Team Specific:

- To participate in investigation, development, and implementation of modern electronics, embedded and microcontroller systems including the Internet of Things, connected systems and industrial control and automation.
- To assist support technicians with producing teaching, demonstration, and research equipment. Operate complex technical equipment. Ensure equipment is maintained, serviced and repaired. Diagnose and rectify faults. Ensure current and future consumable needs are maintained to meet demand.

- To follow and maintain processes for the planning, production, integration and deployment of teaching and research materials for modern electronics education.
- To work within service level agreements and KPIs as promoted by the Faculty Technical Support Management structure.
- 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 liaise with key external organizations to resolve user or operational issues.
- To prepare practical electronic kits and supply
- To develop new electronic kits in house
- To manufacture specific electronic teaching equipment.
- To trouble shoot the faulty electronic equipment in the lab
- Housekeeping of electronic component stores
- To maintain and prepare the Power lab
- To design PCB's using CAD
- Manufacturing of PCB using mechanical CNC routing and drilling
- Purchasing of electrical and electronic components.

Generic:

- To keep up to date with current engineering, scientific and information technology developments to improve and enhance the users' experience.
- Ad hoc support requirements including general housekeeping, storage of equipment and lab management.
- To establish and maintain professional working relationships with colleagues within the University at all levels and with external organizations 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.
- Act as member of University security incident response group on behalf of the Faculty of Engineering and Science

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 always understanding manner, 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 line manager or appropriate senior 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 Electronic Engineering delivers the required level of service.

KEY PERFORMANCE INDICATORS:

- Improved relationships between FES and other departments in a technical context.
- 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

KEY RELATIONSHIPS (Internal & External):

- Staff and student users at all levels, on campus and supported remotely.
- Technical Support teams across all faculties and directorates
- Faculty Academic teams
- Third Line support teams within ILS such as Service Delivery, Networks, Systems
- External vendors of engineering and scientific equipment
- External software and hardware suppliers

PERSON SPECIFICATION

EXPERIENCE:

Essential Criteria

- Project management, deliver tasks/experiments on multidisciplinary systems to technical specifications.
- Proven experience of working in an electronics technical role
- Electronic systems design processes and the use of computer assisted engineering.
- Understanding of block diagrams describing electronic systems
- Understanding of printed circuit boards (PCB) and creation of printed circuit board layouts
- Experience with programming or scripting languages.
- Familiarity with source code control such as Git and GitHub
- Embedded and microcontroller systems development, integration, and evaluation of fitness.
- Contributing to briefs and specifications for electronic systems.
- Basic scientific and mathematical knowledge of electronics and materials behavior

Desirable Criteria

- Working in the Higher Education sector in a service delivery role
- Proficiency with a scripting language such as Batch files, PowerShell, Perl or Bash
- Automation of workflows using computerised tools or scripting
- Arduino, Teensy, Raspberry Pi, Pico, Microbit or other hobbyist's electronics.

SKILLS:

Essential Criteria

- Excellent troubleshooting, advanced problem solving and diagnostic skills, with an ability to assess highly technical problems and implement solutions within the field of electronics.
- 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 verbal and written communication skills, including clear and effective facilitation and presentation skills and the ability to produce clear and concise written materials.
- Excellent working knowledge of safety regulations, legislation, and procedures. For example, Risk assessment, COSHH
- Experience of coaching or training others
- Highly developed IT skills including use of specialist software packages.
- Experience of working within an environmental sustainability context

Desirable Criteria

- Experience of working within an environmental sustainability context

QUALIFICATIONS:

Essential Criteria

- Educated to A-level standard or equivalent
- NVQ3 in Electronic & Electrical engineering

Desirable Criteria

- Electrical safety courses
- Degree in electrical engineering/electronics

PERSONAL ATTRIBUTES:**Essential Criteria**

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

Desirable Criteria

- N/A