

JOB DESCRIPTION

| Job Title: | Research and Enterprise Systems Engineer (HPC) | Grade: | SG8 |
|-----------------------|--|-------------------------|--------------|
| Department: | Information and Library Services (ILS) | Date of Job Evaluation: | January 2021 |
| Role reports to: | Infrastructure Team Leader, Information and Library Services | | |
| Direct Reports | None | | |
| Indirect Reports: | Director of Greenwich Research and Enterprise HPC Steering Group | | |
| Other Key contacts: | Faculty IT Teams, ILS IT teams; key contacts from Faculties and Directorates; HPC User Community; third party contractors and suppliers. | | |

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 department of Information and Library Services, focused on delivery of the HPC service in support of the University's Research and Enterprise aspirations, in line with the University's Digital Strategy.
- To engage with users of the HPC community and ensure the service fulfils their requirements, thereby optimising, enhancing, and maximising their research and enterprise outcomes.
- To work with Faculties to broaden engagement with HPC through collaboration with existing users or nucleate new users of the service – internal or external - and to develop new independent research themes.
- To take responsibility for the creation and curation of subject specific documentation and tools for using the HPC service, to minimize any barriers to entry and maximise the benefits for users.
- To work with ILS Teams, taking a leading role in deployment and provisioning of new HPC hardware, software and cloud services.
- To analyse user or system needs and requirements and take steps to create and support procedures, technical standards, information and other developments as appropriate.
- Deploy new applications and software libraries to the HPC environment and maintain supported versions, taking a leading proactive role in overall system maintenance.
- To engage with key stakeholders within Faculties across the University and within ILS to build strong working relationships with effective feedback channels.
- To assist Information and Library Services teams in achieving service-based strategic objectives relating to the HPC service.
- To ensure services are aligned with University strategies and the changing demands of users, technology and service developments.



KEY ACCOUNTABILITIES:

Team Specific:

- To participate in the production and review of resources, procedures and documentation relating to the usage of the HPC service
- To ensure that all users have access to the documentation and support required to carry out their research and enterprise workloads using the HPC service.
- To engage in person and remotely with HPC service users, assessing their requirements and working with them to find solutions to technical problems.
- To provide advice to HPC users to allow them to help themselves learn and utilise the HPC service for their specific requirement.
- To participate in the creation and review of training materials and take a lead role in the delivery of training to the HPC community.
- To utilise technology to maintain records relating to HPC usage and other statistics.
- To liaise with external vendors where necessary.
- To report regularly to the HPC Admins group, the HPC Steering Committee and the HPC user community.
- To provide tactical and operational advice and guidance to support teams and users of the HPC service.
- 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.

Generic:

- To keep up to date with current engineering, scientific and information technology developments in order to maximise the University's research and enterprise outcomes.
- 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 for the HPC service, particularly with regard to the University's Research and Enterprise and Digital strategies.
- To act fully in the interests of the University.



Managing Self:

- Keep abreast of developments within the field and seek continuous improvement of own professional practice.
- Actively participate in established professional development framework activities.
- Behave in a manner which reflects the University values and creates a positive environment for work and study.
- 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 Information and Library Services Technical Support teams and the wider Research and Enterprise community.
- To work to service deadlines and project timelines.

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.

Additional Requirements:

Undertake any other duties as requested by Team Leaders 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 delivers the required level of service.

KEY PERFORMANCE INDICATORS:



Performance indicators will be established in consultation with the Heads and Directors within ILS and GRE as part of the post-holder's annual Appraisal and Professional Development Review.

KEY RELATIONSHIPS (Internal & External):

- Staff users at all levels, on campus and supported remotely
- Information and Library Service Support Teams
- Third Line support teams within ILS such as Networks, Systems
- External software suppliers

Experience Experience Experience Working in the Higher Education contains

Skills

- Experience working in an engineering or scientific discipline.
- Experience in the use of Linux or Unix systems, and be confident using command line tools.
- Experience in the creation of documentation.
- Experience in the assistance and training of peers in a technical field.
- Experience with computer networking.
- Proficiency with a scripting language such as Batch files, PowerShell, Perl, Python or Bash.

- Working in the Higher Education sector in a service delivery role.
- Proficiency with multiple operating systems including Microsoft Windows, Linux, Unix, Mac OS.
- Proficiency with a programming language such as C, C#, Python.
- Experience in the use of source control systems for version management such as GIT.
- Experience managing and supporting an HPC research computing system.
- Use of a job scheduler and reporting tools, such as SLURM or other scheduling tools.
- Use of an HPC cluster management platform, such as Bright Cluster Manager.
- Experience in the delivery of outcomes in a project management process.
- Experience in service management using a support ticketing system.
- Using Cloud computing Infrastructure such as provided by AWS or Azure.

Skills



- An understanding of troubleshooting and problem-solving for engineering or scientific processes.
- An understanding of troubleshooting and problem-solving in relation to computer software and systems.
- 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 decide and when to defer.
- Ability to provide information and opinions to contribute to others' decision-making processes.
- Excellent communication and presentation skills.
- Excellent IT skills including use of MS Office.
- 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.
- Ability to analyse and report on data and feedback.
- Willingness to maintain and develop technical and personal skills in line with the evolving nature of the work.
- Experience of developing training material using a variety of methods and where necessary presenting that material face to face.

Qualifications

• Educated to Degree standard or equivalent and demonstrable experiential learning

Experience of working within an environmental sustainability context.

Qualifications

• Educated to Postgraduate level in a relevant field.



within a relevant technical, educational management or business discipline.

Personal attributes

 We are looking for people who can help us deliver the <u>values</u> of the University of Greenwich: Excellence, Determination, Inclusivity, Ambition and Creativity

Personal attributes

● N/A