

## **JOB DESCRIPTION**

<b>Job Title</b>	Digital Systems Engineer
<b>Reporting to</b>	Digital and Data Manager
<b>Place of Work</b>	On-campus work is required, with some hybrid (WFH) time available each week.
<b>Hours of Work</b>	35 hours a week
<b>Salary</b>	Fixed point salary £34,071

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The purpose of this role is to ensure the smooth and efficient operation of our IT infrastructure, hardware, and software environments, alongside meeting the needs of stakeholders. Delivering technical solutions and overseeing the SU's bespoke software projects, including maintenance and development. The Digital Systems Engineer will work with a range of tools and data technologies, providing the technical infrastructure required for the operational use of data, ensuring ETL processes perform optimally.

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### **IT & Digital development**

- Deliver technical solutions to solve organisational problems, working closely with the Digital and Data Manager to achieve the outcomes of the Digital strategy in-line with the business strategy and objectives.
- Apply project management skills and agile methodology to 'change' projects across the SU; these might include the implementation of new systems or optimisation of existing systems.
- Oversee the Union's bespoke software projects, ensuring they are being maintained and developed in line with industry best practices, alongside meeting the needs of stakeholders.
- Utilising strong working relationships with all teams within the SU, identify opportunities to improve systems and processes across the organisation, applying a digital-first approach.
- Be able to translate technical solutions and ideas into understandable terms for stakeholders.
- Maintain good relationships with our digital suppliers; remaining updated on platform developments and roadmaps, and articulating development requests to our digital suppliers where necessary. Also share relevant updates to staff teams and key stakeholders.
- Identify and deliver feedback opportunities for staff and students on the performance of York SU digital platforms.

### **Infrastructure oversight & maintenance**

- Ensure on-site IT infrastructure is maintained, for example our pool of Linux Virtual Machines.
- Ensure in-house systems are maintained; for example, configuration of venue EPOS tills.
- Ensure website infrastructure is maintained, including DNS, and cloud infrastructure used for housing web components.
- Work with a range of tools and data technologies including: Ansible, Cloudflare, Ubuntu and Windows Servers, PostgreSQL, GitHub Workflows, and Docker.
- Liaise with the University of York IT Services to keep our IT and digital infrastructure aligned and up to date.
- Support the delivery of organisational projects and events - for example Welcome week and Student Elections - by contributing to project working groups, bringing digital solutions to the table and also managing expectations on what is deliverable.
- Support the Digital Support Coordinator in ensuring effective maintenance and administration of tools and digital systems, including oversight of user access and permissions, such as Google Suite, Slack, University of York IT systems.
- Support the Digital Support Coordinator in managing and procuring an IT asset pool for the organisation.

### **Data warehouse & engineering**

- Provide the technical infrastructure required for the operational use of data; from collection and storage to analytics and transformation.
- Implement data flows to connect operational systems, data for analytics and business intelligence (BI) systems
- Enable the technical infrastructure for functional data lineage, ensuring robust documentation over data origins, mappings, and definitions.
- Use ETL (extract, transform, load) scripts and other functionality to enable automated, and scalable data flows, ensuring ETL processes perform optimally.

### **Information security and integrity**

- Support the Digital and Data Manager and Data Protection Officer in ensuring the organisation remains data compliant under relevant legislation.
- Consider information and cybersecurity risks attached to digital infrastructure or systems.

### **User training & support**

- Identify and highlight opportunities to improve usage of the digital platforms through training or user support.
- Support the team in ensuring any support requests from staff or students are evaluated, categorised, investigated and responded to in a timely manner, escalating to the necessary external support teams.

- Contribute to a strong documentation hub and knowledge base for SU staff and students using our digital platforms, investing in staff and student's confidence and skills.
- Provide advice and support to York SU colleagues on the best use of digital technology to empower staff skills and digital behaviours, building confidence in using digital solutions.
- Provide training to SU staff and students on using digital solutions, where appropriate.

### **Team support**

- Promote knowledge sharing within the team to provide both a secure and robust IT infrastructure, and an enabling support service to users.
- Provide support and guidance to staff where appropriate to understand our data infrastructure, enabling access to data for analytics purpose and/or visualisation.

### **General Notes**

- The principal roles and responsibilities will change from time to time and the post-holder is required to undertake any additional duties as deemed appropriate.
- Staff are required to have a Personal Development Plan and to participate in training, meetings, or conferences considered relevant to their job.
- Staff must carry out their duties with full regard to the rules, policies, and procedures and conditions of service contained in the staff information guide.
- A condition of employment is that all staff are expected to assist in key events throughout the year e.g. Freshers' Fair, Student Balls and any other key events, including elections.
- Staff are expected to portray a positive image both internally and externally of the Students' Union by displaying standards of customer service, integrity, punctuality, politeness, and professionalism.
- To abide by York SU's constitutions and policies.
- To uphold York SU's environmental and sustainability practices, ensuring good practice is met.
- To work within, promote and uphold the student-led and democratic ethos of the Students' Union.
- **York SU envisages that this post will develop through time and that the post-holder is expected to be proactive in pursuing these changes.**

### **York SU's Values and Behaviors**

To work with us, we ask all staff to uphold our core values and behaviors. These are:

#### *Ambition*

*We are unashamedly ambitious. Students and their success is the reason we exist, and we will do everything in our power to work to their unique needs, journeys, experiences and communities.*

#### *Innovation*

*We're not afraid of failure. We bring creativity, sensitivity and integrity to all our work meaning that when things don't pan out how we expected, we own it, learn from it and always try again.*

#### *Social Conscience*

*We are bigger than just ourselves. We care and are committed to our vibrant community, celebrating and encouraging difference and diversity.*

#### *Authenticity*

*We are authentic and honest - building trust, rather than just focusing on our own power, privilege and legitimacy. We are always open about the needs, complexities, opportunities and challenges we all face now and in the future.*

#### *Partnership*

*We recognise we can't work alone - we know and are open about our limitations and believe that collective action and solidarity is what makes our work special. We weave and connect what already exists, build on common ground and focus on what unites us rather than divides us.*

### **Person Specification**

	<b>Essential</b>	<b>Desirable</b>
<b>QUALIFICATIONS</b>		
Educated to University standard or equivalent professional experience.		X
<b>EXPERIENCE / KNOWLEDGE</b>		
Strong knowledge of IT infrastructure - including virtual machines and web hosting (DNS, Terraform, Cloudflare architecture, Ansible)	X	
Experience deploying serverless infrastructure		X
Experience in implementing and maintaining cloud-based / SaaS solutions	X	
Experience with data engineering, including ETL pipelines, SQL and NoSQL database design, and data warehouse systems		X
Familiarity with bespoke software development projects and the software development lifecycle	X	
Good understanding of information security and cybersecurity principles and best practises	X	
Strong working knowledge of Microsoft, Apple, and Linux operating systems	X	
Understanding of directory administration (specifically Windows Active Directory) - users / groups creation, edit and security		X
Knowledge of Infrastructure as Code such as Ansible, Terraform, or Puppet.		X
Good working knowledge of administration of Google Suite		X

Experience of providing hardware asset management and maintenance to an organisation		X
Awareness of the legal issues relating to data; Data Protection, and Computer Misuse Acts	X	
Ability to provide technical support for bespoke local-hosted solutions	X	
Experience of providing specialist advice and training to people, ideally within a digital or IT setting	X	
Experience of compiling and sharing user documentation	X	
Experience of liaising with multiple stakeholders and suppliers	X	
Knowledge of usability testing and user experience principles		X
Knowledge of Python, or other modern programming languages.	X	
<b>SKILLS</b>		
Strong project management skills, with the ability to apply agile methodologies to change and/or development projects	X	
Excellent communication skills, with the ability to explain technical concepts in understandable terms to non-technical users	X	
Strong relationship-building skills to liaise with staff at all levels within the organisation, external suppliers, and partner organisations (e.g. The University of York IT Services)	X	
The ability to identify and implement opportunities for process optimisation and digital transformation	X	
Ability to effectively balance competing priorities and requests	X	
Ability to contribute to organisational events and projects by providing digital solutions and managing expectations.		X
An analytical approach to decision-making	X	
Big-picture and detail-oriented thinking; able to look at the complete puzzle and understand strategic vision	X	
<b>PERSONAL QUALITIES</b>		
A user-driven approach to service improvement	X	
Self-motivated to learn and achieve new skills	X	
Develops self to achieve their best	X	
Actively champions respect, inclusivity, equality and diversity	X	
Identifies and implements continuous improvement	X	