

## JOB DESCRIPTION

<b>Job Title</b>	Lead IT Systems Engineer
<b>Reporting to</b>	Digital and Data Manager
<b>Place of Work</b>	A mix of on-campus and hybrid working is available
<b>Hours of Work</b>	35 hours a week
<b>Salary</b>	£30,876 - £34,071

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### Purpose of Role

As Lead IT Systems Engineer you will be responsible for ensuring the effective development and maintenance of the Union's digital platforms, liaising closely with York SU departments and our student stakeholders to understand the organisational needs and requirements of IT and digital services to enhance business performance and, ultimately, student experience. You will seek and lead on opportunities for digital transformation and modernisation, optimising processes and systems across the Union.

You will be confident in championing big-picture thinking to your work, understanding how it contributes to the long-term strategic vision of having a digital-first approach to processes and services, ensuring the Union is consistent with modern technology and remains future-proof. You will oversee the technical infrastructure of digital systems and platforms, leading on the implementation of any new integrations and identifying optimisation opportunities for existing ones. The SU's IT portfolio consists of primarily off-shelf cloud-based systems, with some custom in-house developed products. You will also provide leadership to the technical delivery of the organisation's bespoke system developments, including web and Content Management Platforms - and so awareness of web hosting and development is necessary.

You will example strong project management skills, communicating timely and effectively with project stakeholders. You will be confident in liaising with suppliers on technical integration, remaining conscious of information security and ethical data handling. You will also be confident in working with external suppliers to understand product roadmaps, supporting the Digital Manager in aligning this with York SU's strategic vision for digital.

You will provide leadership to other technical roles within the team; supporting the Digital Support Coordinator to deliver in-house IT asset management and support, and an enabling digital systems support service to both staff and students, alongside supporting the developer role/s in web and product delivery. You will also act as lead Department Computing Officer for the University of York IT Services, keeping up to date with the University's IT and Digital developments ensuring our IT infrastructure aligns and is up to date, with strong relationships being built between York SU and the University.

It will be second nature for you to identify ways in which to streamline processes and empower staff performance using digital solutions, and so strong communication and empathy skills are necessary to bring staff along with change, alongside a proactive approach to developing staff skills and confidence.

The role is perfect for someone who has a keen interest in digital technology, particularly digital and data transformation. The SU is a small but lively organisation and so you can expect a varied workload, and lots of opportunities to upskill and learn new things!

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### **IT & Digital development**

- Lead on the delivery of 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 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 to the SU.
- 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 Virtual Machines.
- Ensure in-house systems are maintained; for example configuration of venue EPOS tills and staging lighting systems.
- Ensure website infrastructure is maintained, including DNS, and cloud infrastructure used for hosting web components.
- Work with a range of tools and data technologies including...
- 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 - ensuring orders are placed for IT equipment through the relevant suppliers, and that we liaise with University of York IT Services where necessary for procurement of recommended IT equipment.

### **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.
- Work with a range of tools and data technologies including Amazon Web Services, Cloudflare, GitHub Workflows, PostgreSQL, SQL and NoSQL databases.

### **Information security and integrity**

- Support the Digital Manager and Data Protection Officer in ensuring the organisation remains data compliant under relevant legislation.
- Consider information and cyber security 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 where required.
- 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 management and support**

- The role will provide team leadership and direct line management to other roles within the Digital team - including a Digital Support Coordinator and Web Developer.
- Use coaching and mentoring techniques to staff members where appropriate, enabling skills and confidence to realise potential.
- Provide leadership to the team to provide both a secure and robust IT infrastructure, and an enabling support service to users.
- Provide support to team members delivering software projects and developments, in all areas of the software development lifecycle.
- 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 if necessary.
- 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.**

## Person Specification

	Essential	Desirable	How Assessed?
<b>QUALIFICATIONS</b>			
Educated to University standard or equivalent professional experience.	X		A
<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 cyber security principles and best practises	X		
Good full stack web development knowledge - including Javascript frameworks (such as Vue.JS and React) and Typescript.	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		
Experience with budget management and procurement / ordering processes.		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		
Proven ability to lead and mentor a technical team (e.g. support staff, developers)	X		
The ability to identify and implement opportunities for process optimisation and digital transformation	X		
A proactive and empathetic approach to change management, with the ability to bring staff along with new digital solutions	X		
Ability to effectively balance competing priorities and requests	X		
Ability to contribute to organizational 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 and others to achieve their best	X		
Actively champions respect, inclusivity, equality and diversity	X		
Identifies and implements continuous improvement	X		

A= Application Form, I = Interview, T= Test