

Job Description

Job Title	Digital and Technology Solutions Professional Degree Apprentice (Network Engineer)
School/Service/Institute	Digital and Technical Services
Normal Workbase	Stoke
Tenure	Full Time Fixed Term Contract - 40 Months
Grade/Salary	4
FTE/Hours	1.0 FTE (with release for linked Academic Lectures & Learning Blocks)

Job Purpose
<p>Staffordshire University has the ambition of becoming the leading digital university across the UK, transforming the student experience, and improving student success in an increasingly digitally led world.</p> <p>The Digital and Technical Services is a professional service responsible for the University's overall use of digital and other teaching and learning technology to achieve the University strategy.</p> <p>The role of the Digital and Technology Solutions Professional Degree Apprentice (Network Engineer) is to be able to design, build, and test high-quality secure network services and solutions. Working as part of a larger collaborative team having responsibility for the routine operation and maintenance of an enterprise network from monitoring and second line user support to and involvement in University wide</p> <p>Working within the Network & Infrastructure Team and Reporting to the Network & Infrastructure Manager, the role of the Digital and Technology Solutions Professional Degree Apprentice (Network Engineer) will perform the following:</p> <ul style="list-style-type: none"> • Provision and support of a high-performance enterprise quality network to meet the needs of the business. • Network architecture design, procurement, testing and deployment. • Physical network design topology e.g. LAN, WAN, structured cabling • Logical network design e.g IP and VLAN Structure • Network security both on site and in the cloud in partnership with our security team. • Management of network services e.g Wi-Fi, IP Telephony, VPN • Emerging and new integrated services like AVoIP

All apprentices will require the core knowledge and specialist technical skills combined to be able to operate effectively in the role.

Relationships

Reporting to:	Network & Infrastructure Manager
Responsible for:	N/A
Key working relationships:	Network & Infrastructure Team, Digital Services Team,

Main Activities

- Assist day to day operations, maintenance and support of a secure network
- Assist with diagnosing and resolve incidents with network hardware and services
- Use network monitoring tools to ensure network health and pro-actively plan upgrades
- Create and maintain network diagrams and documentation to the required standards
- Assist with the assessment and recommendations of new network hardware, services and solutions
- Develop knowledge and skills in the field of networking and emerging technologies

Core Knowledge (To be acquired throughout Apprenticeship)

- How business exploits technology solutions for competitive advantage.
- The value of technology investments and how to formulate a business case for a new technology solution, including estimation of both costs and benefits.
- Contemporary techniques for design, developing, testing, correcting, deploying and documenting software systems from specifications, using agreed standards and tools.
- How teams work effectively to produce technology solutions.
- The role of data management systems in managing organisational data and information.
- Common vulnerabilities in computer networks including unsecure coding and unprotected networks.
- The various roles, functions and activities related to technology solutions within an organisation.
- How strategic decisions are made concerning acquiring technology solutions resources and capabilities including the ability to evaluate the different sourcing options.
- How to deliver a technology solutions project accurately consistent with business needs
- The issues of quality, cost and time for projects, including contractual obligations and resource constraints

Specialist Technical Knowledge Objectives (To be achieved by end of the Apprenticeship Programme)

- How networks impact the organisation, business processes and objectives.

- How to create a network architecture design and test via network simulation
- How to build and test a secure network including mitigation against network attacks and misuse
- How Quality of Service (QoS) impacts on the different traffic types and how to ensure that performance and service levels meet business needs.
- Understanding of the OSI (Open Standard Interconnection) model and how this model is used for troubleshooting.

Identify network trends and technical opportunities for use within the business

Specialist Skills (To be acquired throughout Apprenticeship)

- Design, build and deploy a secure network infrastructure solution to meet customer requirements based on industry best standards.
- Ensure network solutions are compliant with enterprise Architecture and security standards.
- Manage day to day operations, maintenance and support of a secure network.
- Use network monitoring tools to ensure network health and pro-actively plan upgrades
- Ability to diagnose and resolve incidents with network services such as switching, Wi-Fi, Security, Voice.
- Produce network technology roadmaps for network services

Special Conditions

In the event of a security incident the postholder may be required to undertake emergency out-of-hours activities, up to 4 hours / month on Saturday or Sunday, and up to 4 hours / month during the evening (Monday to Friday). The postholder will be entitled to time-off-in-lieu, to be recorded on a flexi-sheet and agreed in advance with their manager. As much notification as possible will be provided,

If, in exceptional circumstances, additional hours of evening/weekend work are required in any month, time-off-in-lieu or overtime would apply in accordance with the University Remuneration Policy.

Professional Development

The University will support and encourage the postholder to engage in continuous professional development activities through the YOURCareer@Staffs framework. This framework supports postholders to identify appropriate development opportunities. Continuing Professional Development (CPD) activity will be recognised by a bi-annual Performance and Development Review (PDR) discussion.

Variation to Job Description

The University reserves the right to vary the duties and responsibilities of its employees within the general conditions of the Scheme of pay and conditions and employment related matters. Thus, it must be appreciated that the duties and responsibilities outlined above may be altered as the changing needs of the service may require.

Conditions of Service

The postholder will be employed by Staffordshire University Services Limited.

Staffordshire University Services Limited is a wholly owned subsidiary company of Staffordshire University which recruits and provides both academic and professional support staff to the University. You will be subject to Staffordshire University's policies and procedures and will be eligible to participate in the Staffordshire University Pension Scheme.