

## APPRENTICESHIP STANDARD FOR INFRASTRUCTURE TECHNICIAN

### Role Profile

An Infrastructure Technician provides support to internal and external customers, helping them to be productive when using technology to do their own jobs, by using tools to problem solve and trouble shoot non routine problems. The Infrastructure Technician sets people up on systems and provides support when they need it, rectifying issues to maintain the organisations productivity.

**Typical Job Roles:** Help Desk Technician, First or Second Line Support, IT Infrastructure Technician, Network Support

### Entry Requirements

Individual employers will set the selection criteria, but this is likely to include five GCSEs, (especially English, Mathematics and a Science or Technology subject); a relevant Level 2 Apprenticeship; other relevant qualifications and experience; or an aptitude test with a focus on IT skills.

### Technical Competencies

- Communication: works both independently and as part of a team and following the organisations standards; competently demonstrating an ability to communicate both in writing and orally at all levels, using a range of tools and demonstrating strong interpersonal skills and cultural awareness when dealing with colleagues, customers and clients during all tasks.
- IT Security: Demonstrates the necessary skills and behaviours to securely operate across all platforms and areas of responsibilities in line with organisational guidance, legislation
- Remote Infrastructure: Effectively operates a range of mobile devices and securely add them to a network in accordance with organisations policies and procedures
- Data: effectively records, analyses and communicates data at the appropriate level using the organisation's standard tools and processes and to all stakeholders within the responsibility of the position
- Problem solving: applies structured techniques to common and non-routine problems, testing methodologies and troubleshooting and analyses problems by selecting the digital appropriate tools and techniques in line with organisation guidance and to obtain the relevant logistical support as required
- Workflow management: works flexibly and demonstrates the ability to work under pressure to progress allocated tasks in accordance with the organisation's reporting and quality systems
- Health and Safety: Interprets and follows IT legislation to securely and professional work productively in the work environment
- Performance: Optimises the performance of hardware, software and Network Systems and services in line with business requirements
- Can explain the correct processes associated with WEEE (the Waste Electrical and Electronic Equipment Directive)

### Technical Knowledge and Understanding

- Working knowledge of a range of cabling and connectivity, the various types of antennas and wireless systems and IT test equipment
- Understands maintenance processes and applies them in working practices
- Understands and applies the basic elements and architecture of computer systems
- Understands where to apply the relevant numerical skills e.g Binary
- Understands the relevant networking skills necessary to maintain a secure network
- Understands the similarities, differences and benefits of the current Operating Systems available
- Understands how to operate remotely and how to deploy and securely integrate mobile devices
- Understanding and working knowledge of Cloud and Cloud Services
- Understands the importance of disaster recovery and how a disaster recovery plan works and their role within it
- Understands the similarities and differences between a range of coding and logic
- Understands and complies with business processes
- Working knowledge of business IT skills relevant to the organisation

### Underpinning Skills, Attitudes and Behaviours

- Logical and creative thinking skills
- Analytical and problem solving skills
- Ability to work independently and to take responsibility
- Can use own initiative
- A thorough and organised approach
- Ability to work with a range of internal and external people
- Ability to communicate effectively in a variety of situations

- Maintain productive, professional and secure working environment

## Qualifications

Apprentices must achieve one knowledge module or vendor/ professional qualification from each of the five sections in the list below. Further details on the knowledge modules are available in the occupational brief available from the Tech Partnership at [www.thetechpartnership.com/apprenticeship/infrastructuretechnician](http://www.thetechpartnership.com/apprenticeship/infrastructuretechnician)

Ofqual regulated Knowledge Modules / Vendor or professional qualifications
Section 1 Knowledge Module 1: Networking and Architecture (for Level 3 Infrastructure Technician Apprenticeships) CCNA 1* MTA Network Fundamentals Network +* A + CIW Network Technology Associate*
Section 2 Knowledge Module 2: Mobile and Operating Systems (for Level 3 Infrastructure Technician Apprenticeships) CCNA Security* MCP Managing and Maintaining Windows 8 * MCP Configuring Windows 8 * MTA Mobility and Devices Fundamentals* Security + Mobile + CIW – Internet Business Associate CIW – Mobile Application Development
Section 3 Knowledge Module 3: Cloud Services (for Level 3 Infrastructure Technician Apprenticeships) MTA Server Admin * Enabling Office 365 Services Enabling Office 365 Identities and Requirements MTA Cloud Fundamentals Install Configure Windows Server 2012 * Administration of Windows Server 2012 * Configure Advanced Windows Server 2012 Services *
Section 4 Knowledge Module 4: Coding and Logic (for Level 3 Infrastructure Technician Apprenticeships) MTA Software Development Fundamentals App Development
Section 5 Knowledge Module 5: Business Processes (for Level 3 Infrastructure Technician Apprenticeships) CIW – Internet Business Associate ITIL Foundation Level

*\*Or their direct replacement*

Individual employers will select which knowledge module or vendor/ professional qualification the apprentices should take from each of the five sections in the list below.

**English and Maths:** Level 2 English and Maths will need to be passed, if not already, prior to taking the end point assessment.

**Professional Recognition:** This apprenticeship is recognised for entry onto the register of IT technicians confirming SFIA level 3 professional competence and those completing the apprenticeship are eligible to apply for registration.

**Duration:** The duration of this apprenticeship is a minimum of 12 months

**Level:** This is a level 3 apprenticeships

**Review Date:** This standard will be reviewed in December 2017.

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