

# INFRASTRUCTURE TECHNICIAN APPRENTICESHIP STANDARD

## OVERVIEW

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 solve and troubleshoot non-routine problems. The Infrastructure Technician sets people up on systems and provides support when needed, resolving issues to maintain the organisation's 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, (usually including 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.

### Course Outcomes - 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 and legislation
- Remote Infrastructure: effectively operates a range of mobile devices and securely adds them to a network in accordance with the organisation's 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. Analyses problems by selecting the digital appropriate tools and techniques in line with organisation guidance and obtains 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
- Interprets and follows IT legislation to work securely and professionally in the work environment
- Optimising hardware, software, network systems and services in line with business requirements
- Can explain the processes associated with WEEE (the Waste Electrical and Electronic Equipment directive)

### Course Outcomes - Technical Knowledge and Understanding

- Working knowledge of a range of cabling, connectivity, the various types of antennas, wireless systems, IT test equipment, cloud and cloud services
- 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
- Understands the emphasis of disaster recovery, how a disaster recovery plan works and their role within it
- Understands the similarities and differences between a range of coding
- Understands and complies with business processes
- Working knowledge of business IT skills relevant to the organisation

## Underpinning Skills, Attitudes and Behaviours

- Logical, creative thinking, analytical and problem solving skills
- Ability to work independently, use own initiative and to take responsibility
- A thorough and organised approach
- Ability to work with internal and external people. Able to communicate effectively in a variety of situations
- Maintain a productive, professional and secure working environment

## Qualifications

Apprentices must achieve one internationally recognised vendor or professional qualification, from the right hand column in the table below. This then exempts one of the Ofqual-regulated knowledge modules, as shown in the left hand column.

Knowledge Modules	Vendor or Professional Qualifications
Knowledge Module 1: Networking and Architecture (for Level 3 Infrastructure Technician Apprenticeships)	CCNA 1 MTA Network Fundamentals Network + A + CIW Network Technology Associate
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 – Mobile Application Development
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 *
Knowledge Module 4: Coding and Logic (for Level 3 Infrastructure Technician Apprenticeships)	MTA Software Development Fundamentals App Development
Knowledge Module 5: Business Processes (for Level 3 Infrastructure Technician Apprenticeships)	CIW – Internet Business Associate ITIL Foundation Level

\*Or their direct replacements

Individual employers will select which vendor or professional qualification the apprentice should take.

## 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 typically 14 months

## Level

This is a level 3 apprenticeship