LEVEL 3 INFRASTRUCTURE TECHNICIAN

There is nothing standard about the new apprenticeship Standards!

In 2017 modern apprenticeships underwent a major overhaul. Apprenticeships now represent the very best in vocational Further Education programmes and benefit the widest range of employees and employers for new career starts, upskilling for progression or changes in career direction.

Programme Overview:

An Infrastructure Technician provides support to internal and/or external users, helping them to be productive when using technology in their job.

Infrastructure Technicians set up new users, resolve a wide range of technical queries and issues, use tools to problem solve, trouble shoot and monitor hardware in order to provide preventative measures to ensure user experience and up-time is as good as possible.

Infrastructure Technicians ensure hardware is safe, working properly and that problems are responded to on a timely basis.

Who is it for?

Typical job titles include (but are not limited to);

- Help Desk Technician
- First or Second Line Support
- IT Infrastructure Technician
- Network Support

Entry Requirements:

Entry requirements exist for all funded Further Education programmes. These ensure the value, gain and success of the programme. The ATP will conduct the processes with employers and prospective apprentices to determine correct funding eligibility.

Job role eligibility (known as Competency Role Map):

The job role must contain opportunity for an apprentice to practice the content set out in the apprenticeship Standard to achieve vocational competency. Apprentices must have the opportunity to practice the knowledge taught in training sessions in order to convert new knowledge in to sustainable skills applied in the workplace.

Each apprenticeship requires a portfolio of evidence this will showcase the apprentice's work and will be reviewed by the apprenticeship assessment organisation to determine how well new knowledge has been successfully utilised vocationally. If a job role is close to the eligibility criteria we will consult with employers to see if adjustments can be made to ensure criteria is met.

Initial assessment of existing knowledge and skills:

A prospective apprentice must stand to gain significant knowledge and skills from an apprenticeship. If the apprenticeship is too advanced for them or if they already know much of the knowledge and skills the apprenticeship would provide then they may not be eligible for the funding.

The ATP will review existing qualifications, knowledge and skills to determine if the prospective apprentice will benefit from the proposed apprenticeship such that it meets the funding criteria. In most instances this is very straightforward, however in some instances funding can be specially authorised for reduction in order to fund the parts of an apprenticeship that would be relevant. The ATP will provide the assessment for these possibilities.

The Level 3 Infrastructure Technician apprenticeship is highly technical, so whilst employers can select their own entry criteria, they should include at least 5 GCSEs including English and Mathematics and hold a minimum of 120 UCAS points, or equivalent as a minimum to help ensure success.

In many cases this type of apprenticeship can demand a higher capability of English and maths than is taught at GCSE or A-Level. For example, advanced report writing, budgeting, complex structured explanations and/or advanced formulae and statistics. The ATP will provide both functional and advanced English and maths diagnostics and teaching to ensure each apprentice is fully supported in these areas.

Programme Duration:

This apprenticeship is delivered over 18 months for full-time employees. For part-time employees the term may be extended depending on the contracted hours.

Standard Delivery Model:

Apprenticeship training is delivered through a blend of weekly live web-based classrooms and regular face-to-face mentoring sessions that are held on a one-to-one basis in the workplace.

These live classrooms are held through Microsoft Teams. This software provides the full suite of educational tools including everything you would find in a conventional classroom and more e.g. live open interactions, private breakout rooms, note and question queues and interactive illustration boards. We can also use movie green screen technology for lesson illustrations.

A full timetable for the training, mentoring, exams and assessments is provided at the outset. Progress is reviewed at 12-week intervals in a meeting between the mentor, apprentice and employer (typically the apprentice's line manager).

Employers and apprentices have full visibility of progress in real-time by accessing the e-portfolio system, alternatively regular updates can be provided by other means if preferred.

End Point Assessment (EPA):

Aside from qualifications that can be obtained by doing an apprenticeship, the most important and valuable goal is what has been achieved during the programme.

Successful apprentices will obtain a Pass, Merit or Distinction in their apprenticeship. The way a Pass, Merit or Distinction is determined is at a stage called End Point Assessment which takes place once all the leaning has been completed. Like all examinations, a mock will take place before the final assessment.

Once all components of the apprenticeship have been achieved including the mock, a final review is conducted to ensure everything has been covered, this is called gateway. Then the apprentice will undergo their End Point Assessment.

The EPA for this programme consists of:

1. Portfolio of Evidence demonstrating work on 6-8 projects covering all the criteria in the Technical Competency Standards document
2. Employer Reference built over the course of the apprenticeship during the 12 week reviews, covering all the criteria in the Employer Reference document
3. Synoptic Project, a business related project completed at the end of the apprenticeship, sometimes including a virtual lab where appropriate
4. Interview, a structured interview with assessors exploring the project, portfolio and employer reference

Programme Structure:

Technical Competencies:

- **Communication:** Works independently and as part of a team. Follows the organisations standards competently demonstrating ability to communicate both in writing and orally at all levels. Demonstrates strong interpersonal skills and cultural awareness when dealing with colleagues and/or external clients
- **IT Security:** Demonstrates the necessary skills and behaviours to securely operate across all platforms and areas of responsibility in line with organisational guidance, procedures and legislation
- **Remote Infrastructure:** Effectively operates a range of mobile devices, securely adding them to networks in accordance with the organisations policies and procedures
- **Data:** Effectively records, analyses and communicates data at the appropriate level using the organisation's designated tools and processes Interacts with stakeholders within the responsibility of the position
- **Problem Solving:** Applies structured techniques to common and non-routine problems. Uses testing and troubleshooting methodologies and analyses problems using appropriate digital tools
- **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 ensure safe productive work. Takes ownership of health and safety for self and others
- **Performance:** Optimises performance of hardware, software, network systems and services in line with business requirements

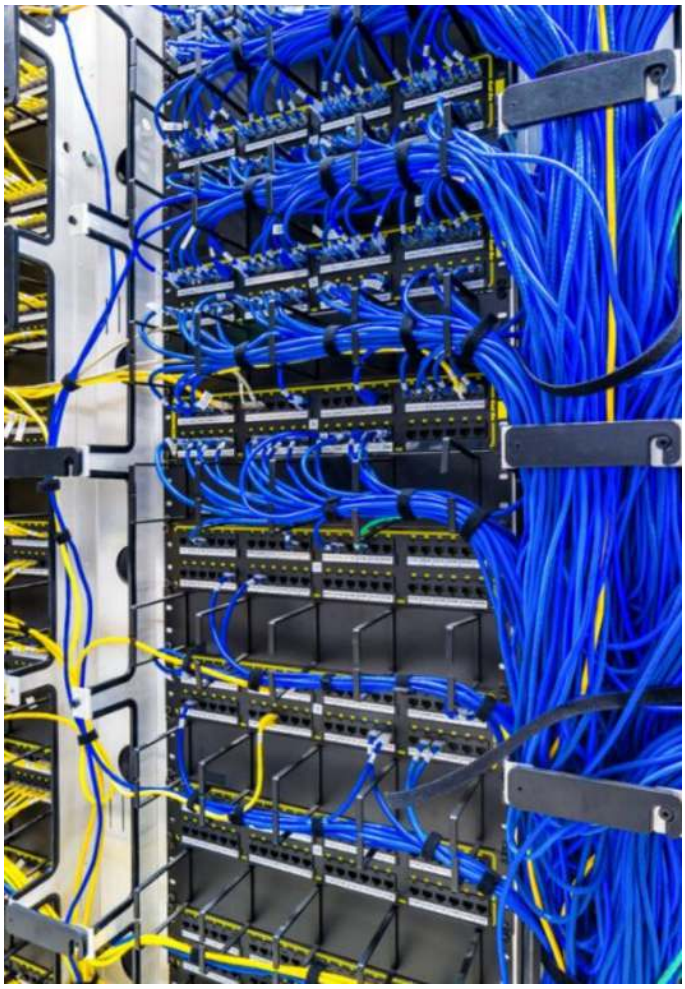
- **WEEE:** Can explain the correct processes associated with WEEE (the Waste Electrical and Electronic Equipment directive)

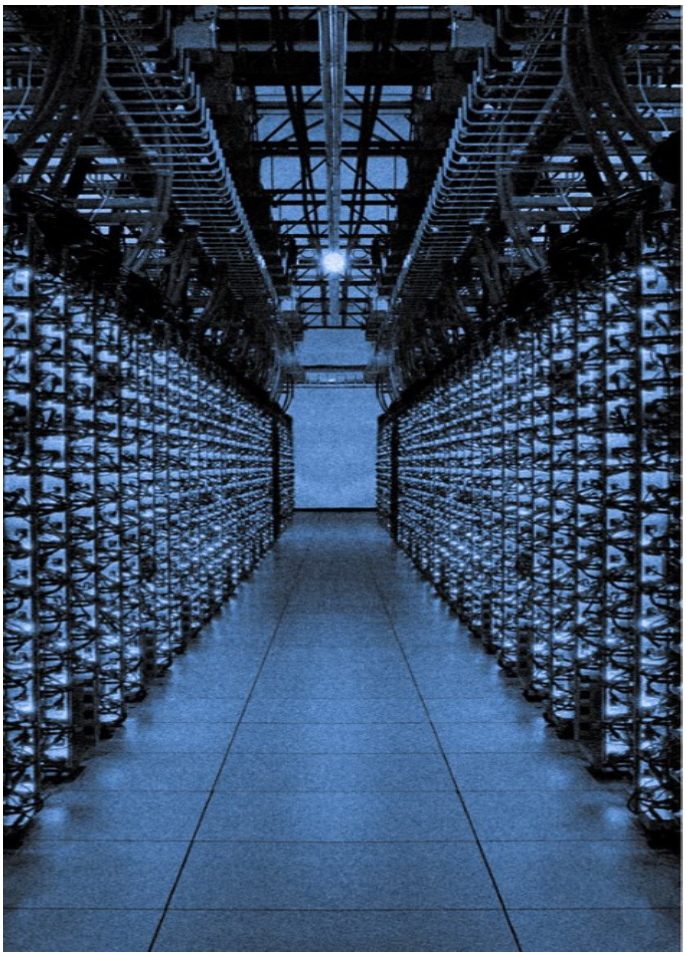
Technical Knowledge and Understanding:

- Working knowledge of a range of cabling, connectivity, antennas, 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 networking skills necessary to maintain a secure network
- Understands the similarities, differences and benefits of 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 importance of disaster recovery, how a disaster recovery plan works and own 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 safe, productive, professional and secure working environment





Qualifications:

Apprentices must achieve one Knowledge or Vendor qualification from each of the five knowledge modules.

N.B. Apprentices are exempt from sitting one of the BCS knowledge module qualifications if they instead pass one of the approved vendor or professional qualifications instead.

Knowledge Module 1

BCS Networking and Architecture

OR;

MTA Network Fundamentals

Knowledge Module 2

BCS Mobile and Operating Systems

OR;

MTA Mobility and Devices Fundamentals

Knowledge Module 3:

MTA server admin

Knowledge Module 4:

Coding and Logic

Knowledge Module 5

Business Processes

OR;

ITIL Foundation level

The designated trainer and mentor will support the employer and apprentice throughout the programme as dedicated points of contact for questions and queries. This includes additional support for portfolio and project preparation, along with any advice and guidance needed.

Progression:

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

Next steps:

To configure an ideal apprenticeship we will meet with you, discuss your needs, present the options and collaborate to determine the best apprenticeships to meet your needs.

We will provide ongoing support including:

- Recruitment of candidates
- Quality assured information advice and guidance
- Updates and information on legislation and funding
- Support and guidance for apprentice and employer throughout the apprenticeship
- Access to a comprehensive suite of resources and support material via OneFile