THE APPRENTICE
and TRAINING PARTNERSHIP

There is nothing standard about the new apprenticeship Standards!

Following the 2019 - 2021 digital skills review, modern apprenticeships have once again taken a leap forward to provide better vocational training for apprentices and greater benefit to employers. The perfect solution for new career starts, professional upskilling or changes in career direction.

Programme Overview:

As organisations increasingly rely on advancing electronic communications systems in all areas of their operations and decision making processes, it follows that there is an increasing demand for employees to maintain optimal performance of such systems.

The Information Communications Technician (ICT) role delivers efficient support to the IT and/or Telecommunications infrastructure comprising of physical or virtual hardware, software, network services and data storage based locally, remote or in the cloud.

The ICT helps organisations to prepare for new or changed services. They can operate purely as support and throughout change processes assisting with maintenance of regulatory, legal, and professional standards in the delivery of systems. They are involved in building and managing systems and components in virtualised and cloud computing environments. They can monitor the performance of systems and services in relation to their defined parameters along with security and sustainability.

The Information Communications Technician has three pathways:

- **Support Technician**
- **Network Technician**
- **Digital Communications Technician**

Who is it for?

Typical job titles include;

- Help Desk Support
- First-line Support
- Network Support
- Network Field Operative
- Telecommunications Technician

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.

Here is a general overview of each eligibility criteria:

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 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 Information Communications Technician is highly technical, so whilst employers can select their own entry criteria, they should include; at least 5 GCSEs including English and Mathematics and have achieved a Level 2 or equivalent qualification 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 is adjusted depending on contracted hours.

Standard Delivery Model:

Apprenticeship training is delivered through a blend of weekly live virtual classrooms sessions 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 and mentoring, exams and assessments are provided at the outset. Progress is reviewed at 12 week intervals in a meeting between the mentor, apprentice and employer (typically

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 or Distinction in their apprenticeship. The way a Pass 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.

EPA for this programme consists of:

1. Portfolio of Evidence demonstrating work on 6-8 projects covering all the standard criteria

2. Interview underpinned by the portfolio of evidence

3. Project report with questioning

Programme Structure:

Apprentices are taught principles, techniques and technologies. The education incorporates knowledge, skills and behaviours as well as self-management and an objective led approach.

Knowledge:

Common to all pathways

- Approaches to back up and storage solutions
- Basic elements of technical documentation and its interpretation
- Root cause problem solving, using fault diagnostics for troubleshooting
- Network addressing
- Cloud and cloud-based services
- Virtual networks and components
- Cultural awareness and how diversity impacts delivery of support tasks
- Methods of communication including level of technical terminology to use with technical or non-technical stakeholders
- Types of maintenance and preventative measures to reduce incidents and faults
- Security including the roles of People, Product and Process in secure systems for example access and encryption requirements
- Fundamentals of physical networks and components
- Approaches to documenting tasks, findings, actions taken and outcome for example, use of task tracking and ticketing systems
- Legislation in relation to disposal of waste materials for example Waste Electronic and Electrical regulations (WEEE)

Support Technician

- Operating systems, hardware system architecture and devices
- Principles of remote operation of devices including how to deploy and securely integrate mobile devices into a network
- Peripherals
- Virtualisation of servers, applications and networks
- Disaster recovery, how a disaster recovery plan works and their role within it
- Test Plans, their role and significance
- Fundamentals of purpose, creation and maintenance of asset registers
- Approaches to system upgrades and updates and their significance
- Approaches to interpretation of log files, event viewer and system tools
- Network infrastructure architectures including Wi-Fi and wired networks

Network Technician

- Principles of OSI layers
- Cloud and network architecture
- Principles of DNS / DHCP
- Cloud platforms, such as AWS, Azure, or GCP
- LANs and WANs
- Approaches to virtualisation of servers, applications, and networks K30: Principles of network protocols
- Principles of API's and Web Services
- Different types of cloud storage
- Back up procedures and their importance
- Databases and migration
- Cloud Security and firewalls
- Awareness of DevOps methodology and tools, such as Puppet, Chef, Git, Docker

Digital Communications Technician

- Basic elements of network communication architectures for example, hardware, software, protocols and connection mediums.
- Firewalls
- Types of connectivity and cabling for example physical and remote
- Network protocols
- The purpose of digital communications technologies for example, hardware, virtual and cellular technologies
- Main factors affecting network performance including faults and error control
- Principles of digital test and diagnostic equipment usage
- Basic principles of VPN and Remote Access Security for example transmission technologies

Skills:

Common to all pathways

- Interpret and prioritise internal or external customer's requirements in line with organisation's policy
- Apply appropriate tools and techniques to undertake fault finding and rectification
- Apply Continuous Professional Development to support necessary business output and technical developments
- Operate safely and securely across platforms and responsibilities maintaining the security of personal data of internal and external stakeholders
- Communicate with all levels of stakeholders, keeping them informed of progress and managing escalation where appropriate
- Develop and maintain effective working relationships with colleagues, customers, and other relevant stakeholders
- Manage and prioritise the allocated workload making best use of time and resources
- Complete documentation relevant to the task and escalate where appropriate, ensuring organisational compliance
- Install or undertake basic software upgrades, either physically or remotely
- Establish and diagnose the extent of the IT support task, in line with the organisation's policies and SLA's
- Provide remote/F2F support to resolve customer requirements
- Maintain a safe working environment for own personal safety and others in line with H&S appropriate to the task

Support Technician

- Identify and scope the best solution informed by the system data for the task
- Test and evaluate the system's performance and compliance with customer requirements.
- Escalate non routine problems in line with procedures
- Use basic scripting to execute the relevant tasks for example PowerShell, Linux
- Carry out routine maintenance across systems, (such as IT, Communications), ensuring organisational compliance at all times
- Apply the necessary security, in line with access and/or encryption requirements

Network Technician

- Use a range of Cabling or Connectors equipment in line with technical requirements
- Test and evaluate network environments
- Monitor performance and usage of a network
- Deploy applications on a network
- Set up storage and data access for staff
- Apply necessary security measures, in line with access requirements to a network
- Carry out routine maintenance across network systems, ensuring organisational compliance
- Monitor network-related workloads including DNS and firewalls
- Install or undertake basic upgrades, either physically or remotely

Digital Communications Technician

- Use a range of Cabling or Connectors equipment in line with technical requirements
- Establish digital or telecommunications systems
- Identify a range of tools and or diagnostic equipment, for example, Hardware or Software components, to resolve Communications or Telecommunications requirements
- Undertake basic telecommunications activities, in response to an allocated task, designated responsibilities, instructions or customer requirements.
- Use information necessary to identify operational issues and rectify or escalate accordingly in line with policy

Behaviours

- Works professionally, taking initiative as appropriate and acting with an ethical approach.
- Communicates technical and non-technical information in a variety of situations to support effective working with internal or external stakeholders
- Demonstrates a productive and organised approach to their work
- Self-motivated, for example takes responsibility to complete the job.

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

Next steps:

To configure an ideal apprenticeship we will meet with you virtually to discuss your requirements, present the options and collaborate to determine the best apprenticeships to meet your needs. We will provide ongoing support including:

- Recruitment of apprentices
- 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
- Industry specialist qualified trainers and mentors

If you have any questions about this apprenticeship Standard or would like to book an information session, please contact our team T. 0330 380 0249 or E. info@theatp.co.uk