_PTT

Knowledge objective support for
Level 3 Information Communications Technician - Option 2:

Network Technician

Cover up to 70% of knowledge objectives through PTT online training

- 15 online courses cover the majority of objectives
- Aids learner understanding when blended with on-the-job tasks
- Flexible delivery to suit the learner and employer schedules
- Certificates of completion to prove knowledge for learner portfolio
- Proven, effective method of delivery

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Network Technician
PTT course timeline example

PTT online courses are fully flexible in their delivery. Employers and apprentices can work with their apprenticeship provider to develop a schedule to suit them.

The topics covered by the PTT online courses could be reviewed periodically in virtual or classroom-based tutor support sessions to re-enforce learning through class-wide discussions.

Below is an example of how most of the knowledge objectives can be delivered in 7 months.

Month 1	
PAA: Analogue and digital signals	K4
PAC: Transmission fundamentals	K39
Month 2	
PAE: Data communications principles	K24, K40
TFA: Telephony and data services	K5, K6
Month 3	
EDA: Ethernet fundamentals	K28
EBB: Structured cabling	K39
EDC: Ethernet networks	K11, K25, K28, K30, K35, K38, K40
Month 4	
EBD: Advanced Ethernet networks	K28
EDE: Network testing and fault-finding or FPB: Telecoms testing and fault-finding	K3, K9, K25, K28
Month 5	
NSA: Network services	K1, K31, K32, K33, K34
TQA: Introduction to wide area networks	K28
Month 6	
TQF: Internet protocols	K25, K30, K40
TQG: IP networks	K25, K30, K40
Month 7	
TCG: Telecommunications systems security	K10, K34, K35
NSB: Domain and cloud services	K25, K26, K27, K29, K32

Learners are given access to the above courses throughout their apprenticeships. This will allow them to revise the content when necessary to reinforce their knowledge gained on the job and prior to their end point assessment.

Information Communication Technician (Level 3) - Option 2 - Network Technician
Knowledge objectives

Core elements:

K1 Approaches to back up and storage solutions
K2 Basic elements of technical documentation and its interpretation
K3 Principles of root cause problem solving using fault diagnostics for troubleshooting
K4 Principles of basic network addressing for example binary
K5 Basic awareness of the principles of cloud and cloud-based services
K6 Fundamental principles of virtual networks and components
K7 Principles of cultural awareness and how diversity impacts on delivery of support tasks
K8 Methods of communication including level of technical terminology to use to technical and non-technical stakeholders
K9 Different types of maintenance and preventative measures to reduce the incidence of faults
K10 Key principles of Security including the role of People, Product and Process in secure systems for example access and encryption requirements
K11 Fundamentals of physical networks and components
K12 Approaches to documenting tasks, findings, actions taken and outcome for example, use of task tracking and ticketing systems
K13 Basic awareness of legislation in relation to disposal of waste materials for example Waste Electronic and Electrical regulations (WEEE)

Network Technician elements:

K24 Principles of OSI layers
K25 Principles of cloud and network architecture (including Wi-Fi)
K26 Principles of DNS / DHCP
K27 Awareness of Cloud platforms, such as AWS, Azure, or GCP
K28 Principles of LANs and WANs
K29 Approaches to virtualisation of servers, applications, and networks
K30 Principles of network protocols
K31 Principles of API's and Web Services
K32 The different types of cloud storage
K33 Back up procedures and their importance
K34 Principles of databases and migration
K35 Key principles of Cloud Security and firewalls
K36 Awareness of DevOps methodology and tools, such as Puppet, Chef, Git, Docker
K38 Awareness of the purpose of firewalls
K39 Different types of connectivity and cabling for example physical and remote
K40 Awareness of network protocols

PTT course title	Objectives covered
PAA: Analogue and digital signals * #	K4
PAC: Transmission fundamentals * #	K39
PAE: Data communications principles * #	K24, K40
TFA: Telephony and data services * #	K5, K6
EDA: Ethernet fundamentals *	K28
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* Forms part of the PTT Level 3 Certificate in Unified Communications
# Forms part of the PTT Level 3 Award in Principles of Telecommunications