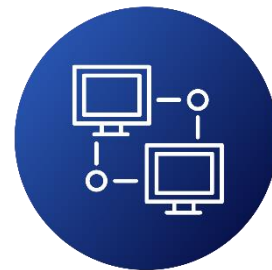


Network Engineer (Level 4)



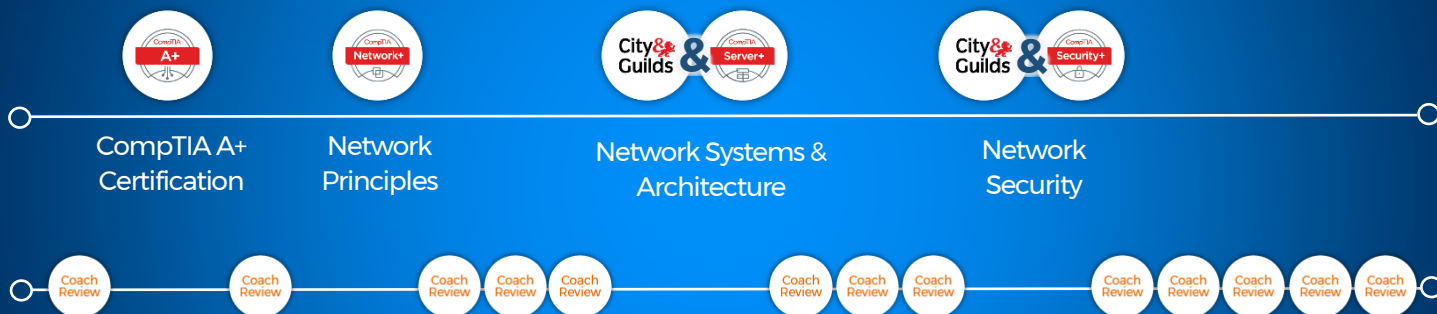
Phase 1

Induction & Initial Assessment



Phase 2

Training Modules and contact from Skills Development Coach



Phase 3

Assessment Gateway



Phase 4

End Point Assessment

Apprenticeship Standard Network Engineer (Level 4)

Blended Learning breakdown

		Training Centre	Remote
Phase 1	Induction & Initial Assessment	1 day	Training Centre only
Phase 2	CompTIA A+ Certification (Recommended if no L3 or equivalent skills)	2 weeks	40 hours self-study 8 remote training sessions
	Network Principles (CompTIA Network+)	2 weeks	Training Centre only
	Network Systems & Architecture (CompTIA Server+ optional exam, C&G mandatory exam)	2 weeks	40 hours self-study 8 remote training sessions
	Network Security (CompTIA Security+ optional exam, C&G mandatory exam)	2 weeks	40 hours self-study 8 remote training sessions
Phase 3	Assessment Gateway	Up to 1 week*	Training Centre only
Phase 4	End Point Assessment	3 - 5 days	Training Centre only

*To be arranged by your Skills Development Coach

Course Details



Induction & Initial Assessment

1 day in the training centre

Functional Skills

If required, learners will sit a Maths and/or 3 English exams.
Allow 1 – 2 days per exam.

Network Security

- Explain terminology for key IT security concepts
- Describe current vulnerabilities and threats associated with IT security
- Explain risk management methods and risk calculation tools
- Explain and know when to use IT security countermeasures and controls
- Understand how to configure Network Security
- Understand how to configure a network server to enhance security of the server, applications and data
- Describes elements of network security that can be configured on a server to enhance security
- Understand a range of tools and techniques to identify vulnerabilities and threats to a network server
- Understand the concepts of appropriate incident response for Information security incidents and identify different instances and escalate in an appropriate way



CompTIA A+ Certification

(Recommended only if learner is not of equivalent level of knowledge)

- Assemble components based on customer requirements
- Install, configure and maintain devices, PCs and software for end users
- Understand the basics of networking and security/forensics
- Properly and safely diagnose, resolve and document common hardware and software issues
- Apply troubleshooting skills
- Provide appropriate customer support
- Understand the basics of virtualisation, desktop imaging, and deployment



Network Principles

- Describe the role performed by a network of computers and shared devices
- Describe concepts of physical and logical networks and state their main features and the advantages and disadvantages of each
- Explain the typical infrastructure components of physical networks
- Understand network protocol suites and conceptual models
- Explore the fundamentals of network conceptual models
- Compare and contrast the layers and the functionality of the OSI and TCP/IP models and associated devices
- Understand the concepts of IP addressing and routing and IP addressing schemes, Routing concepts and protocols
- Describe the differences between a class based (IPv4) and Classless Inter Domain Routing scheme (CIDR)
- Compare and contrast the advantages and disadvantages offered by static and dynamic for a Local Area Network



Network Systems & Architecture

- Develop a knowledge of the hardware and software components that form a Server
- Install and configure a Server (or configure partition(s) within a server) and test connection to an existing network
- Explain how to configure the elements required to enable a Server to perform a specified role
- Describe the concept of virtualisation and VMs
- Install and configure one or more virtual machines and manage resource allocation using a Hyper-Visor
- Explain the roles and services provided by servers
- Describe how to configure a range of network services and test their operation
- Explain middleware and application services in a networking context through examples and case studies.
- Describe the purpose, benefits and drawbacks of server workload balancing
- Describe a range of different storage solutions used in networks for online and offline storage
- Understand key storage protocols used for network attached storage,
- Describe how to configure network storage devices and profile file



Assessment Gateway, Assessment Preparation & Administration Week

(Up to 1 week in the training centre)
Preparation week to understand the four elements of the assessment gateway.

Assessment Phase

Summative Portfolio

Synoptic Project

Technical Interview with SME

Employer Reference

Achievement of Apprenticeship

**BCS
Network Engineer
(Level 4)**