

Apprenticeships England

Cloud Network Specialist

Level 3 Apprenticeship

Programme Guide



QA.com



Why QA?

Endorsed by 4,000+ global clients, we are the leader in applied and cohort-based learning academies.

Today's biggest technological shifts are shaped by AI, cloud, and data.

In every technology revolution, there are winners and losers – and teams with applied skills make all the difference. We believe you can't change an organisation unless you change the capabilities of its people and ensure human and machine intelligence work together.

Success in numbers:

35+

Years of training experience

£500M+

Levy spend invested

1,000+

Al, cloud & coding hands-on labs

24 hours

Feedback time for submissions

40,000+

Careers launched & accelerated

<1 minute

Response time to learner queries



Ready to explore how QA can support you? Let's dive in!



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Creating Change

Cloud networking enables secure, scalable connectivity for innovation.

This programme equips your organisation with core skills to specialise in cloud systems, resolve IT issues efficiently, and drive agility and operational excellence.

Our apprenticeships drive business results by empowering organisations to apply skills consistently at speed and scale.



Cloud First Curriculum

Best practices for securing and optimising cloud and multi-environment infrastructures.

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IT Performance

Foster a responsive IT environment to resolve technical issues and support evolving needs.

R Industry Certification

Earn recognised accreditation from Microsoft Azure or AWS for a competitive advantage. v2.0 2024

Digital by Design

Our market-leading approach accelerates skill development and achievement through our **Discover**, **Practise**, **Apply** methodology, ensuring that both learners and employers are fully supported throughout their programme.



Discover

Leveraging QA's learning platform, learners follow a development path focused on their job role.



Practise

Learners come together for instructor-led training sessions, practising their skills through hands-on labs and sandboxes in a safe environment while collaborating with peers.

Apply

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These practiced learnings are applied on the job through work-based activities at key and sequenced stages, fully supported and reviewed by the specialist DLC team.

Programme Overview



Experience QA's self-paced learning platform with interactive labs and configurable learning.





Learner Journey

The Cloud Network Specialist programme integrates live and online workshops with self-paced learning, employing a guided discovery approach for individual learner contexts.

Learners are assigned a Digital Learning Consultant (DLC) for personalised coaching and support. These specialists ensure their successful progress, wellbeing, and readiness for assessments.





Modules

Following each module, learners apply their newly acquired knowledge and skills to ongoing work projects.



Module 1: Core IT Principles

Introduces essential organisational, cultural, and healthy & safety considerations that are critical for cloud specialists. It covers a broad range of foundational networking concepts and skills that form the backbone of cloud computing.

Topics:

- Foundational Networking Concepts
- Organizational & Cultural Considerations
- IT Systems Setup & Configuration

- Troubleshooting Common IT Issues
- Completing Real-World Cloud Projects

Live Instructor Sessions: 2 Days



Module 2: Core Cloud and Networking Principles

Examines key networking concepts – from IP addressing, cloud infrastructure, virtualisation, and security protocols.

Topics:

- Key Networking Concepts
- Virtual Networks Setup & Cloud Services
 Configuration
- Troubleshooting Network Issues in Cloud Environments
- Implementing Cloud & Networking Solutions

03

Module 3: Networking Architecture and Security

Explores essential principles, hardware components, protocols and services involved in designing and managing on-premise, cloud, and hybrid network architectures.

Topics:

- Designing Secure Network Architectures
- Security Protocols & Measures
- Vulnerability Assessments & Penetration
 Testing
- Security-Focused Labs & Simulations



Module 4: Azure, AWS and Advanced Networking Principles

Delves into cloud platforms, virtualisation, DevOps practices, and the fundamentals of databases, data migration, and cloud-native architectures.

Topics:

- Deploying & Managing Resources on AWS / Azure
- Network Performance for Cloud Applications
- Cloud Security Measures
- Cloud-Native Architectures & Data Migration

Live Instructor Sessions: 5 Days

Live Instructor Sessions: 5 Days

Live Instructor Sessions: 2 Days

Tools and Technologies

Cloud Platforms

- AWS
- Azure
- GCP

Security

- Firewalls
- Intrusion Detection Systems (IDS)
- Vulnerability Scanners

Networking

- Cisco Packet Tracer
- Wireshark

Development

• Visual Studio Code

Collaboration

- Slack
- Teams



End-Point-Assessment

We ensure all learners are fully prepared for their End-Point-Assessment (EPA) through our internal gateway process, maximising their success rates.

Assessment criteria:

01

Knowledge Ability to convey knowledge effectively.

02

Skills Demonstrate practical skills with confidence.

03

Behaviour Exhibit professional workplace behaviour.

Explore the detailed assessment criteria within the <u>Information Communications</u> <u>Technician standard</u>.

EPA process:



Professional Discussion: Engage in a formal two-way conversation to showcase knowledge, skills, and behaviours.

Project Report with Questions: Prepare a project report, demonstrate knowledge and achievements, and participate in a Q&A.



Ready to partner with us?

Let's talk:





<u>qa.com/contact</u>

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