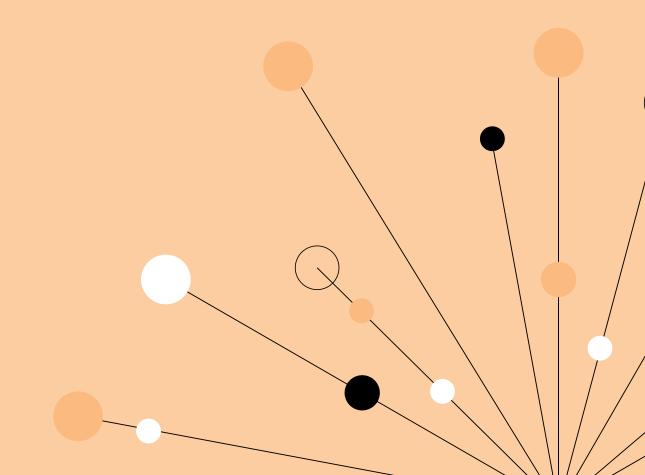


Cyber Defender & Responder

Level 4 Apprenticeship

Programme Guide





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!

3

Contents

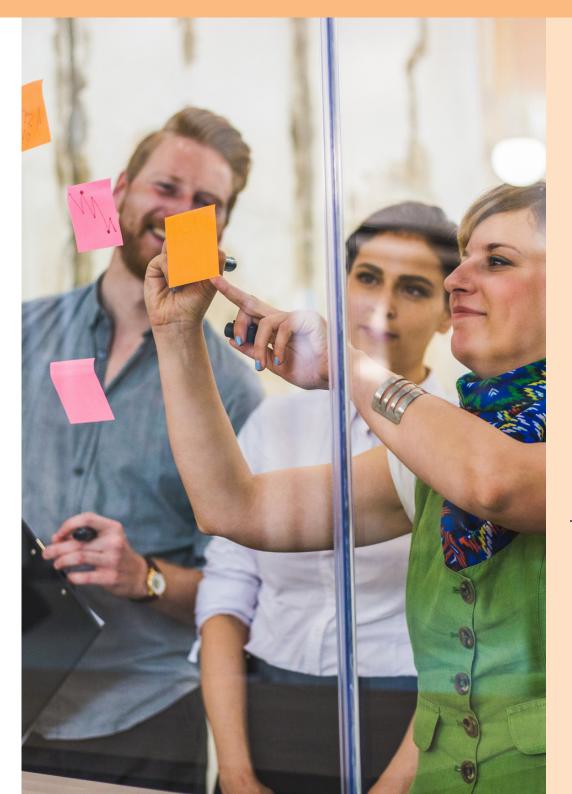
| Creating Change | 04 |
|------------------------|----|
| Digital by Design | 05 |
| Programme Overview | 06 |
| Learner Journey | 07 |
| Modules | 08 |
| Tools and Technologies | 12 |
| End-Point-Assessment | 13 |

Creating Change

Cybersecurity is the shield against digital threats.

This programme equips your organisation with core skills needed to defend against and respond to cyber incidents, secure systems, and monitor for breaches.

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





Project Ares®

Exclusive access to the award-winning, gamified platform by <u>Circadence</u>.



"Athena"

Interactive missions and realistic attack simulations, guided by the in-game advisor.



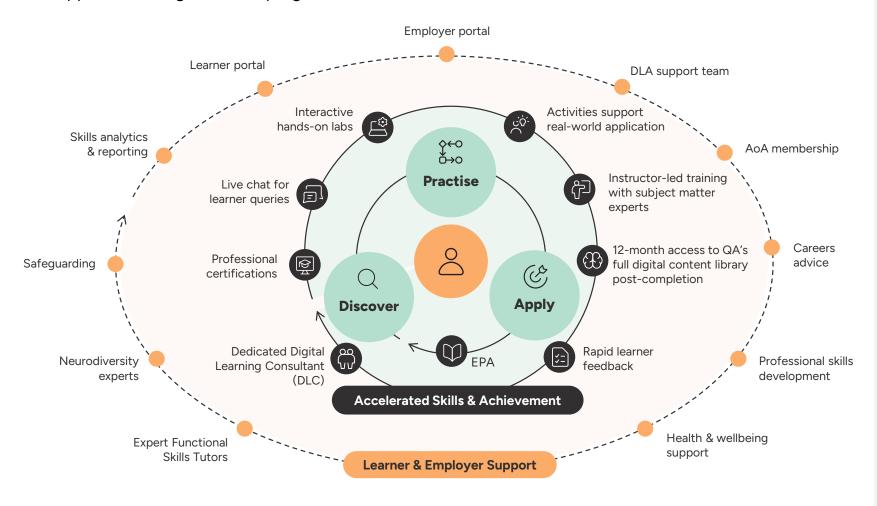
Skill Retention

Level-up cybersecurity teams and stay ahead of evolving threats.

4

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

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



Details of standard: Cyber Security Technologist



Total cost: £18,000



Programme duration: 20 months



Live instructor sessions: 18 days

Delivered in collaboration with our strategic vendor partners:







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



Cyber Security



Network Fundamentals



Operating Systems



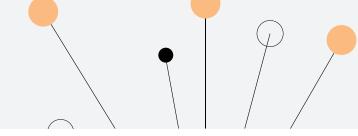
Security Management



Defence and Cloud Security



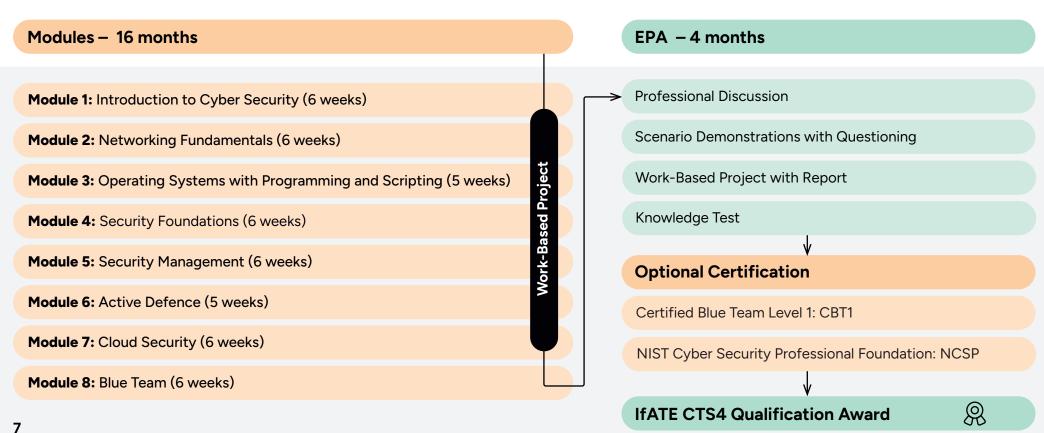
Blue Team



Learner Journey

The Cyber Security Defender & Responder 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:

Introduction to Cyber Security

Offers a foundational overview of cyber security and IT, with an emphasis on service management concepts.

It provides insight into the critical role of cybersecurity in today's digital landscape, the common technologies involved, and its increasing significance across industries.

Topics:

- Service Management Concepts
- Service Value Stream
- Guiding Principles
- Computing & Network Fundamentals
- Cyber Security Fundamentals
- Governance & Risk
- Security Considerations

Live Instructor Sessions: O Days



Module 2:

Networking Fundamentals

Provides discovery of networking, covering both on-premise and cloud networking infrastructures.

Topics:

- Network Operations
- Network Security
- Virtualisation & Cloud
- Network Structure & Protocols
- IP Addressing & Internet Working
- Applications & Security Management

Live Instructor Sessions: 5 Days



Module 3:

Operating Systems with Programming and Scripting

Explores Windows, MacOS and Linux operating systems – focusing on administration and its importance in maintaining a strong cyber security posture.

Topics:

- System Architecture
- Package Management
- · Command Line Basics
- Partitions & File Systems
- Shells, Scripting & Databases
- Linux Administration
- System Services
- · Networking & Security

Live Instructor Sessions: 0 Days



Module 4:

Security Foundations

Develops foundational cyber security skills, knowledge, and familiarity with essential tools.

Topics:

- UK Laws & Regulations
- Cryptography Basics
- · Critical Security Control
- Modern Network Architecture
- Risk Management Principles
- Operation System & Application Security
- Applied Cryptography Techniques

Live Instructor Sessions: 5 Days

9 v2.0 2024



Module 5:

Security Management

Explores cybersecurity from a business perspective, from Agile fundamentals and advancing to key industry security frameworks like ISO and NIST.



Module 6:

Active Defence

Methods for identifying and countering potential attacks, including attack vectors, system vulnerabilities, and defence strategies.

07/

Module 7:

Cloud Security

Examines cloud technologies and associated security implications – focusing on monitoring, data protection, and compliance.

Topics:

- Agile Fundamentals
- ISO 27001 & ISO 27002
- NIST Cybersecurity Framework
- GDPR & Digital Economy
- Core Functions, Categories & Subcategories
- Cyber Risks & Impact Analysis
- Security Controls & Case Studies
- Cybersecurity Improvement

Live Instructor Sessions: 3 Days

Risk & Impact

Topics:

- Introduction to Attack & Defence
- OWASP Top 10
- Penetration Testing
- Encryption & Forensics
- Burp Suite Overview
- Reporting & Presentation

Topics:

- Cloud Computing Fundamentals
- · Web Basics
- SIEM Tools & Usage
- Cloud Concepts & Virtualization
- Cloud Security Frameworks & Certifications
- · Security Technologies: Azure, AWS, GCP
- Assurance, Data Protection & Compliance

Live Instructor Sessions: O Days

Live Instructor Sessions: 5 Days



Module 8:

Blue Team

Develops skills for defending networks and managing cyber incidents - emphasising practical techniques and response strategies.

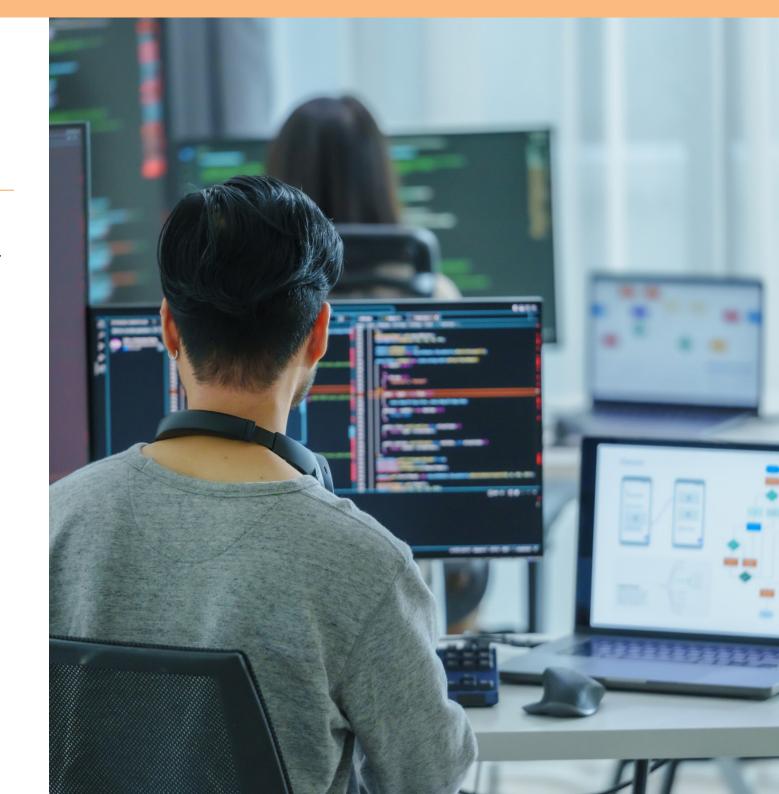
Topics:

- Security Fundamentals
- Phishing Analysis
- Threat Intelligence
- Digital Forensics
- SIEM
- Incident Response

Live Instructor Sessions: O Days

For details on the free CBT1 certification:

Click here



Tools and Technologies

Network Simulation and Security Tools

- Packet Tracer
- Kali Linux
- PowerShell

Security Information and Event Management Tools

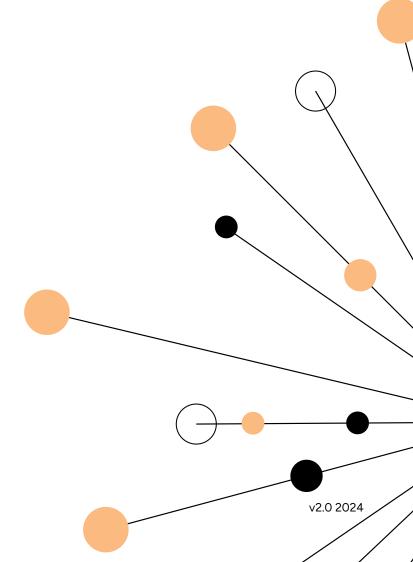
SEIM Tools

Cloud Platforms

- Azure
- AWS
- GCP

Remote Labs and Learning Platforms

- Project Ares by Circadence
- Security Blue Team
- GoToMyPC
- · Learning on Demand



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.

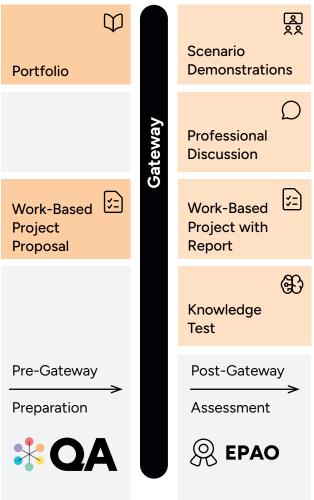
03

Behaviour

Exhibit professional workplace behaviour.

Explore the detailed assessment criteria within the <u>Cyber Security Technologist</u> <u>standard</u>.

EPA process:



Scenario Demonstrations with Questioning:

Complete four scenarios, supplemented by Q&As to explain reasoning.

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

Work-Based Project with Report: Develop project addressing a cyber security issue with business application, supported by a report.

Knowledge Test: Answer multiple-choice questions aligned with key knowledge statements.

13 v2.0 2024

Ready to partner with us?

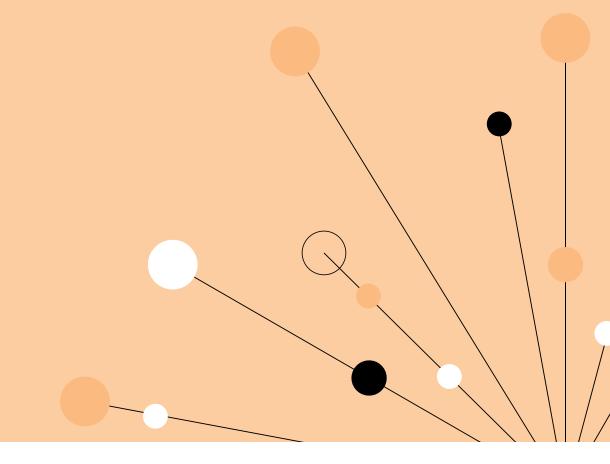
Let's talk:

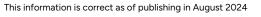
[.]

0113 220 7150

厂

qa.com/contact





V2.0 2024









