Virtual College

Create your own in-house Cyber Security Technologists with Virtual College specialist development programme

Inspiring learning for all

Businesses both large and small need to be proactive to protect against growing cyber threats.

The Verizon Communication's Data Breach Investigations Report 2018 revealed that 72% of the 855 global data breaches analysed were at companies with 100 employees or less. For an SME, the average cost of a data breach could be between £75,200 and £310,800; a steep price to pay, not to mention the potential damage caused to both your brand and your customer relationships.

Imagine having your own Cyber Security Technologist, how important would that be?

This development programme is designed for individuals specialising in cyber threats, hazards, risks, control measures and the mitigations sector to protect an organisation's systems and people, through working on security design and architecture, security testing, investigations and response.

What will the individual learn?

- System vulnerabilities
- Analysis and evaluation of security threats and hazards
- Demonstration of the use of relevant external sources of threat intelligence or advice
- Research and investigation of some common attack techniques
- Security risk assessments
- Development of security cases
- Troubleshooting
- Design, build and testing of networks
- Configuration of security hardware/software
- Employment of cryptography
- Cyber risk assessments
- Risk assessment methodologies

What qualifications will the apprentice gain?

All apprentices will also have the opportunity to complete the professional vendor qualification: MTA Security Fundamentals

Technologist Route:

- **Level 4 Certificate** Cyber Security Introduction
- **Level 4 Certificate** Network Communications Theory
- **Level 4 Certificate** Security Case Development and Good Design Practice
- **Level 4 Certificate** Security Technology Building Blocks
- **Level 4 Certificate** Employment of Cryptography

Analyst Route:

- **Level 4 Certificate** Cyber Security Introduction
- **Level 4 Certificate** Risk Assessment
- **Level 4 Certificate** Governance, Organisation, Law, Regulation and Standards

This Level 4 programme is 18 months' duration with core training delivered online live. It is for existing staff and/or new staff; we also provide a full recruitment service. The programme is delivered as an apprenticeship and hence for most businesses as a minimum it is 90% funded.

How do we create your Cyber Security Technologists?

The core training is delivered as 6 x 5 day modules on pre-selected calendar dates, e.g. one module every 2 to 3 months. Module content is as follows with all modules delivered over 5 days online live, plus 20 hours' self-study and 1 x face-to-face visit.

Cyber Security Introduction

Why security matters. Basic Security Theory. Security Assurance. Applying Basic Security Concepts to Develop Security Requirements. Security Concepts Applied to ICT Cyber Infrastructure. Attack Techniques and Common Sources of Threat.

Network and Digital Communications Theory

Demonstrate the understanding and operation of commonly used network data and protocols. Compare and contrast the features and functionality of layered network models. Understand the functionality and operation of network routing. Understand the factors that affect network performance.

Security Case Development and Good Design Practice

Describe what good practice in design is and how this may contribute to security. Compare and contrast the features of reputable security architecture which incorporates security hardware and software components. Describe the features of the Common Criteria Protection Profile. Understand how to design and develop a 'security case', recognising that threats evolve and respond to security design.

Security Technology Building Blocks

The ability to demonstrate a thorough knowledge of tools and methods employed to implement host-based security for a range of threats. A comprehensive knowledge of the technologies and techniques necessary for the defence and maintenance of networks and their hosts. Understand the functionality and operation of security techniques as they apply to software and data. A thorough understanding of the application, deployment and management of the security of networked systems and methods available to identify and reduce risk.

Employment of Cryptography

The ability to demonstrate a thorough knowledge of the theory underpinning cryptographic techniques, common applications and limitations. A comprehensive knowledge of the practical deployment of cryptography - how it is applied to secure a range of common public technologies, data and networked systems, in addition to issues faced in their deployment and updating. A thorough understanding of the legal issues relevant to cryptography, particularly when crossing national borders, and the regulatory frameworks in place in various jurisdictions.

MTA Security Fundamentals (recognised vendor qualification)

- Understanding Security Layers
- Authentication, Authorisation and Accounting
- Understanding Security Policies
- Understanding Network Security
- Protecting the Server and Client

In addition to high value adding training: Professional Recognition

This apprenticeship is recognised for entry to both IISP and BCS Associate Membership and for entry onto the Register of IT Technicians confirming SFIA Level 3 professional competence. Those completing the apprenticeship are eligible to apply for registration.

Additional Information

Online live is a virtual classroom with all the benefits of interactive teaching and learning.
The individual will undertake an exam at the end of each module. The employer will mentor the individual and provide opportunities for knowledge sessions, work shadowing and self-study opportunities. At the end of the 18 month programme of study, our trainer will be on hand to support the `apprentice` through the end point assessment phase in month 19-20.

Are existing employees eligible for an apprenticeship?

Absolutely! Apprenticeships are a perfect way to train existing staff. If you have identified a member of staff with the potential to take on Cyber Security responsibilities, our trainers will help them to gain the skills to succeed and benefit your business.

For 22 years, Virtual College has been developing and supplying collaborative, customer-focused e-learning technology for organisations world-wide.

We're proud to have won **'Learning Technologies Supplier of the Year 2016-17' and 'E-learning Development Company of the Year 2015-16'. Now with over 3 million online learners.**

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