

# CYBER SECURITY TECHNOLOGIST APPRENTICESHIP STANDARD

**Standard Code ST1021**  
**Course Level 4**  
**Day Release**  
**Location: Lincoln**  
**Funding Level £18000**  
**Duration 27mths including EPA**

## *Course Description*

The primary role of a Cyber Security Technologist is to apply an understanding of cyber threats, hazards, risks, controls, measures and mitigations to protect organisations, systems and people. Those focussed on the technical side work on areas such as security design & architecture, security testing, investigations & response.

Those focused on the risk analysis side focus on areas such as operations, risk, governance & compliance.

Whether focused on the technical or risk analysis side, all people in this occupation work to achieve required security outcomes in a legal and regulatory context in all parts of the economy. They develop and apply practical knowledge of information security to deliver solutions that fulfil an organisation's requirements.

## *Off the Job Training*

A key requirement of an Apprenticeship is Off-the-job training. This must make up an average of 6 hours per week of the apprentice's working hours, over the total duration of the apprentice's planned training period. Off-the-job training must be directly relevant to the apprenticeship standard and must take place within the apprentice's normal working hours. The new learning must be documented and reflected on through the Learner Journal on their e-portfolio.

## *Entry Requirements*

The Apprentice will need to be in a relevant role and show a willingness to undertake the knowledge, skills and behaviours required. They will also need to have Level 2 Maths and English (GCSE at Grade 4/C or above or equivalent).

Individual employers will set their selection criteria, but this is likely to include A Levels, a relevant Level 3 apprenticeship or relevant qualification, relevant experience or an aptitude test with a focus on functional maths.

Apprentices may be required to attend an interview and undertake relevant skills assessments.

Once they have been accepted on to the programme all apprentices will be required to attend a Lincoln College Induction. Apprentices will require access to a tablet/computer to access their e-portfolio.

## ***Knowledge, Skills and Behaviours***

### **TECHNICAL KNOWLEDGE**

Understand the basics of cyber security:

- Why cyber security matters.
- Basic theory concepts including security, identity, confidentiality, integrity, and availability.
- Security assurance concepts and how to achieve these in practice.
- How to build a security case.
- Cyber security concepts applied to ICT infrastructure.
- Attack techniques and sources of threat.
- Cyber defence.
- Relevant laws and ethics.
- The existing threat landscapes.
- Threat trends.

### **SKILLS & BEHAVIOURS**

- Logical and creative thinking skills.
- Analytical and problem-solving skills.
- Ability to work independently and to take responsibility.
- Can use own initiative.
- Thorough and organised approach.
- Ability to work with a range of internal and external people.
- Ability to communicate effectively in a variety of situations.
- Maintain productive, professional and secure working environment.

## **Assessment**

Assessment is done through a combination of practical tasks, written assignments, oral discussions and online tests throughout the programme.

- Regulated knowledge modules throughout the apprenticeship.
- One to one support from a dedicated, professional assessor/instructor allocated to the learner for the duration of the programme.
- Work based assignments and projects to be completed in an e-portfolio.
- Case studies and in College course days as and when required for each learner.
- Job shadowing and mentoring, cross training in other departments.
- Independent learning and research as directed by the assessor, relevant to the area of study.
- Review of progress every 10-12 weeks with the Apprentice, Manager and Assessor, evaluating and contributing to what has been learnt and what the next steps to take are.

## **End Point Assessment**

There will be an End Point Assessment (EPA) as the final stage of an Apprenticeship. The Apprentice must demonstrate their learning to an independent end point assessor and the overall grade available is distinction, merit, pass or fail.

### **Assessment events are:**

- Summative Portfolio: Containing work-based evidence collated throughout the apprenticeship.
- Synoptic Project: A business related project completed over a one-week period away from the day to day workplace.
- Employer Reference.
- Interview: Discussion with an assessor exploring what has been presented in the portfolio and the project.

## **Progression**

This Apprenticeship provides an ideal grounding into the occupation and supports progression within the sector to Level 6 Cyber Security Technical Professional.

## **Fees**

As an Apprentice, you will pay no course fees. However, your employer may have to pay towards your training as well as providing you with a wage. All Apprentices are entitled to the national minimum apprentice wage within their first year of training from their employer, although they can, and often do, pay more. In the second and subsequent years of an Apprenticeship programme, if you are aged 19 or over, the national minimum wage for your age would apply [<https://www.gov.uk/national-minimum-wage-rates>]

If you are an employer and want to find out more information regarding employer contributions and any further costs related to the Apprenticeship programme, please contact our dedicated Apprenticeship team at [employers@lincolncollege.ac.uk](mailto:employers@lincolncollege.ac.uk)

## **Business Benefits**

Employers have designed the Apprenticeship Standards to meet the needs of the sector and industry. Ensuring they include:

- Relevant Knowledge, skills and behaviours ensure that the Standard is relevant to the occupation.
- Widening participation Apprenticeship standards provide opportunities to employees that may not previously have been available.
- Development tools A cost effective way to train your employees to undertake specific roles in your business.
- Return on Investment On average, an apprentice who has completed their course will increase business productivity by £214 per week (CEBR, 2015).