

## Level 4 Cyber Security Technologist **New Apprenticeship Standard**

At Skills Training UK we go further in fully understanding what it is that our employer clients want to achieve from their training. We work as their partner in delivering on that vision, developing stronger employees who work well as individuals and as part of a team.



This apprenticeship is designed for individuals specialising in the cyber threats, hazards, risks, controls, measures and mitigations sector to protect organisations systems and people, through working on security design and architecture, security testing, investigations and response.

**Typical Job Roles: Security Architect, Penetration Tester, Security Analyst, Cyber Security Specialist, Information Security Assurance & Threat Analyst, Forensics and Incident Response Analyst, Security Engineer, Security Administrator**

### Role Requirements

**The learner role must have the knowledge to be able to carry out the below as a minimum the list below:**

- Discover (through a mix of research and practical exploration) vulnerabilities in a system
- Analyse and evaluate security threats and hazards to a system or service or processes.
- Be aware of and demonstrate use of relevant external sources of threat intelligence or advice
- Research and investigate some common attack techniques and recommend how to defend against them. Be aware of and demonstrate use of relevant external sources of vulnerabilities (e.g. OWASP)
- Undertake a security risk assessment for a simple system without direct supervision and propose basic remediation advice in the context of the employer.
- Develop a simple security case and design then build a system in accordance with the security case.
- Investigate different views of the future and trends in a relevant technology area and describe what this might.
- Design, build, test and troubleshoot a network incorporating more than one subnet with static and dynamic routes
- Select and configure relevant types of common security hardware and software components to implement a given security policy.
- Conduct cyber risk assessments against externally recognised cyber security standard using a recognised risk assessment methodology.

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<< An employer must be prepared to provide the learner with the opportunity to carry out work and be part of projects, which will enable the learner to produce substantial evidence towards their qualification.

In order to ensure the successful progression of the learner, we request that employers participate in joint reviews of the learner's progress at regular intervals throughout the apprenticeship. This ensures continued and positive progress, through the apprenticeship and agrees how any issues are to be resolved and how additional stretching and challenging activities can be built in.

## Eligibility

Learner must hold Level 3 qualifications, which could include: A levels, a level 3 apprenticeship or other relevant qualifications. Must have a minimum of 12 months experience with the role or similar.

Maths and English qualifications must be held; minimum accepted levels include: Grade D GCSE or Level 1 Functional Skills.

## Knowledge Modules

Core/Mandatory Knowledge Module: Cyber Security Introduction  
AND

### Option 1 (Technologist)

Module 2: Network and Digital Communications Theory

Module 3: Security Case Development and Design Good Practice

Module 4: Security Technology Building Blocks

Module 5: Employment of Cryptography

OR

### Option 2 (Risk Analyst)

Module 6: Risk Assessment

Module 7: Governance, Organisation, Law, Regulation and Standards

## Duration

The duration of this apprenticeship is 24 months (please note the last 3 months of the apprenticeship are allocated for the end point assessment).

## How Do We Support

During the duration of the programme, the learner will have a dedicated assessor who will visit them within the work

place a minimum of once per month in order to support their learning, development of competency and generation of evidence.

This will also be supported between visits by off-site information, advice, guidance, academic progress and technical competence support.

The assessor will work with the learner and the employer in order to ensure that all learning needs are being met for both parties, in order to ensure successful progression against all elements of the apprenticeship during the period of the programme.

The knowledge modules and vendor qualifications will require formal teaching sessions, which may take place within an appropriate area within the workplace or off site, in order to ensure the learner gets the maximum benefit of the learning in order to successfully pass all associated exams.

## End Point Assessment

**In order to pass the apprenticeship, the learner needs to successfully pass the End Point Assessment. This assessment is made up through a number of stages:**

- **A portfolio** – this is a collection of evidence from real work projects which have been completed during the apprenticeship
- **A project** – learners will undertake a business related project, within a controlled environment (away from the day to day workplace) over the period of one-week
- **A employer reference** – this is usually carried out via a face to face or skype call with an assessor from the end point assessment body
- **A learner interview** – this is carried out via a face to face or Skype call with an assessor from the end point assessment body, where questioning will be carried out around the contents of the portfolio and the project in order to verify the learners knowledge and competence

The assessor from the end point assessment body will then decide whether to award successful apprentices with a pass, a merit or a distinction.

## 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 and those completing the apprenticeship are eligible to apply for registration.