

# Computing, Digital and IT

## Cyber Security Technologist Level 4 Apprenticeship

### In Brief

#### Start Date / Duration

This apprenticeship programme can be started at any time. The duration of this apprenticeship is typically 24 months.

#### Entry Requirements

Individual employers will set the selection criteria, but this might include five GCSEs and/or A levels; a Level 3 Apprenticeship; other relevant qualifications and experience; or an aptitude test with a focus on functional maths.

•Please see our Apprenticeship vacancies.

<https://www.barnsley.ac.uk/our-departments/apprenticeships/apprenticeship-vacancies/>

#### You will achieve

Cyber Security Technologist Level 4 Apprenticeship Standard

### Course Overview

Save the day and get serious with IT. Start your exciting career as a Cyber Security Technologist with us.

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.

There are two pathways within the Cyber Security Technologist standard – Technical and Risk Analyst:

- Those focused on the technical work on areas such as security design and architecture, security testing, investigations and response
- Those focussed on the risk analysis focus on areas such as operations, risk, governance and compliance

Whether focussed on the technical or risk analysis, all will work to achieve the required security

outcomes in a legal/ regulatory context, develop and apply practical knowledge of information security to deliver solutions that fulfil an organisation's requirements and support the vast areas of the digital security economy.

For further information regarding this apprenticeship standard please click here [<https://www.instituteforapprenticeships.org/apprenticeship-standards/cyber-security-technologist/>] .

## Course Content

### **Want to be the person who protects an organisation's computer networks and systems?**

Apply an understanding of cyber threats, hazards, risks, controls, measures and mitigations to protect organisations, systems and people – monitor networks for breaches and learn to install software (firewalls, data encryption, etc.), create disaster-recovery plans or most importantly think like 'ethical hackers'.

As well as keeping up to date with the latest methods of attack and conducting penetration testing to find vulnerabilities before they can be exploited, you will aim to form a deeper understanding of data, cryptography and encryption, open source intelligence (OSI), protocols and how they relate to each other, network routing and performance including typical failure modes in protocols and approaches to error control.

You will also cover common security architectures, hardware and software components and sources of architecture patterns/guidance and undertake live and virtual risk-based activities.

## How will I be assessed?

On Programme Assessment will include a mixture of:

- Practical demonstrations
- Work based projects
- Written assessments
- Portfolio
- Observations
- End Point Assessment

## What Equipment Will I Need?

You will need to provide your own writing materials and a USB stick.

## Where will I study?

You will study within the workplace and attend classes at Barnsley College SciTech Centre, Falcon Street, Barnsley S70 2EY.

## What can I do next?

You can progress onto higher level degree and/or apprenticeship study or apply for a vast array of digital roles that include:

Cyber Operations Manager, Security Architect, Penetration Tester, Security Analyst, Risk Analyst,

Intelligence Researcher, Security Sales Engineer, Cyber Security Specialist, Information Security Analyst, Governance and Compliance Analyst, Information Security Assurance and Threat Analyst, Forensics and Incident Response Analyst, Security Engineer, Information Security Auditor, Security Administrator, Information Security Officer.

See what careers are available in the Computing [<https://www.barnsley.ac.uk/app/uploads/2023/10/Computing-careers-2023-24.pdf>] and Games [<https://www.barnsley.ac.uk/app/uploads/2023/10/Games-Design-careers-2023-24.pdf>] sectors. Use our online careers tool, Career Coach [<https://barnsley.lightcastcc.com/?radius=&region=Barnsley>] , to find out what your next steps could be.

## **How much does the course cost?**

There is no cost to being an apprentice. All costs associated with your apprenticeship, including the cost of training and your salary, will be paid by your employer.

## **Extra information**

### **Contact the Apprenticeship Team**

For further information please contact the team on 01226 216166 or email: [apprenticeships@barnsley.ac.uk](mailto:apprenticeships@barnsley.ac.uk) [<mailto:apprenticeships@barnsley.ac.uk>]

## **Want to join Barnsley Sports Academy and the Sports Village?**

Barnsley College has a range of sports opportunities for all students to take part in, gain professional training and compete nationally and internationally. We also have a state-of-the-art fitness village, Honeywell Sports Village [<https://www.barnsley.ac.uk/shops-services/honeywell-sports-village/>] where students can make use of our fitness suite, spinning studio and classes for competitive rates. You don't have to be studying sport to get involved in the Sports Academy [<https://www.barnsley.ac.uk/barnsley-sports-academy/>] .

## **Additional Learning Support**

Our Additional Learning Support team can provide you with the support you need. Please contact them on +44 (0)1226 216 769.

## **English and Maths**

Having good English and Maths qualifications are important for most careers and we want to give you the help you need to succeed.

If you are aged 16 – 19 and don't already have a grade C/4 or above in GCSE English and Maths they will automatically be included in your study programme. If you want to work towards higher grades in English and Maths we can help you do that too.

Need a higher level Maths qualification? We offer a [Level 3 Mathematical Studies \(Core Maths\)](#).

This can be added to your study programme.

If you need any further information, please contact our friendly [Information Team](#).

## Disclaimer

Please note we reserve the right to change details without notice. We apologise for any inconvenience this may cause.

**Last updated:** 11th December 2023

### Want to apply?

Visit <https://www.barnsley.ac.uk/apply> to get started

Call us on **01226 216 123**