

ARE YOU THE RIGHT CANDIDATE FOR THIS ROLE?

We are looking for a hard-working driven candidate to complete a 2-year **Cyber Security Technologist Level 4 Apprenticeship** as a **Trainee Professional Services Engineer** at **Business Computer Solutions**.

Do you have a passion for the world of technology, over 18 years of age, have GCSE (B/6 equivalent or above) in Maths & English? Look further into this opportunity and **apply today!**

Prerequisites:

Must have an A Level in ICT, Level 3 Apprenticeship in a similar subject OR a BTEC Extended Diploma in IT (180 credits)

ADDRESS

Unit 16, Leigh Road, Haine Industrial Estate, Ramsgate, Kent, CT12 5EU.

CONTACT US

T. 01843 572 600
E. careers@bcs365.co.uk
W. www.bcs365.co.uk

WANT TO START YOUR IT CAREER?

Business Computer Solutions are offering some amazing trainee positions with both course-led and on-the-job experience.

ABOUT THE COURSE.

The modules in our Cyber Security apprenticeship equip learners with the advanced technical skills they need for their role. Each module develops the core set of skills they must be able to do well to be competent. In each module, learners will 'discover', 'practice' and 'apply' what they've learned. This helps them put their newly-found knowledge into action back at work. There are 5 modules to complete with the following learning outcomes.

Module 1: Cyber & Open Source Intelligence

This Module will introduce the learner to basic security concepts and Open Source Intelligence. It will involve lots of hands-on activities.

It will include:

- Introduction to Cyber Security
- Operating Systems and AAA
- Cryptography
- Infrastructure Security
- Investigating Infrastructure with OSINT
- Software Platform Security
- Attack and Defence
- Defensive OSINT

Module 2: Networking Fundamentals

This module will introduce the learner to the world of Networking. It will involve lots of hands-on activities.

This will include:

- TCP/IP and OSI
- IPv4 and IPv6
- Routing Protocols
- Configuring Wired and Wireless networks
- Managing Network Performance
- How to use a network visualisation tool such as Cisco Packet Tracer to create a basic network

This module's hands-on activities will get the learner to:

- Use Windows and Linux networking tools to troubleshoot networks
- Use of Cisco Packet Tracer Simulator to set up wired and wireless networks based on requirements



- Network using virtual machines on Hyper-V
- Configure networking on cloud systems

At the end of the classroom block, the learner will attempt the BCS Network and Digital Communications Theory exam.

Modules 3: Security Fundamentals

This module will build on the Security Concepts taught in Module 1. It will involve lots of hands-on activities.

It will include:

- Understand the threats faced by modern networks, systems and application platforms
- Understand the techniques used to detect, prevent and respond to these threats
- Build enablement solutions for detection and situational awareness
- Respond, contain and start hunting out known and unknown threats
- Use leading 'open source' security tools to serve active and passive defence techniques
- Discover and analyse 'high risk' weakness within systems
- Create an actionable and auditable policies
- Understand cryptography and its applications in a digital world
- Begin to analyse, attribute and predict the threats and create an active defence posture

Module 4: Introduction to Cyber Security

The module will prepare the learner for the BCS Cyber Security Introduction exam:

It will include:

- Why Cyber Security matters
- Basic security theory.
- Security assurance.
- Basic security concepts to develop security requirements (to help build a security case).
- Security concepts applied to ICT ('cyber') infrastructure
- Attack techniques.
- Cyber Defence.
- Legislation, standards, regulations and ethical standards relevant to cyber security.
- How to keep up with the threat landscape.
- Future trends.

At the end of the classroom block, the learner will attempt the BCS Cyber Security Introduction exam.

Module 5: A Practical Introduction to Cryptography



This hands-on module will support the learner in building practical skills in using encryption.

This will include:

- The difference between encoding, encryption and hashing
- The differences between mainstream encryption standards, i.e. DES, 3DES, AES etc.
- Difference between symmetric and asymmetric encryption
- Pros and cons of the above and types of keys (key, password, passphrase or hardware keys)
- How to use mainstream products and protocols
- Defending data at rest and in transit using software & hardware means
- How to defeat "loopholes" in encryption
- Best Practices for Deploying SSL/TLS in a Cloud Environment

Module 6: Employing Cryptography

The module will prepare the learner for the BCS Employment of Cryptography exam:

It will include:

- Main cryptographic techniques in use and the algorithms they employ
- Usage of Encryption in:
 - file and disk encryption
 - database encryption
 - digital rights management
 - ransomware
 - ecommerce
 - wireless communications
 - document and email message encryption and signing
 - data destruction
 - blockchain
 - protecting passwords and other authentication mechanisms- VPNs
- Features of key management including the key lifecycle and the challenges associated with each stage
- Legal issues surrounding Encryption

At the end of the classroom block, the learner will attempt the BCS Employment of Cryptography exam.

Module 7: Security Architecture

This module will cover key concepts of Security Architecture and Penetration Testing.

There will be a mixture of Hands-on and introduction to core topics that will support in the next module.



This will include:

- OWASP security by design principles
- Security Architecture frameworks
- Risk Assessments
- Threat Modelling
- Basics of Penetration Testing
- Identifying Vulnerabilities
- Security Audit Techniques
- Identity and Access Management

Module 8: Building a Security Case, and Security Technology Building Blocks

The module will prepare the learner for the BCS Security Case Development and Design Good Practice and BCS Security Technology Building Blocks exams:

It will include:

- Categories of security hardware and software that are available to assist with risk mitigation
- How each security hardware and software component type helps to protect data and systems
- How implicit assurance can be used to help select security hardware and software in different situations
- Features of good systems design and explain how these contributes to security
- The Trustworthy Software Framework
- NCSC secure design principles:
- Common security architecture frameworks in use
- Purpose and characteristics of a security case
- Threat Modelling

At the end of the classroom block, the learner will attempt the BCS Security Case Development and Design Good Practice and BCS Security Technology Building Blocks exams.

Gateway & End Point Assessment

This final component will get learners ready to go through the 'gateway'. The apprenticeship gateway is an internal QA process. It will ensure that your learner's work is ready to be assessed by BCS. This exists to increase their chances of success.

At this pre-gateway stage learners will:

- Consolidate and submit their portfolio
- Consolidate and submit their final employer reference
- Conduct a mock EPA

In addition to the items above, learners must have successfully completed:



- All their exams
- All the Functional Skills exams (except exempted learners)

Once learners have met all the above criteria, they will go through the gateway. When approved, it takes 3 months from gateway to achievement.

During this time, learners will:

- Complete their synoptic project
- Complete their interview



ABOUT BCS.

Business Computer Solutions has now been **trading for 25 years**, starting out as a break fix business (only being paid if the customer calls us). In 2008 we became a Managed Service Provider (MSP) paid each month and committed to improving uptime. The only constant in this industry is continual change and the whole team remaining adaptable is key to our commercial success and team happiness.

At BCS, our work ethic and environment is **caring, focused** and **fun**. We are employee owned, so it really is our people who make us. It means all staff are **empowered** and **encouraged** to **share, learn** every day, and to **grow**. This is no dull office environment. Located five minutes from Ramsgate train station on the Kent coast, we are also just a few minutes from the famous beach of Ramsgate Main Sands.

Our staff area has a pool table, arcade machine and a widescreen television to use during break and lunch times. We want everyone in the BCS family to get the right work/life balance. We do this by offering continued support, regular team meetings and appraisals, along with paid time for training and volunteering.

It is just the start of the benefits all employees enjoy when joining the team.

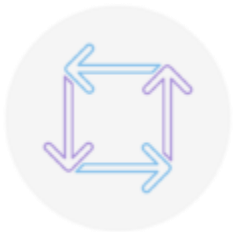


ARE THE RIGHT CANDIDATE?

Do you have a passion for technology? Do you think you align to our Business **Core Values**? ...



Integrity – We believe in total transparency in everything we do. Even when faced with difficult decisions and hard choices, we expect everyone at BCS to always do the right thing. To be honest and willing to share, and to uphold our trusted reputation. This is the BCS way!



Dependability – We believe in keeping our promises and always delivering. Not only are we there to support our customers 24/7. The BCS team must also depend on one another. This culture of trust is reflected in the way we treat our customers. After saying what we plan to do, we do it – every time!



Education – We believe that having a passion for learning is essential. Our industry is always evolving and changing. And so are we. We encourage and celebrate learning in all its forms, not just for our staff, but our clients too. Together we can all stay on top of the latest technologies and trends. Only by learning do we grow.

Have you got what it takes to be a part of the BCS family?



ABOUT THE ROLE.

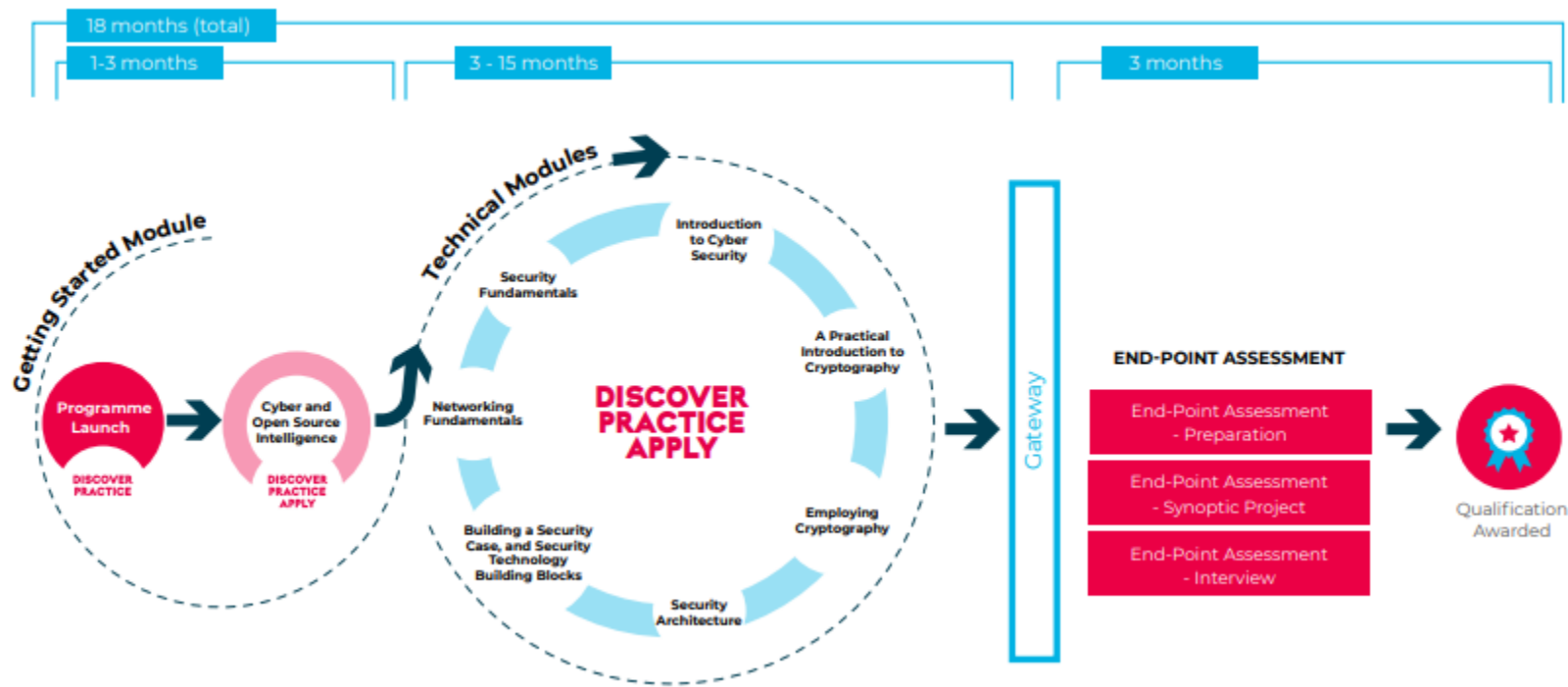
This is a trainee role with both course-led education and 'on-the-job' experience as a **Trainee Professional Services Engineer**. This trainee role offers a competitive **starting salary of £18,000 per annum** (with 4-weeks of paid holiday per year).

The **Cyber Security Technologist Level 4** is delivered by **QA**. There are three pillars of this apprenticeship: **Discover, Practice and Apply**.

Discover – Learners will learn the theory, by exploring subjects online and in the classroom.

Practice – Learners will practice their newfound knowledge by completing activities – online, in the classroom and (most importantly) directly at work in their day-to-day role.

Apply – Learners will apply what they have discovered and practiced at work. They will actively contribute to our organization whilst building their portfolio of evidence (showing how they have applied their new skills) to gain their qualification.



APPLY TODAY!

Application for this trainee position is via the submission of your **current CV** complete with a **covering letter** ideally detailing all elements of **what makes you an ideal candidate for this position**.

Email your application to careers@bcs365.co.uk and you will receive feedback on the next steps **within one working week**.

If you have any **questions** regarding your application, classroom-led course, or our business, do not hesitate to **contact** us on 01843 572 600.

The successful candidate is required to consent to us making an application to the Disclosure and Barring Service (DBS).



CV

Email your CV and introduce yourself.



Review

We carefully review all applications for a variety of criteria.



Interview

If we think you fit a current vacancy, you'll be invited to an interview.



Trial Day

Aced the interview? Now join us for a day working with the BCS team.



Job Offer!

Ta-dah! You've done it, welcome to the BCS family.

