Pearson BTEC
Level 3 Technical Occupational Entry for
Cyber Security Technician (Diploma)

Specification
First teaching from September 2025
First certification from 2026

Pre-publication draft
Qualification Number: XXX/XXXX/X
Pearson BTEC Level 3 Technical Occupational Entry for Cyber Security Technician (Diploma)

Specification

BTEC Technical qualification
First registration September 2025
About Pearson

We are the world’s leading learning company operating in countries all around the world. We provide content, assessment and digital services to students, educational institutions, employers, governments, and other partners globally. We are committed to helping equip students with the skills they need to enhance their employability prospects and to succeed in the changing world of work. We believe that wherever learning flourishes so do people.

References to third-party material made in this specification are made in good faith. Pearson does not endorse, approve, or accept responsibility for the content of materials, which may be subject to change, or any opinions expressed therein. (Material may include textbooks, journals, magazines and other publications and websites.)

All information in this specification is correct at time of publication.

Publication code: VQ000350

All the material in this publication is copyright © Pearson Education Limited 2023
Welcome

With a track record built over 30 years of student success, BTEC qualifications are widely recognised and respected. They provide progression to the workplace either directly or via study at higher levels. Recent data has shown that 1 in 5 adults of working age in the UK has a BTEC qualification.

Why choose BTEC Level 3 Technical Qualifications?

BTEC Level 3 Technical Qualifications enable students to develop a purposeful and coherent combination of knowledge, skills, and behaviours to confidently enter or progress into employment in occupations that are recognised and demanded by employers.

The qualifications, which are based on the occupational standards published by the Institute for Apprenticeships and Technical Education (IFATE), embody a fundamentally student-centred approach to the curriculum, with a flexible, unit-based structure and an approach to learning and assessment that:

- provides students with meaningful and occupationally relevant learning experiences.
- engages and motivates students to achieve as assessments can be focused on individual student needs and can be achieved as they progress through the qualifications.
- promotes self-directed learning through the clarity and transparency of the standards to be achieved.
- makes the qualifications accessible to a wider range of students, including part-time and adult students.

In developing these qualifications, we have collaborated with employers to ensure that the qualifications meet the current and emerging needs of industry. We have also worked with colleges and training providers to ensure that the qualifications meet their needs and those of their students.

We are providing a range of support to ensure that students and their tutors have the best possible experience during their course. Further information is provided on the qualification pages of our website.

A word to students

These qualifications will require commitment and hard work. You will have to complete the learning for the required range of units, be organised and complete your assessments, which may include practical work-based activities, projects, and vocational assignments. But you can feel proud to achieve a BTEC Level 3 Technical qualification as you can be confident in your readiness to advance your career in your chosen occupation.

Good luck, and we hope you enjoy your course.
# Contents

1. **Introducing the qualification**  
   What are Level 3 Technical Qualifications?  
   Qualification purpose  
   Employer engagement and validation  
   Progression opportunities

2. **Qualification summary and key information**

3. **Qualification structure**  
   Pearson BTEC Level 3 Technical Occupational Entry for Cyber Security Technician (Diploma)

4. **Assessment requirements**  
   Language of assessment  
   Internal assessment  
   Assessment of competency-based units

5. **Centre recognition and approval**  
   Approvals agreement  
   Centre resource requirements

6. **Access to qualifications**  
   Access to qualifications for students with disabilities or specific needs.  
   Reasonable adjustments and special consideration

7. **Recognising prior learning and achievement**

8. **Quality assurance of centres**

9. **Units**

10. **Appeals**

11. **Malpractice**  
    Dealing with malpractice in assessment  
    Student malpractice
12 Further information and publications
Publisher information

12 Glossary
Part A – General terminology used in specification
Part B – Terms used in knowledge and understanding criteria
1 Introducing the qualification

What are Level 3 Technical Qualifications?

Level 3 Technical Qualifications are qualifications that are at level 3 on the Regulated Qualifications Framework (RQF) and are designed to deliver the skills needed to enter or progress in the workplace. They can be delivered through a combination of classroom and work-based learning and assessment.

These qualifications are based on occupational standards designed by employers and published by the Institute for Apprenticeships and Technical Education (IfATE), who also approve the qualifications. IFATE has specified different categories under which Level 3 Technical Qualifications can be approved based on their scope and purpose. Detailed information about these categories can be found on IFATE's website.

Qualification purpose

Pearson BTEC Level 3 Technical Occupational Entry for Cyber Security Technician (Diploma) enables students to develop a purposeful combination of knowledge, skills, and behaviours to enter employment as a cyber security technician and provides a strong foundation for them to achieve full occupational competence with further training and development in the workplace.

The qualification which is mapped to the Cyber Security Technician occupational standard, is designed to meet the needs of adult students (19+) and provides a clear line of sight to employment in an occupation that is recognised and demanded by employers.

The qualification aims to:

- develop students' ability and confidence to apply the knowledge, skills and behaviours when carrying out the occupational duties and functions of a cyber security technician and meet entry level competence.
- develop transferable skills and professional behaviours such as managing own time to meet deadlines, managing stakeholder expectations, having a structured approach to prioritising tasks, and reviewing own development needs to keep up to date with evolution in technologies, trends and innovation that are essential to personal effectiveness in a cyber security role.
- develop knowledge and understanding of best practices relating to cyber security compliance and compliance monitoring, cyber security audit requirements, procedures and plans, importance of maintaining privacy and confidentiality of information and the impact of a poor security culture that are important for regulatory compliance and meeting professional requirements in the cyber security sector.
• provide opportunities for students to achieve a nationally recognised occupational qualification to support them in taking the next step in their career journey.
• provide employers with reliable evidence of students' attainment against the cyber technician occupational standard and their readiness to enter employment in this sector.

The qualification can be taken on a part time or full-time basis to meet the needs of adult students.

**Employer engagement and validation**

In developing the Pearson BTEC Level 3 Technical Occupational Entry for Cyber Technician (Diploma), we have worked closely with a dedicated panel of cyber security employers from a range of different types of organisations, who have:

• validated the demand for the qualification and confirmed that it is occupationally relevant and meets the current and emerging needs of industry.
• confirmed that students will have an appropriate combination of knowledge, skills, and behaviours relevant to the occupational standard that attests to their readiness to enter into employment in the related occupation.

**Progression opportunities**

Students who achieve the Pearson BTEC Level 3 Technical Occupational Entry for Cyber Security Technician (Diploma) can progress to roles such as cyber security technologist or cyber security engineer.
## Qualification summary and key information

<table>
<thead>
<tr>
<th>Qualification title</th>
<th>Pearson BTEC Level 3 Technical Occupational Entry for Cyber Security Technician (Diploma)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification Number (QN)</td>
<td>XXX/XXX/X</td>
</tr>
<tr>
<td>Regulation start date</td>
<td>XX/XX/XXXX</td>
</tr>
<tr>
<td>Operational start date</td>
<td>01/09/2025</td>
</tr>
<tr>
<td>Approved age ranges</td>
<td>19+</td>
</tr>
<tr>
<td>Total qualification time (TQT)</td>
<td>383</td>
</tr>
<tr>
<td>Guided learning hours (GLH)</td>
<td>295</td>
</tr>
<tr>
<td>Assessment</td>
<td>Internal assessment.</td>
</tr>
<tr>
<td>Grading information</td>
<td>The units within the qualification are graded Pass/Fail. To achieve a Pass, students must achieve a Pass in all three units.</td>
</tr>
<tr>
<td>Entry requirements</td>
<td>No prior knowledge, understanding, skills or qualifications are required before students register for this qualification.</td>
</tr>
<tr>
<td>Funding</td>
<td>This qualification is eligible for 19+ funding as a Technical Occupational Entry qualification. Information about funding can be found on the Find a learning aim database.</td>
</tr>
</tbody>
</table>
# Qualification structure

## Pearson BTEC Level 3 Technical Occupational Entry for Cyber Security Technician (Diploma)

The requirements outlined in the table below must be met for Pearson to award the qualification.

<table>
<thead>
<tr>
<th>Minimum number of units that must be achieved</th>
<th>3</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Unit number</th>
<th>Mandatory units</th>
<th>Level</th>
<th>Guided learning hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Technologies, Principles and Evolving Threats</td>
<td>3</td>
<td>85</td>
</tr>
<tr>
<td>2</td>
<td>Policies and Procedures in Cyber Security</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>3</td>
<td>Cryptography and Incident Management</td>
<td>3</td>
<td>160</td>
</tr>
</tbody>
</table>
## Assessment requirements

The table below gives a summary of the assessment methods used in the qualification.

<table>
<thead>
<tr>
<th>Units</th>
<th>Assessment methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>All units</td>
<td>Authorised Assignment Briefs are provided for centres to use or adapt. Centres are free to create their own assignment briefs.</td>
</tr>
</tbody>
</table>

### Language of assessment

Students must use English only during the assessment of this qualification.

A student taking the qualification(s) may be assessed in British Sign Language where it is permitted for the purpose of reasonable adjustment.

Further information on the use of language in qualifications is available in our *Use of languages in qualifications policy*, available on our website, qualifications.pearson.com.
Internal assessment

Internally assessed units are subject to standards verification. This means that centres set and mark the final summative assessment for each unit, using the examples and support that Pearson provides.

To pass each internally assessed unit, students must:

• achieve all the specified learning outcomes.
• satisfy all the assessment criteria by providing sufficient and valid evidence for each criterion.
• prove that the evidence is their own.

Centres must ensure:

• assessment is carried out by assessors with relevant expertise in both the occupational area and assessment. For the occupational area, this can be evidenced by a relevant qualification or current (within three years) occupational experience that is at an equivalent level or higher than this qualification. Assessment expertise can be evidenced by qualification in teaching or assessing and/or internal quality assurance or current (within three years) experience of assessing or internal verification.
• internal verification systems are in place to ensure the quality and authenticity of students' work, as well as the accuracy and consistency of assessment.

Students who do not successfully pass an assignment, are allowed to resubmit evidence for the assignment or to retake another assignment.

Assessment of competency-based units

To pass each unit, students must independently complete assignment(s) that show that the learning outcomes and assessment criteria for the unit have been met.

Format of assignments for competency-based units:

• all learning outcomes and assessment criteria must be covered.
• assignments can include both practical and written tasks.
• assignments are independently completed as a distinct activity after the required teaching has taken place.
• the brief is issued to students with a defined start date, a completion date, and clear requirements for the evidence they are required to produce.
• all or parts of units can be combined into a single assignment. Learning outcomes must not be split into more than one assignment.

Pearson has produced three Authorised Assignment Briefs (AABs) for this qualification, one for each of the three qualification units. The AABs cover all the assessment for that unit.
5 Centre recognition and approval

Centres must have approval prior to delivering or assessing any of the units in this qualification.

Centres that have not previously offered BTEC Technical qualifications need to apply for, and be granted, centre recognition as part of the process for approval to offer individual qualifications.

Guidance on seeking approval to deliver BTEC qualifications is given on our website.

Approvals agreement

All centres are required to enter into an approval agreement with Pearson, in which the head of centre or principal agrees to meet all the requirements of the qualification specification and to comply with the policies, procedures, codes of practice and regulations of Pearson and relevant regulatory bodies. If centres do not comply with the agreement, this could result in the suspension of certification or withdrawal of centre or qualification approval.

Centre resource requirements

As part of the approval process, centres must make sure that the resource requirements below are in place before offering the qualification:

- appropriate physical resources (for example IT, learning materials, teaching rooms) to support the delivery and assessment of the qualification.
- suitable staff for delivering and assessing the qualification (see Section 4 Assessment requirements)
- systems to ensure continuing professional development (CPD) for staff delivering and assessing the qualification.
- health and safety policies that relate to the use of equipment by students.
- internal verification systems and procedures (see Section 4 Assessment requirements)
- any unit-specific resources stated in individual units.
6 Access to qualifications

Access to qualifications for students with disabilities or specific needs.

Equality and fairness are central to our work. Our *Equality, diversity and inclusion policy* requires all students to have equal opportunity to access our qualifications and assessments, and that our qualifications are awarded in a way that is fair to every student.

We are committed to making sure that:

- students with a protected characteristic (as defined by the Equality Act 2010) are not, when they are taking one of our qualifications, disadvantaged in comparison to students who do not share that characteristic.
- all students achieve the recognition they deserve from their qualification and that this achievement can be compared fairly to the achievement of their peers.

For students with disabilities and specific needs, the assessment of their potential to achieve the qualification must identify, where appropriate, the support that will be made available to them during delivery and assessment of the qualification.

Centres must deliver the qualification in accordance with current equality legislation. For full details of the Equality Act 2010, please visit [www.legislation.gov.uk](http://www.legislation.gov.uk)

Reasonable adjustments and special consideration

Centres are permitted to make adjustments to assessment to take account of the needs of individual students. Any reasonable adjustment must reflect the normal learning or working practice of a student in a centre or a student working in the occupational area.

Centres cannot apply their own special consideration – applications for special consideration must be made to Pearson and can be made on a case-by-case basis only.

Centres must follow the guidance in the Pearson document *Guidance for reasonable adjustments and special consideration in vocational internally assessed units.*
7 Recognising prior learning and achievement

Recognition of Prior Learning (RPL) considers whether a student can demonstrate that they can meet the assessment requirements for a unit through knowledge, understanding or skills they already possess and so do not need to develop through a course of learning.

Pearson encourages centres to recognise students' previous achievements and experiences in and outside the workplace, as well as in the classroom. RPL provides a route for the recognition of the achievements resulting from continuous learning.

RPL enables recognition of achievement from a range of activities using any valid assessment methodology. If the assessment requirements of a given unit or qualification have been met, the use of RPL is acceptable for accrediting a unit, units, or a whole qualification. Evidence of learning must be sufficient, reliable, and valid.

Further guidance is available in our policy document Recognition of prior learning policy and process, available on our website.
8 Quality assurance of centres

For the qualification in this specification, the Pearson quality assurance model will consist of the following processes.

Centres will receive at least one visit from our Standards Verifier, followed by ongoing support and development. This may result in more visits or remote support, as required to complete standards verification. The exact frequency and duration of Standards Verifier visits/remote sampling will reflect the level of risk associated with a programme, taking account of the:

- number of assessment sites
- number and throughput of students
- number and turnover of assessors
- number and turnover of internal verifiers
- amount of previous experience of delivery.

Following registration, centres will be given further quality assurance and sampling guidance.

For further details, please see the work-based learning quality assurance handbooks, available in the support section of our website:

- Pearson Work-based Learning Centre Guide to Quality Assurance
9 Units

The units that form the assessment for the qualification can be found in the Unit Specification.

For explanation of the terms within the units, please refer to Section 13 Glossary.

It is compulsory for students to meet the learning outcomes and the assessment criteria to achieve a Pass. Content is compulsory unless it is provided as an example and is therefore marked ‘e.g.’. All compulsory content must be delivered, but assessments may not cover all content.

Where legislation is included in delivery and assessment, centres must ensure that it is current and up to date.
10 Appeals

Centres must have a policy for dealing with appeals from students. Appeals may relate to assessment decisions being incorrect or assessment not being conducted fairly. The first step in such a policy is a consideration of the evidence by a Lead Internal Verifier or other member of the programme team. The assessment plan should allow time for potential appeals after students have been given assessment decisions.

Centres must document all students’ appeals and their resolutions. Further information on the appeals process can be found in the document *Internal assessment in vocational qualifications: Reviews and appeals policy*, available on our website.
11 Malpractice

Dealing with malpractice in assessment

Malpractice refers to acts that undermine the integrity and validity of assessment, the certification of qualifications and/or may damage the authority of those responsible for delivering the assessment and certification.

Pearson does not tolerate actual or attempted actions of malpractice by students, centre staff or centres in connection with Pearson qualifications. Pearson may impose penalties and/or sanctions on students, centre staff or centres where malpractice or attempted malpractice has been proven.

Malpractice may occur or be suspected in relation to any unit or type of assessment within a qualification. For further details on malpractice and advice on preventing malpractice by students, please see Pearson's Centre Guidance: Dealing with Malpractice available on our website.

Centres are required to take steps to prevent malpractice and to investigate instances of suspected malpractice. Students must be given information that explains what malpractice is for internal assessment and how suspected incidents will be dealt with by the centre. The Centre Guidance: Dealing with Malpractice document gives full information on the actions we expect you to take.

Pearson may conduct investigations if we believe a centre is failing to conduct internal assessment according to our policies. The above document gives further information and examples. It details the penalties and sanctions that may be imposed.

In the interests of students and centre staff, centres need to respond effectively and openly to all requests relating to an investigation into an incident of suspected malpractice.

Student malpractice

The head of centre is required to report incidents of suspected student malpractice that occur during Pearson qualifications. We ask centres to complete JCQ Form M1 (www.jcq.org.uk/malpractice) and email it with any accompanying documents (signed statements from the student, invigilator, copies of evidence, etc) to the Investigations Processing team at candidatemalpractice@pearson.com. The responsibility for determining appropriate sanctions or penalties to be imposed on students lies with Pearson.

Students must be informed at the earliest opportunity of the specific allegation and the centre's malpractice policy, including the right of appeal. Students found guilty of malpractice may be disqualified from the qualification for which they have been entered with Pearson.

Failure to report malpractice constitutes staff or centre malpractice.
Teacher/centre malpractice

The head of centre is required to inform Pearson's Investigations team of any incident of suspected malpractice (which includes maladministration) by centre staff before any investigation is undertaken. The head of centre is requested to inform the Investigations team by submitting a JCQ M2 Form (downloadable from www.jcq.org.uk/malpractice) with supporting documentation to pqsmalpractice@pearson.com. Where Pearson receives allegations of malpractice from other sources (for example Pearson staff, anonymous informants), the Investigations team will conduct the investigation directly or may ask the head of centre to assist.

Pearson reserves the right in cases of suspected malpractice to withhold the issuing of results/certificates while an investigation is in progress. Depending on the outcome of the investigation, results and/or certificates may not be released, or they may be withheld.

You should be aware that Pearson may need to suspend certification when undertaking investigations, audits, and quality assurances processes. You will be notified within a reasonable period of time if this occurs.

Sanctions and appeals

Where malpractice is proven, we may impose sanctions or penalties, such as:

- mark reduction for affected external assessments.
- disqualification from the qualification
- debarment from registration for Pearson qualifications for a period of time.

If we are concerned about your centre’s quality procedures, we may impose sanctions such as:

- requiring centres to create an improvement action plan.
- requiring staff members to receive further training.
- placing temporary suspensions on certification of students
- placing temporary suspensions on registration of students
- debarring staff members or the centre from delivering Pearson qualifications
- suspending or withdrawing centre approval status.

The centre will be notified if any of these apply.

Pearson has established procedures for considering appeals against penalties and sanctions arising from malpractice. Appeals against a decision made by Pearson will normally be accepted only from the head of centre (on behalf of students and/or members or staff) and from individual members (in respect of a decision taken against them personally). Further information on appeals can be found in the JCQ Appeals booklet (www.jcq.org.uk/exams-office/appeals).
12 Further information and publications


- Books, software and online resources for UK schools and colleges: www.pearsonschoolsandfecolettes.co.uk.

- Our publications catalogue lists all the material available to support our qualifications. To access the catalogue and order publications, please visit our website.

All centres offering external assessments must comply with the Joint Council for Qualifications (JCQ) document Instructions for conducting examinations.

Further documents that support the information in this specification:

- Access arrangements and reasonable adjustments (JCQ)
- A guide to the special consideration process (JCQ)
- Collaborative and consortium arrangements for the delivery of vocational qualifications policy (Pearson)
- UK information manual (updated annually and available in hard copy) or Entries and information manual (available online) (Pearson).
- Distance learning and assessment policy (Pearson)

Publisher information

Any publisher can seek endorsement for their resources and, if they are successful, we will list their BTEC resources on our website.
## Glossary

### Part A – General terminology used in specification

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level</td>
<td>Units and qualifications have a level assigned to them. The level assigned is informed by the level descriptors defined by Ofqual, the qualifications regulator.</td>
</tr>
<tr>
<td>Guided learning hours (GLH)</td>
<td>This indicates the number of hours of activities that directly or immediately involve tutors and assessors in teaching, supervising, and invigilating students, for example lectures, tutorials, online instruction, and supervised study. Units may vary in size.</td>
</tr>
<tr>
<td>Total qualification time (TQT)</td>
<td>This indicates the total number of hours that a typical student will take to complete the qualification. This is in terms of both guided learning hours but also unguided learning, for example private study, time spent in the workplace to master skills.</td>
</tr>
<tr>
<td>Learning outcomes</td>
<td>The learning outcomes of a unit set out what a student knows, understands or is able to do as the result of a process of learning.</td>
</tr>
<tr>
<td>Assessment criteria</td>
<td>The assessment criteria specify the standard the student is required to meet to achieve a learning outcome.</td>
</tr>
<tr>
<td>Unit content</td>
<td>This section sets out the required teaching content of the unit and specifies the knowledge, skills and understanding required for achievement of the unit. It enables centres to design and deliver a programme of learning that will enable students to achieve each learning outcome and to meet the standard determined by the assessment criteria.</td>
</tr>
<tr>
<td>Summative assessment</td>
<td>Assessment that takes place after the programme of learning has taken place.</td>
</tr>
<tr>
<td>Valid assessment</td>
<td>The assessment assesses the skills or knowledge/understanding in the most sensible, direct way to measure what it is intended to measure.</td>
</tr>
<tr>
<td>Reliable assessment</td>
<td>The assessment is consistent, and the agreed approach delivers the correct results on different days for the same students and different cohorts of students.</td>
</tr>
</tbody>
</table>
### Part B – Terms used in knowledge and understanding criteria

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyse</td>
<td>Examine methodically and in detail, typically in order to interpret.</td>
</tr>
<tr>
<td>Assess</td>
<td>Consideration of all factors or events that apply, to identify those which are the most important or relevant and make a judgement.</td>
</tr>
<tr>
<td>Compare</td>
<td>Identify the main factors relating to two or more items/situations, explaining the similarities and differences or advantages and disadvantages, and in some cases say which is best and why.</td>
</tr>
<tr>
<td>Describe</td>
<td>Give a clear account in their own words, including all the relevant information (e.g. qualities, characteristics, or events, etc.). Description shows recall and in some cases application.</td>
</tr>
<tr>
<td>Detailed</td>
<td>Having additional facts or information beyond a simple response.</td>
</tr>
<tr>
<td>Evaluate</td>
<td>Bring together all information and review it to form a supported conclusion, drawing on evidence, including strengths, weaknesses, alternative actions, relevant data, or information.</td>
</tr>
<tr>
<td>Explain</td>
<td>Provide details and give reasons and/or evidence to support an opinion, view, or argument.</td>
</tr>
<tr>
<td>OR</td>
<td>Provide details and give relevant examples to clarify and extend a point. This would usually be in the context of students showing their understanding of a technical concept or principle.</td>
</tr>
</tbody>
</table>