# Pearson Level 3 Alternative Academic Qualification
# BTEC National in Information Technology (Extended Certificate)

This course is for learners with an interest in the Digital sector and aiming to progress to higher education as a route to graduate level employment. It is suitable for learners looking to develop their applied knowledge and skills in Information Technology as part of their programme of study.

Learners develop the ability to apply digital concepts to different sectors which is beneficial to the analytical approach included in many degrees. The ability to take personal responsibility and written communication skills will develop students' ability to manage their own work and independently create extended writing tasks which is a good foundation for academic success.

| Year 12 | Focus / Topic | Knowledge & Skills | | Assessment |
|---|---|---|---|---|
| Autumn 1 | Unit 01: Information Technology Systems | Explore the concepts and implications of the use of, and relationships among devices that form IT systems<br>A1. Functions and use of digital devices, and the notation used to represent the design of IT systems<br>A2. Peripheral devices and media<br>A3. Computer software in an IT system<br>A4. Choosing IT systems<br>A5. Emerging technologies | | • End of learning aim test.<br>• Book reviews of class and home learning.<br>• Content will form part of November Assessment Week (whole school) |
| | Unit 03: Website Development | Understand how the principles of website development are used to create effective websites<br>A1. Purpose and principles of websites<br>A2. Planning a website in response to a client brief | | |
| Autumn 2 | Unit 01: Information Technology Systems | Transmitting data<br>B1. Connectivity<br>B2. Networks<br>B3. Issues relating to transmission of data | Operating online<br>C1. Online system<br>C2. Online communities | • End of learning aim test.<br>• Book reviews of class and home learning. |
| | Unit 03: Website Development | Explore website design skills and techniques to meet client requirements<br>B1. Website design<br>B2. Asset management techniques | | • End of learning aim test.<br>• Book reviews of class and home learning. |

Information prepared by C. Tsangari, Subject Leader for Computing & IT

| Year 12 | Focus / Topic | Knowledge & Skills | | Assessment |
|---|---|---|---|---|
| Spring 1 | Unit 01: Information Technology Systems | Protecting data and information<br>D1. Threats to data, information and systems<br>D2. Protecting data | Impact of IT systems<br>E1. Online services<br>E2. Using and manipulating data | March Assessment Week (whole school); end of learning aim tests. |
| | Unit 03: Website Development | Develop a website to meet client requirements<br>C1. Common tools and techniques to produce a website<br>C2. Website development process | | End of learning aim tests. |
| Spring 2 | Unit 01: Information Technology Systems | <u>Issues</u><br>F1. Moral and ethical issues<br>F2. Legal issues | | |
| | Unit 03: Website Development | Develop a website to meet client requirements<br>C1. Common tools and techniques to produce a website<br>C2. Website development process<br>C3. Testing | | |
| Summer 1 | Unit 01: Information Technology Systems | Consolidation and past exam paper practice | | Externally assessed exam<br>● Fri 15 May 2026 (PM). |
| | Unit 03: Website Development | Sample assessment material (dry run) | | Internal formative assessment |
| Summer 2 | Unit 03: Website Development | Pearson Set Assignment Brief (15 hours) | | Internal assessment<br>● Submission due Jul. |

| **Year 13**<br>2026/27 | **Focus / Topic** | **Knowledge & Skills**<br>Provisional plan subject to refinements |
|---|---|---|
| Autumn 1 | Unit 2: Cyber Security and Incident Management | Cyber security threats, system vulnerabilities and security protection methods<br>A1. Cyber security threats<br>A2. System vulnerabilities<br>A3. Legal responsibilities<br>A4. Software and hardware security measures<br><br>Use of networking architectures and principles for security<br>B1. Network types<br>B2. Network components<br>B3. Networking infrastructure services and resources |
| | Unit 4: Relational Database Development | Understand how the principles of relational database models, data storage and normalisation are used to create effective relational database solutions<br>A1. Relational database management systems<br>A2. Manipulating data structures and data in relational databases<br>A3. Normalisation<br>A4. Preliminary scoping of a relational database solution in response to a client brief |
| Spring | Unit 2: Cyber Security and Incident Management | Cyber security documentation<br>C1. Internal policies<br><br>Forensic procedures<br>D1. Forensic collection of evidence<br>D2. Systematic forensic analysis of a suspect system |

| **Year 13**<br>2026/27 | **Focus / Topic** | **Knowledge & Skills**<br>Provisional plan subject to refinements | |
|---|---|---|---|
| | Unit 4: Relational Database Development | Design a relational database solution to meet client requirements<br>B1. Relational database design techniques and processes<br>B2. Design documentation<br>B3. Reviewing and refining designs<br><br>Develop a relational database solution to meet client requirements<br>C1. Producing a database solution<br>C2. Testing the database solution<br>C3. Reviewing the database solution<br>C4. Optimising the database solution | |
| Summer | Unit 2: Cyber Security and Incident Management | Revision | Externally assessed exam<br>May 2027 |
| | Unit 4: Relational Database Development | Pearson Set Assignment Brief (15 hours) | Internal assessment<br>● Submission due Jul. |

*The course ends mid-May.*