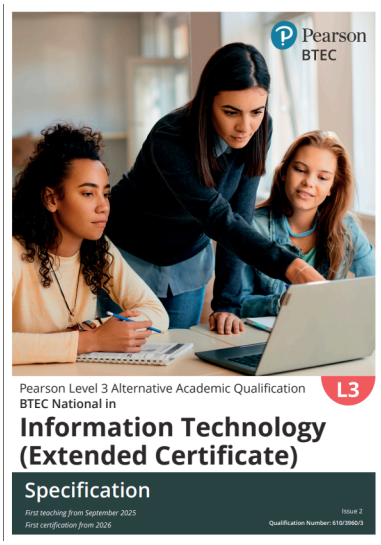
Year 12 Course Induction Booklet 2026-27



BTEC Level 3 AAQ Extended Certificate in Information Technology

Name: Tutor Group

PERSONAL DETAILS SHEET

Please complete and hand to your Information Technology Teacher

NAME	
FORM TUTOR	
ADDRESS	
EMAIL ADDRESS	
EMERGENCY CONTACT NAME AND NUMBER	
MOBILE NUMBER	
WHY DID YOU CHOOSE INFORMATION TECHNOLOGY?	

TIMETABLE WEEK 1

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
P1					
P2					
BREAK	BREAK	BREAK	BREAK	BREAK	BREAK
P3					
P4					
LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
P5					

P6					

TIMETABLE WEEK 2

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
P1					
P2					
BREAK	BREAK	BREAK	BREAK	BREAK	BREAK
P3					
P4					
LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
P5					
P6					

BTEC Nationals LEVEL 3 AAQ in Information Technology Agreement

Requirements

All students will be expected to get to all lessons on time. In addition to this, you will be expected to complete other work in your own time. You will be required to hand in assignments no later than the end of day on the deadline date. You will also be expected to take full participation in practical group work and theory debate.

Class work

Lesson time will focus on covering the key aspects of each topic along with a couple of worked examples. There may be some class time dedicated to working through exercises, but it is likely that you will have to complete the exercises at home or in your own time. The theory unit of work will be focused on theory and research should be undertaken to fully participate in these sessions.

Homework

You will be given assignments to complete in individual learning time, and revision tasks. These will be expected to be completed on time and assessed formally to enable effect revision and learning to take place.

Monitoring

You will be regularly assessed in the form of learning conversations, past papers, research assignments, critical debates, group and peer work, case studies, presentations, textual analyses etc. Students will be assessed in accordance with BTEC's marking criteria and assessment objectives. External exam will be in May 2027 (externally assessed 2 hour exam) 90 marks

Your target

We want you to achieve the highest possible grade and we will target you a grade that you can achieve, providing you follow the course requirements. This target grade will be based on your GCSE grade and our experience. We will discuss this grade with you and alter it overtime if necessary

Aims of the Computing Department

- Every student who is taught by the ICT Department is given the same learning opportunities as all other students.
- Students are to be supported as best as can be with their learning development as ICT Students.
- Students are to be given a wide range of learning resources through booklets, ICT provision, and group, paired and individual tasks that enable them to achieve to the highest level of their ability and enjoy their learning.
- To provide extra provision outside of lesson time for every student to help develop their work to the best level that is possible.

Questions

If you have any questions or problems please contact;
Mr. Heskey – mr.heskey@holyfamilycatholicschool.co.uk

Or the Sixth Form Team

Absences

If you will not be attending college you must contact:

Sixth Form Admin on **0208 509 4268** by **8.40am** on the day of absence.

SPECIFICATION OVERVIEW

Introduction

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

Qualification title	Size and structure	Summary purpose
Pearson Level 3 Alternative Academic Qualification BTEC National in Information Technology (Extended Certificate)	360 GLH (468 TQT) Equivalent in size to one A Level. 4 units of which 4 are mandatory and 2 are external. Mandatory content (100%). External assessment (66.6%).	The Extended Certificate is for students who are interested in learning about the Information Technology sector alongside other fields of study, with a view to progressing to a wide range of higher education courses, not necessarily in Information Technology-related subjects. It is designed to be taken as part of a programme of study that includes A Levels.

Synoptic assessment

Synoptic assessment requires students to demonstrate that they can identify and use effectively, in an integrated way, an appropriate selection of skills, techniques, concepts, theories and knowledge from across the whole sector as relevant to a key task. Synoptic links between units are flagged within the units. Please refer to *Unit 1: Information Technology Systems* and *Unit 3: Website Development* for further details.

Language of assessment

Assessment of the internal and external units for these qualifications will be available in English. All student work must be in English. A student taking the qualifications may be assessed in British or Irish Sign Language where it is permitted for the purpose of reasonable adjustment.

Grading for units and qualifications

Achievement in the qualification requires a demonstration of depth of study in each unit, assured acquisition of a range of practical skills required for progression to higher education, and successful development of transferable skills. Students achieving a qualification will have completed all units.

Units are assessed using a grading scale of Distinction (D), Merit (M), Pass (P), Near Pass (N) and Unclassified (U). The grade of Near Pass is used for externally assessed units only. All mandatory and optional units contribute proportionately to the overall qualification grade, for example a unit of 120 GLH will contribute double that of a 60 GLH unit.

BTEC National qualifications are graded using a scale of P to D*, **or** PP to D*D*, **or** PPP to D*D*D* depending on the size of the qualification. Please see *Section 6* for more details. The relationship between qualification grading scales and unit grades will be subject to regular review as part of Pearson's standards monitoring processes on the basis of student performance and in consultation with key users of the qualification.

How you can achieve a PASS, MERIT, and DISTINCTION

A summative unit grade is awarded after all opportunities for achievement are given.

A learner must achieve all the **assessment criteria for that grade.**
Therefore:
● to achieve a Level 3 Distinction a learner must have satisfied **all the Distinction** criteria in a way that encompasses the Level 3 Pass, Merit and Distinction criteria, providing evidence of performance of outstanding depth, quality or application

● to achieve a Level 3 Merit a learner must have satisfied **all the Merit** criteria in a way that encompasses all the Level 3 Pass and Merit criteria, providing performance of enhanced depth or quality

● to achieve a Level 3 Pass a learner must have satisfied all the **Level 3 Pass criteria,** showing breadth of coverage of the required unit content and having relevant knowledge, understanding and skills

A learner who does not achieve all the assessment criteria at level 3 has not passed the unit and should be given a grade of U (Unclassified).
A learner must achieve all the defined learning aims to pass the internally assessed units. There is no compensation within the unit

Unit outlines

Unit 1: Information Technology Systems

Information technology (IT) systems have a significant role in the world around us and play a part in almost everything we do. Having a sound understanding of how to effectively select and use appropriate IT systems will benefit you personally and professionally. You will explore the relationships between the hardware and software that form an IT system, and the way that systems work individually and together, as well as the relationship between the user and the system. You will examine issues related to the use of IT systems and the impact that they have on organisations and individuals. In this unit you will draw on your learning from across your programme to complete assessment tasks. This unit will give you a fundamental and synoptic understanding of all areas of IT, supporting your progression to an IT-related higher education course.
Summary of assessment

This unit is externally assessed through a written examination set and marked by Pearson. The examination is two hours in length. Learners will be assessed on their understanding of computer systems and the implications of their use in personal and professional situations. The number of marks for the unit is 90. The assessment availability is January and May/June each year. The first assessment availability is May/June 2026. Sample assessment materials will be available to help centres prepare learners for assessment.

Assessment outcome

AO1 Demonstrate knowledge and understanding of information technology systems, terminology, concepts and processes.
AO2 Apply knowledge and understanding of information technology systems, terminology, concepts and processes.
AO3 Analyse and evaluate the factors and implications of information technology systems.

Essential content of this unit:

A. Digital devices in IT systems
B. Transmitting data
C. Operating online
D. Protecting data and information
E. Impact of IT systems
F. Issues

Unit 2: Cyber Security and Incident Management

Unit introduction

Our increasing reliance on computer systems and the data they contain makes us vulnerable to attacks from cyber criminals and to the loss of these systems if there is an accident or a natural disaster. As Information Technology (IT) system security is improved, more sophisticated methods of attack are developed, and it is important that organisations have robust plans in place to deal with a cyber security incident before it occurs. All IT professionals require a good understanding of the current threats to systems, how to apply appropriate and effective protection methods and how to manage a cyber security incident.

In this unit, you will examine the many types of cyber security attacks, the vulnerabilities in networked systems and the techniques that can be used to defend an organisation's networked systems. You will examine scenarios and explain appropriate protection measures for networked systems. You will also

look at the forensic methods used to investigate cyber security incidents and analyse the suitability of those methods for a given scenario.

As IT systems evolve, there is an increasing need for IT professionals to protect networked systems and the information they contain, while providing enhanced features and benefits for organisations, customers and individuals. This unit will help prepare you for IT courses in higher education.

Summary of assessment

The unit will be assessed through one examination of 90 marks lasting 2 hours 15 minutes. Students will be assessed through a number of short- and long-answer questions. Students will need to explore and relate to contexts and data presented. The questions will assess understanding of cyber security threats, the methods used to counter them and the forensics used to investigate an attack. The assessment availability is twice a year in January and May/June. The first assessment availability is May/June 2026. Sample assessment materials will be available to help centres prepare students for assessment.

Assessment outcomes

AO1 Demonstrate knowledge and understanding of cyber security terms, security threats, system vulnerabilities and security protection methods, forensic procedures and implications resulting from threats.

AO2 Apply knowledge and understanding to security threats, system vulnerabilities and security protection methods, forensic procedures and implications by selecting appropriate security tools and methods.

AO3 Analyse and evaluate security threats, system vulnerabilities and security protection methods, forensic procedures and implications for cyber security scenarios.

Essential content of this unit:

A. Cyber security threats
B. Use of networking architectures
C. Cyber security documentation
D. Forensic procedures

Unit 3: Website Development

Unit introduction

Website development skills are more essential than ever if you want to be noticed, reach your goals and generate interest in today's sophisticated, competitive and dynamic online environment. Modern lifestyles are digitally driven and as a website

developer you must combine different tools and techniques to capture and maintain the user's interest. Website developers need to understand and acquire the necessary skills to find solutions to a variety of scenarios and problems. In this unit, you will explore how existing websites use the principles of website development to appeal to their intended audience and meet their specific purpose. You will plan, design and develop a website in response to a client brief by applying website development tools, techniques and processes. You will also reflect on the usability, functionality and fitness for the purpose of the website using a testing and review process. Many software developers, database experts and systems managers need web-client development skills as an integral part of their overall portfolio of expertise. This unit will benefit you to progress on to information technology courses in higher education.

Learning aims

In this unit you will:
A Understand how the principles of website development are used to create effective websites.
B Explore website design skills and techniques to meet client requirements.
C Develop a website to meet client requirements

Unit 4: Relational Database Development
Unit introduction

Databases underpin many processes in numerous aspects of modern society. From stock control systems for large multi-outlet online retailers to the smallest niche internet forums, databases are a repository of information that make up the world wide web as we know it. Database developers understand and use practical skills utilising technologies that will enable them to design and develop databases that can be used by many different connecting systems.
In this unit, you will examine the structure of data and how an efficient data design follows through into an effective, useful database. You will investigate database management systems (DBMS) and apply practical skills in designing and developing a database within a given DBMS.
This unit will provide you with the knowledge, and skills needed for progression on to higher education programmes in Information Technology.

Learning aims

In this unit you will:
A Understand how the principles of relational database models, data storage and normalisation are used to create effective relational database solutions
B Design a relational database solution to meet client's requirements.
C Develop a relational database solution to meet client's requirements

SOW Schedule
Year 1

Autumn	1st Half Term
7 Weeks **Unit 1 & 3**	Unit 1: Information Technology Systems Learning Aims: A: Explore the concepts and implications of the use of, and relationships among devices that form IT systems B: Transmitting data C: Operating online Topics: A1 Functions and use of digital devices, and the notation used to represent the design of IT systems A2 Peripheral devices and media A3 Computer software in an IT system A4 Choosing IT systems A5 Emerging technologies B1 Connectivity B2 Networks B3 Issues relating to transmission of data C1 Online systems C2 Online communities Unit 3: Website Development Learning aim A: Understand how the principles of website development are used to create effective websites Assignments: Explore the purposes and principles of website development
	2nd Half Term
7 Weeks **Unit 1 & 3**	Unit 1: Information Technology Systems Learning Aims: A: Explore the concepts and implications of the use of, and relationships among devices that form IT systems B: Transmitting data C: Operating online Topics:

	A1 Functions and use of digital devices, and the notation used to represent the design of IT systems A2 Peripheral devices and media A3 Computer software in an IT system A4 Choosing IT systems A5 Emerging technologies B1 Connectivity B2 Networks B3 Issues relating to transmission of data C1 Online systems C2 Online communities Unit 3: Website Development Learning aim A: Understand how the principles of website development are used to create effective websites Assignments: Explore the purposes and principles of website development

Spring	1st Half Term
6 Weeks **Unit 1 & 3**	D: Protecting data and information E: Impact of using IT systems F: Issues Topics: D1 Threats to data, information, and systems D2 Protecting data E1 Online services E2 Using and manipulating data F1 Moral and ethical issues F2 Legal issues Unit 3: Learning aim B & C: Understand how the principles of website development are used to create

	effective websites Assignments: Use web design skills and techniques to plan a website in response to a client brief Develop a website in response to a client brief
	2nd Half Term
6 Weeks **Unit 1 & 3**	D: Protecting data and information E: Impact of using IT systems F: Issues Topics: D1 Threats to data, information, and systems D2 Protecting data E1 Online services E2 Using and manipulating data F1 Moral and ethical issues F2 Legal issues Unit 3: Learning aim B & C: Understand how the principles of website development are used to create effective websites Assignments: Use web design skills and techniques to plan a website in response to a client brief Develop a website in response to a client brief

Summer	1st Half Term
6 Weeks **Unit 1**	**Revision & Exam preparation** **Final unit 3 coursework Deadline: 15th May 2027**
	2nd Half Term
7 Weeks **Unit 2**	Unit 2: Cyber Security and Incident Management Learning Aims: A: Cyber security threats, system vulnerabilities and security protection methods Topics: A1 Cyber security threats A2 System vulnerabilities A3 Legal responsibilities A4 Software and hardware security measures

Year 2

Autumn	1st Half Term
7 Weeks **Unit 2**	Unit 2: Cyber Security and Incident Management Learning Aims: A: Cyber security threats, system vulnerabilities and security protection methods B: Use of networking architectures and principles for security C: Cyber security documentation

	D: Forensic procedures Topics: A1 Cyber security threats A2 System vulnerabilities A3 Legal responsibilities A4 Software and hardware security measures B1 Network types B2 Network components B3 Networking infrastructure services and resources C1 Internal policies D1 Forensic collection of evidence D2 Systematic forensic analysis of a suspect system
	2nd Half Term
7 Weeks **Unit 2**	Learning Aims: A: Cyber security threats, system vulnerabilities and security protection methods B: Use of networking architectures and principles for security C: Cyber security documentation D: Forensic procedures Topics: A1 Cyber security threats A2 System vulnerabilities A3 Legal responsibilities A4 Software and hardware security measures B1 Network types B2 Network components B3 Networking infrastructure services and resources C1 Internal policies D1 Forensic collection of evidence D2 Systematic forensic analysis of a suspect system **Revision & Exam preparation**

Spring	1st Half Term
6 Weeks **Unit 4**	Unit 4: Relational Database Development Learning aim A: Understand how the principles of relational database models, data storage and normalisation are used to create effective relational database solutions Assignments: Understand how the principles of relational database models, data storage and normalisation are used to create effective relational database solutions
	2nd Half Term
6 Weeks **Unit 4**	Unit 4: Relational Database Development Learning aim A: Understand how the principles of relational database models, data storage and normalisation are used to create effective relational database solutions Learning aim B: Design a relational database solution to meet client requirements [MY-TPR] Learning aim C: Develop a relational database solution to meet client requirements Assignments: Understand how the principles of relational database models, data storage and normalisation are used to create effective relational database solutions Design a relational database solution to meet client requirements Develop a relational database solution to meet client requirements

Summer	1st Half Term
6 Weeks **Unit 4**	Unit 4: Relational Database Development

	Learning aim A: Understand how the principles of relational database models, data storage and normalisation are used to create effective relational database solutions Learning aim B: Design a relational database solution to meet client requirements [MY-TPR] Learning aim C: Develop a relational database solution to meet client requirements Assignments: Understand how the principles of relational database models, data storage and normalisation are used to create effective relational database solutions Design a relational database solution to meet client requirements Develop a relational database solution to meet client requirements **Exam practice & revision for resit exam(s)**
	2nd Half Term
7 Weeks **Unit 4**	Unit 4: Relational Database Development Learning aim A: Understand how the principles of relational database models, data storage and normalisation are used to create effective relational database solutions Learning aim B: Design a relational database solution to meet client requirements [MY-TPR] Learning aim C: Develop a relational database solution to meet client requirements Assignments: Understand how the principles of relational database models, data storage and normalisation are used to create effective relational database solutions Design a relational database solution to meet client requirements Develop a relational database solution to meet client requirements **Exam practice & revision for resit exam(s)**

	Final unit 4 coursework Deadline: 15th May 2028

KEY DATES

Year 12

Year 12 Parents' Evening – TBC

Year group	Assessment cycle	Assessment to take place week beginning:
12	1	
12	2	
12	3	
12	4	
12	5	
12	6	

Example of Exam Paper Unit 1: Information Technology Systems

2 A company provides services to clients that include businesses and individuals.

The company has decided to move to bigger premises.

The company is concerned that during the move equipment is damaged and data is lost.

(a) State **two** impacts to the company if data is lost.

(2)

1 .....

.....

2 .....

.....

(b) The company should ensure they design the computer workspace to minimise health risks.

Explain **two** factors the company should consider when they design the computer workspace in the new premises to minimise health risks.

(4)

1 .....

.....

.....

.....

2 .....

.....

3 An online retail company sells clothing.

The retail company offers a 'click-and-collect' service.

Customers using the 'click-and-collect' service nominate a store to collect their purchases.

When customers place their online order, the stock availability in the warehouse is checked. Unavailable items cannot be ordered and the customer can select an alternative item.

Available items are despatched to the customer's nominated store.

Items not collected by the customer within 14 days are returned to the warehouse.

Emails are sent to the customer when:

(e) The retail company stores all data on a server-based local area network (LAN).

The retail company is considering using cloud computing for all its IT systems. They believe this will be cost-effective.

Evaluate the cost implications for the retail company of a move to cloud computing.

You should consider:

- Benefits
- Drawbacks.

(9)

(d) The manufacturing company is considering introducing an emerging technology to improve services.

Evaluate whether the company should be more concerned with either the impact on:

- the performance of their IT systems
- the use of IT systems by employees.

(12)

Task 1 – Exploring the World of IT

How does IT impact our everyday lives?

Complete the table below by identifying examples of modern technology and how they are used.

Technology	**Example**	**How does it help individuals or organisations?**
Cloud Computing		
Artificial Intelligence (AI)		
Communication Technology		
Cybersecurity		

Mobile Technology		

Task 2 – Become an IT Consultant

Scenario

A small business wants to improve the way it uses technology. They currently store files on one computer, communicate using paper documents, and have no cybersecurity protection.

Your job is to recommend improvements.

1. Identify two technologies the business could introduce.

Technology 1:

Technology 2:

2. Explain how each technology would improve the business.

Answer Box:

3. Identify one possible risk or problem of introducing new technology.

Answer Box:

Sentence Starters

- One technology the business could use is _____.
- This would improve the business because _____.
- A possible disadvantage is _____.

Task 3 – Design Your Future IT Career

Create an IT Career Profile

Choose an IT career that interests you and complete the profile.

Career Name

Answer:

Main Responsibilities

Answer:

Skills Needed

Answer:

Technology/Software Used

Answer:

Salary Range & Qualifications Needed

Answer:

Why does this career interest you?

Answer:

Challenge

Research a real company that employs people in this role and explain why they need IT professionals.

Answer:

Extension Challenge ⭐

How do you think this IT career will change in the future because of new technologies such as AI, automation, or cloud computing?

Answer:

Holy Family Catholic School and Sixth Form

Malpractice

This document is taken directly from the Edexcel website and gives information on malpractice for learners.

Attention all BTEC Students

Please be aware of the following information regarding malpractice

Attempting to or actually carrying out any malpractice activity is not permitted by the examination board. Below is a list of some instances of malpractice:

- Plagiarism by copying and passing off work as learners own

- Collusion by working collaboratively with other learners to produce work that is submitted as individual learners work

- Pretending to be someone else in order to produce the work for another or arranging to take another's place in an assessment

- Fabrication of results/evidence (for example when carrying out a survey)

- Failing to abide by the instructions or advice of an assessor

- Misuse of assessment and/or examination material

- Use of unauthorised material

- Obtaining, receiving, exchanging or passing on information which could be assessment related

- Behaving in such a way to undermine the integrity of any assessment

- The alteration of any results document, including certificates

- Cheating