

Subject: Information and Creative Technology

Level: BTEC First Award Level 2
(Equivalent to a GCSE)

Course Summary

The BTEC First in Information and Creative Technology has been designed for pupils who prefer a more vocational approach and is orientated towards learning by doing. It is designed to inspire and enthuse learners to become technology savvy – producers of technology products and systems and not just consumers. It gives learners the opportunity to gain a broad understanding and knowledge of the Information Technology sector and some aspects of the creative industries.

Course Structure

Unit 1: The Online World (compulsory core– External Assessment – Online Examination)

How do websites work? How do emails reach your computer? How does the use of computer applications affect your daily life? This unit provides an introduction to the modern online world.

Unit 2: A Digital Portfolio (compulsory core– Internal Assessment)

This unit is your chance to show off! A digital portfolio is an exciting onscreen way to showcase your achievements to potential employers or when applying for a course.

It is all about:

- the projects you have created and developed
- your use of communication and presentation skills
- your capabilities and potential.

Unit 3: Creating Digital Graphics (compulsory core– Internal Assessment)

You will see graphics at work whenever you surf websites, play computer games, go shopping or read a user manual. Graphics are used to communicate messages in every part of our lives, such as advertising, music, fashion, interior design and architecture. It is the job role of a graphic designer to create digital graphics, which bring colour, information and interest to our lives for a wide range of industries.

Unit 4: Website Development (compulsory core– Internal Assessment)

Have you ever viewed a website and wondered how it was created? Many different elements can be included in the website, such as text, graphics, animation, video and programs (client-side computer scripts). To be successful, a website must be visually interesting, while remaining

easy to use.

The assessment approach enables learners to receive feedback on their progress throughout the units as they provide evidence towards meeting the assessment criteria.

Grades available are Pass, Merit, Distinction and Distinction*.

(These options may change and are for guidance only)

Progression opportunities

The BTEC Level 2 First Award in Information and Creative Technology provides the skills, knowledge and understanding for level 2 learners to progress to:

- Level 3 qualifications, such as the BTEC Level 3 Nationals in IT or an IT/Creative Media apprenticeship.
- Academic qualifications, such as GCSE or GCE A Level in ICT or Computing.
- Employment within the information technology and/or areas within the creative industries, such as electronic publishing or multimedia production.

Entry requirements

- Pupils should have displayed an interest in and an aptitude for the subject at Key Stage 3.

Coleraine Grammar School - ICT Department

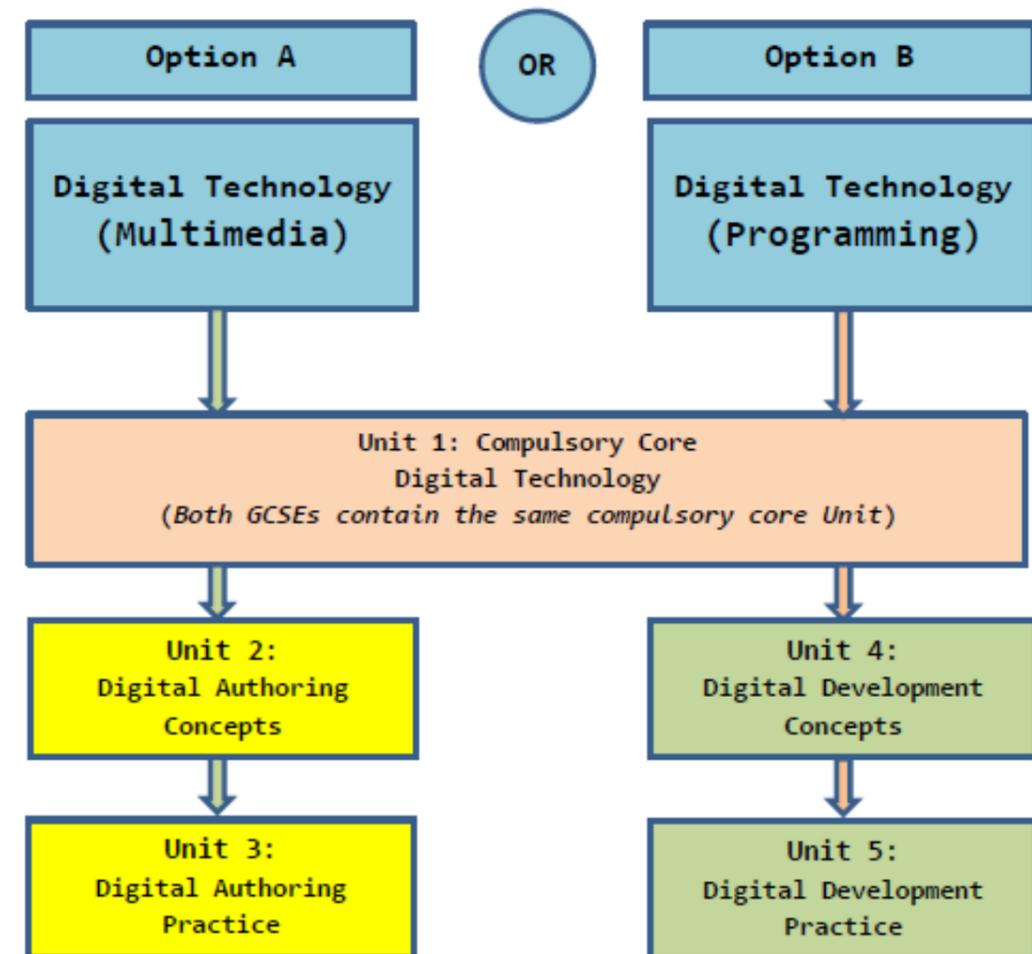
GCSE Subject Choices:

- 1) Digital Technology (Programming)
- 2) Digital Technology (Multimedia)
- 3) BTEC Information and Creative Technologies (Level 2)

GCSE Digital Technology replaces GCSE ICT

The changes in ICT at both GCSE and A Level reflect the continuing technological innovation within ICT and the need to ensure that pupils' skills are relevant in today's society.

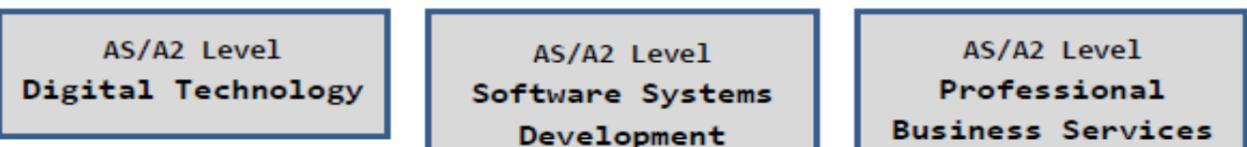
Two different strands of Digital Technology are offered.



Please note:

Pupils have to select the GCSE option at the beginning of the course.
Pupils cannot select both options.

A Levels / Progression Paths offered from studying GCSE Digital Technology



Subject: GCSE Digital Technology (Multimedia)

Level: GCSE

Course Summary

Digital Technology (**Multimedia**) is designed to help pupils acquire the knowledge and skills needed to become independent and discerning users of digital technology. Digital Technology/ICT underpins much of the infrastructure that supports our modern, global society and it is vital all pupils develop creative and technical skills to help them play an important role in society. Digital Technology (**Multimedia**) develops core skills and understanding with an emphasis on the creative elements such as graphics, animation, sound and website development (including html and scripting).

Course Structure**Unit 1: Digital Technology (compulsory core) – (One hour External Examination – 30%).**

In this unit, students explore a range of digital technologies available for data storage, manipulation, presentation and transfer. They also evaluate the importance of data security and data legislation.

Digital Technology Concepts			
Digital Data	Software	Database Applications	Spreadsheets
Computer Hardware	Network Technologies	Cyberspace, network security and data transfer	
Ethical, legal and environmental impact		Digital Applications	Cloud Technology

Unit 2: Digital Authoring Concepts – (One hour thirty minutes External Examination – 40%).

In this unit, students gain an understanding of the concepts in the development of digital systems. They enhance the knowledge and skills developed in Unit 1.

Digital Authoring Concepts			
Designing Solutions	Digital Development Considerations		
Multimedia Authoring	Website Development	Video /Sound Production	Animation
Database development	Database Development	Evaluation of solutions	

Unit 3: Digital Technology Practice – (Controlled Assessment – 30%).

Design, development and test digital multimedia systems:

- Designing a solution.
- Building a solution.
- Testing a solution.
- Evaluating a solution.

Progression opportunities

GCSE Digital Technology (multi-media) is a suitable preparation for progression into AS and A2 Digital Technology. It is also useful for those pupils who wish to develop their ICT skills and further their practical and theoretical knowledge of ICT which is applicable to a wide range of curriculum areas and careers.

Entry requirements

- Pupils should have displayed an interest in and an aptitude for the subject at Key Stage 3.
- They should be competent in both literacy and numeracy to study at GCSE level.

Subject: GCSE Digital Technology (Programming)

Level: GCSE

Course Summary

Digital Technology (**Programming**) is designed to help pupils acquire the knowledge and skills needed to become independent and discerning users of digital technology. Digital Technology/ICT underpins much of the infrastructure that supports our modern, global society and it is vital all pupils develop creative and technical skills to help them play an important role in society. Digital Technology (programming) develops core skills and understanding with an emphasis on programming and learning the languages and concepts that are used to develop modern computer systems.

Course Structure**Unit 1: Digital Technology (compulsory core) – (One hour External Examination – 30%).**

In this unit, students explore a range of digital technologies available for data storage, manipulation, presentation and transfer. They also evaluate the importance of data security and data legislation.

Digital Technology Concepts			
Digital Data	Software	Database Applications	Spreadsheets
Computer Hardware	Network Technologies	Cyberspace, network security and data transfer	
Ethical, legal and environmental impact		Digital Applications	Cloud Technology

Unit 4: Digital Development Concepts – (One hour 30 minutes External Examination – 40%)

In this unit, students analyse trends in software development and the concepts involved in designing and building digital systems using coded solutions.

Digital Development Concepts			
Contemporary trends in software development		Digital data	Digital Data Principles
Programming Constructs	Simple Error Handling	Testing	Evaluation

Unit 5: Digital Development Practice – (Controlled Assessment – 30%).

In this unit, students design, develop and test coded solutions when creating digital systems. Students will use the **c# programming language**.

- Designing a solution using appropriate tools.
- Building a solution.
- Testing a solution.
- Evaluating a solution.

Progression Opportunities

GCSE Digital Technology (programming) is a suitable preparation for progression into AS and A2 Digital Technology and Software Systems Development. It is also useful for those pupils who wish to develop their ICT skills and further their practical and theoretical knowledge of ICT which is applicable to a wide range of curriculum areas and careers.

Entry requirements

- Pupils should have displayed an interest in and an aptitude for the subject at Key Stage 3.
- Pupils should have demonstrated a high level of numeracy in Key Stage 3 to succeed in this subject.