

Computing Curriculum Overview			
YEAR 7 - Introduce			
	Autumn Term – Big Idea: Computer Systems	Spring Term – Big Idea: Algorithms and Programming	Summer Term – Big Idea: Digital Literacy
	Students explore the foundations of computer systems, including the difference between hardware and software, how networks and the internet function, and the role of search engines and databases. Alongside this technical knowledge, they learn about e-safety, digital footprints, and the importance of responsible online behaviour.	Students are introduced to algorithms and the core programming constructs of sequence, selection, and iteration. They learn to represent solutions using flowcharts, applying decomposition and logical reasoning to solve problems.	Students develop their skills in creating and adapting digital content, with a focus on image types and editing techniques. They also learn about the legal and ethical responsibilities of working with digital technology, including data protection and copyright.
YEAR 8 - Develop			
	Autumn Term – Big Idea: Computer Systems	Spring Term – Big Idea: Algorithms and Programming	Summer Term – Big Idea: Digital Literacy
	Students build on their understanding of digital systems by learning how data is organised, stored, and presented. They explore the use of spreadsheets and databases, including data types, formulae, functions, and charts, to analyse and model information.	Students extend their programming knowledge by implementing algorithms through a high-level programming language. They work with variables, data types, and constructs including sequence, selection, and iteration, and begin to use debugging strategies to correct errors.	Students explore the role of digital media and develop their ability to combine text, images, and graphics to create meaning. They learn about typography, editing techniques, and design features with products and their target audiences.
YEAR 9 - Refine			

Curriculum Map - Computing and Media



	Autumn Term – Big Idea: Computer Systems	Spring Term – Big Idea: Algorithms and Programming	Summer Term – Big Idea: Digital Literacy
	Students learn how computers represent and protect data. They learn about binary and denary number systems, image representation, and binary addition, before exploring threats to networks such as malware and social engineering. Alongside this, they study legislation including the Computer Misuse Act and GDPR.	Students learn how to use variables, constants, and data types. They explore string manipulation, concatenation, and comments, alongside arithmetic and comparison operators. They learn to construct programs using a range of programming constructs.	Students learn how to combine text, images, and graphics. They explore design techniques such as typography, image editing, clipping, layering, and logo creation. They apply conventions of media products to engage specific audiences.

YEAR 10 and Y11 BTEC Media

There are three components: two are internally assessed, one is externally assessed.

Component 1: Exploring Media Products (30%)	Component 2: Developing Digital Media Production Skills (30%)	Component 3: Create a Media Product in Response to a Brief (40%)
Students learn how existing media products are used created meaning for audiences. They examine production techniques, style, genre, regulatory and contextual issues, and investigate how media is used and consumed.	Students build technical skills in media production (e.g. using software/tools, planning, producing media), typically from sectors like audio/moving-image, print or interactive design. They also reflect on their processes, improving work through feedback.	Students create a media product in response to a brief. They plan, produce, and deliver a media product, showing how they manage the production process, make creative and technical decisions, meet constraints and reflect on their outcome. This is synoptic — it draws together what has been learned in Components 1 & 2.

YEAR 10 and 11 GCSE Computer Science

The GCSE is 100% exam assessed. There are two written papers at the end of Year 11. Each is worth 50% of the total mark.

Paper 1: Computer Systems

This paper tests how well students understand how computer systems work. Key content includes architecture of the CPU (fetch-execute cycle, registers), memory & storage (RAM, ROM, secondary storage, virtual memory), networks (types, hardware, protocols), system software (operating systems & utility software), threats/security, and legal/ethical impacts.

Paper 2: Computational Thinking, Algorithms & Programming

This paper assesses students' ability to think algorithmically and program. Topics include: designing, writing and refining algorithms; programming fundamentals (data types, sequence, selection, iteration); producing robust programs (defensive design, testing, debugging); Boolean logic; programming languages & IDEs. Students will write algorithms in pseudocode.