Curriculum Summary Document

Year 11 – *Computer Science*

Developing depth in computational thinking, algorithms and programming.
Computer Systems, hardware and networks

Module/Unit of Learning	Taught During	What will students learn?	How does this prepare students for success at GCSE?	Links to other Subjects
2.1 Computational Thinking & designing and creating algorithms 1.2 Representation 1.1 Architecture of the CPU	Autumn one	Learners will revisit and extend topics from Y10, covering developing programs. Understanding and applying computational thinking, flow diagrams. Learners will also revisit how computers represent numbers (binary, hex) and media (characters, images and sound). Learners will revisit how key computer architecture and the factors that affect performance.	Students will identify areas of confidence and areas that require further development in computer architecture and programming.	
1.3 Networks 2.4 Boolean Logic 2.2 Searching and Sorting	Autumn two	Learners will revisit and extend topics from Y10, covering Network Topology, Utility software, Boolean Logic.	Students will identify areas of confidence and areas that require further development in computer architecture and programming.	
Computer Architecture and hardware Recap Programming and code development Recap	Spring one	During this term students will work through topics in Computer Architecture and Programming Development so that they can apply and refine understanding. Topics will include: Computational Thinking Designing, creating and refining algorithms Programming Fundamentals and additional programming techniques Networks Threats and vulnerabilities Testing and defensive design	Students will identify areas of confidence and areas that require further development in computer architecture and programming.	

Exam prep Question and topic practice	Spring two	During this term students will work through topics in Computer architecture and Boolean Logic, Primary and secondary storage. Students will prepare for exams by practicing exam style questions, revieing and refining answers and understanding of topics.	Students will identify areas of confidence and areas that require further development in computer architecture and programming.	
Exam prep Question and topic practice	Summer one	No new content		
Exams	Summer two			