

Computer Science Department

Key Stage 3 Curriculum Overview – Year 8 – 9

	Autumn 1 (rotation 1)	Autumn 2 (rotation 1)	Spring 1 (rotation 1)	Spring 2 (rotation 2)	Summer 1 (rotation 2)	Summer 2 (rotation 2)
YEAR 8	- Computer systems and hardware - The safe and effective use of computers - Using the Microsoft Office suite	- Binary conversion and units - Programming fundamentals – how to use the ‘print’ function in Python	- Programming fundamentals – variables and data types - Programming fundamentals – user input - Programming if statements	- Computer systems and hardware. - The safe and effective use of computers - Using the Microsoft Office suite	- Binary conversion and units - Programming fundamentals – how to use the ‘print’ function in Python	- Programming fundamentals – variables and data types - Programming fundamentals – user input - Programming if statements
YEAR 9	- Computer systems and hardware - The safe and effective use of computers - Using the Microsoft Office suite	- Binary conversion and units - Programming fundamentals – how to use the ‘print’ function in Python	- Programming fundamentals – variables and data types - Programming fundamentals – user input - Programming if statements	- Computer systems and hardware. - The safe and effective use of computers - Using the Microsoft Office suite	- Binary conversion and units - Programming fundamentals – how to use the ‘print’ function in Python	- Programming fundamentals – variables and data types - Programming fundamentals – user input - Programming if statements

Key Stage 4 Curriculum Overview – Year 10 – 11

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
YEAR 10 <i>OCR</i>	- Computer systems - CPU and memory - Binary conversion - Programming sequence and selection	- Binary shift and binary addition - Logic gates - Programming – data types and operators - Programming – string handling - Programming - iteration	- Primary memory - Secondary storage - Representation of sound - Programming iteration	- Representation of image - Representation of characters and text - Hexadecimal - Programming arrays - Programming file handling	- System software - Introduction to networks - Networks (topologies, hardware, protocols, threats) - Programming sub programs	- Ethical, legal and cultural issues - Computer legislation - Programming 2D arrays - Defensive design - SQL
YEAR 11 <i>OCR</i>	- CPU including registers - Binary operations - Programming recap - Sequence, selection, iteration	- Primary memory - Secondary storage - Representation of sound - Logic circuits - Programming lists, file handling and sub programs	- Representation of image - Representation of characters and text - Hexadecimal - Systems Software - Programming errors, pseudocode and translators	- Networks (topologies, hardware, protocols, threats) - Ethical, legal and cultural issues - Computer legislation - Defensive design - SQL	<i>Revision and exam practice</i>	