

Curriculum Intent: The Computing Curriculum contributes to the whole school curriculum by providing students with the digital knowledge and understanding of digital infrastructure to thrive within their school life. Our curriculum provides a variety of experiences, such as STEM days and after school clubs, that interest and empower students to make informed contributions to our democratic society.

Curriculum Rationale: Pupils will develop the necessary skills knowledge and understanding to prepare them for the technological demands of society throughout KS3. Pupils exposed to all three strands of the National Curriculum (Information Technology, Computer Science and Digital Literacy) to ensure that they are proficient users and practitioners while understanding the dangers and pitfalls of the technology. The computing curriculum will equip pupils with appropriate skills for all subjects and prepare them for the wider workplace. The whole of our KS3 curriculum builds knowledge that will be required both in later life and within our two KS4/5 pathways.

KS3 - Computing

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Y7	Digital Foundations	Digital Literacy	Networks	Computational Thinking & Algorithms	Mobile App Development	Scratch Programming & Games Development
Y8	Algorithms – Search & Sort	Computer Systems & Architecture	Data Representation – Images & Sound	Data Analytics	User Interface Designs	Python Programming & Boolean Logic
Y9	Cyber Security – Threats to Data	Website Design	Text-Based Programming	Applying Programming Skills with Physical Computing	User Interfaces – Design Principles & Functionality	Data Analysis and Modelling

KS4 - Computer Science

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
10	Computational Thinking Data Representation		System Architecture	Flowcharts, Pseudocode & Algorithms	Computer Networks	Programming fundamentals
11	Searching and Sorting Algorithms Network Security	Boolean logic ELCS impacts of technology	ELCS impacts of technology Python Programming	Python Programming Exam preparation & Revision Sessions		

KS4 - Digital Information Technology

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Y10	User Interface Component 1: Investigate user interface design for individuals and organisations	User Interface Component 1: Audience needs, and design principles	PSA Component 1: Use project planning techniques to plan and design a user interface	PSA Component 1: Develop and review a user interface	Spreadsheets Component 2: investigate the role and impact of using data on individuals and organisations	Spreadsheets Component 2: different ways of representing information situations where they are used
Y11	PSA Component 2: Create a dashboard using data manipulation tools	PSA Component 2: Draw conclusions and review data presentation methods	Component 3: Modern technologies	Component 3: Cyber security Component	Component 3: The wider implications of digital systems	Component 3: Planning and communication in digital systems