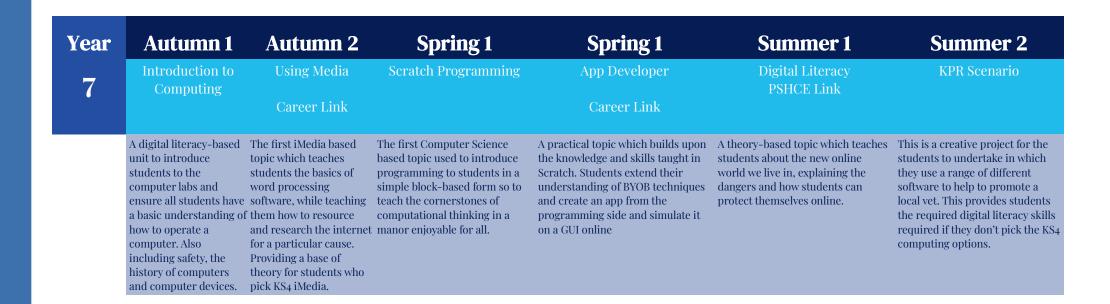


## **Computing Curriculum Overview**









Year	Autumn 1	Autumn 2	Spring 1	Spring 1	Summer 1	Summer 2
9	The Digital World PSHCE Link	Binary	Web Design/HTML Careers Link	Python Basics Careers Link	Databases	Flow Charts, Algorithms and Pseudocode
	The final of the digital literacy topics used to ensure students understand how to be safe online and the laws which affect them.	A Computer Science based topic which is important to the computing curriculum. This t teaches students the basic maths of computers and how computers represent data stored.	the three areas of computing where students get to develop	programming journey in KS3 students will be coding using	The ability to analyse and edit text-based data is still a key skill that students are required to pick up to have full digital literacy. Students create a data base using suitable data types, add validation and run suitable queries and reports	A Computer Science based topic, teaching students how to plan the creation of programs both in a visual and text-based format. Students will also learn some basic searching algorithms used by computers.





Year	Autumn 1	Autumn 2	Spring 1	Spring 1	Summer 1	Summer 2
10	Java Practical Programming	1.2 Memory and Storage	1.3 Computer Networks Career Link	l.4 Network Security (continued)	Paper 1 Revision	Paper 1 Mock Practical Programming
	Careers Link 1.1 System Architecture	1.5 Systems Software	1.4 Network Security Careers Link	Careers Link		Project Careers Link
	1.1 System Memtecture			1.6 Ethics		
	Java Practical Programming: Learning programming constructs such as sequence, selection and iteration in a practical manner. System Architecture: Learning how the CPU works and the factors affecting its performance.	Memory and Storage: Learning how all data is represented in binary and the difference between RAM and ROM. System Software: Understanding the software which makes up an Operating System and the additional utility software.	Computer Networks: Learning the different ways networks connect including their size, hardware and topology. Network Security: Learning the risks to a network and their prevention methods.	Ethics: Learning the legislation which affects computing and the effect computers had on society.	Recap of all Paper 1 topic, spending a week on each in s preparation for first mock.	Preparation for Paper 1 mock and completion of Final few weeks are spent doing multiple mini projects to get more comfortable in a programming environment.





Year	Autumn 1	Autumn 2	Spring 1	Spring 1	Summer 1	Summer 2
11	2.1 Algorithms	2.2 Programming Fundamentals Careers Link	2.3 Robust Programs Careers Link 2.4 Boolean Logic 2.5 IDE's	Paper 1 Recap Paper 2 Recap	Mock Papers	
	Algorithms: Learning how to plan programs using pseudocode and flowcharts. Learning different searching/sorting algorithms used in computing	programming include more intricate features such as arrays, functions and use of text files with elements of the Python programming-built in.	Robust Programs: Learning to how test programs creating.  Boolean Logic: Learning of Boolean operators which are fundamental to a computer's operation.	Revision of all theory required in preparation of summer exams.	Practice of past exam papers in preparation of summer exams	
			IDE's: Learning the environment in which programming takes place.			