

Computer Science Curriculum Map – Key Stage 3

	Year 7	Year 8	Year 9
Autumn-1	Digital media & E-Safety <ul style="list-style-type: none"> Navigating school computer system Internet Safety Web browsers & using email software Poster making in Microsoft PowerPoint 	Computer Systems <ul style="list-style-type: none"> Online safety General purpose of computing systems Computer hardware components Input and output devices 	Cyber security <ul style="list-style-type: none"> Data, information and risks How to protect personal information Managing devices and accounts Identifying scams and sources of support
Autumn-2	Networks and internet <ul style="list-style-type: none"> Computer networks Protocols Networking hardware Wired and wireless networks Internet 	Computer Systems <ul style="list-style-type: none"> How hardware works to execute programs Function of operating systems Decomposition Writing algorithms with flowcharts 	Cyber security <ul style="list-style-type: none"> Hacking Malware Security in organisations Preventing cyber attacks
Spring-1	Networks and the internet <ul style="list-style-type: none"> Internet services World Wide Web Modelling data - Excel <ul style="list-style-type: none"> Spreadsheet features & basic formulae 	Python programming <ul style="list-style-type: none"> Programs and algorithm Assignments Python syntax 	Data representation <ul style="list-style-type: none"> Units of storage Representing images with pixels Representing colours in images Presenting size of images
Spring-2	Modelling data - Excel <ul style="list-style-type: none"> Collecting data Applying SUM, MIN, MAX, COUNTA Data analysis and sorting 	Python programming <ul style="list-style-type: none"> Writing arithmetic & logical expressions Coding simple programs Relational operators 	<ul style="list-style-type: none"> Representing sound as binary Representing sound size Sound manipulation Compression
Summer-1	Using media to gain support for a cause <ul style="list-style-type: none"> Features of a word processor Formatting documents Licensing and copyright Credibility of sources 	Python programming and representation <ul style="list-style-type: none"> Using if statements to create conditions Representation <ul style="list-style-type: none"> Introduction to representation Binary digits Converting decimals into binary 	Programming - Further programming techniques in python <ul style="list-style-type: none"> Selection and randomness Multi-branch selection Using iteration
Summer-2	Using media to gain support for a cause <ul style="list-style-type: none"> Research and blog planning Promoting and presenting a cause 	Representation <ul style="list-style-type: none"> Bits and bytes conversion Turing's mug 	Data science Delving into data science Visualising data Global data