Curriculum Map- Computer Science 2021-22

Below is a curriculum map, showing what is taught at each stage of the year.

	Term 1.1	Term 1.2	Term 2.1	Term 2.2	Term 3.1	Term 3.2
Year 7	**Intro to Computer Science** ESafety, Online working, Collaboration, GSuite	**Working with Data** Introduction to spreadsheets, data types and data handling	**Programming** Programming essentials using BBC Micro:bit Programming Constructs, Variables, and Data Types using a block language		**Networks and the Internet** Introduction to computer networks, how data is transmitted and the development of the internet	**Using Media** Using applications to develop multimedia content.
Year 8	**Introduction to Computer System** Investigating the 3 layers of Hardware, Software and Operating System	**Working with Data** Introduction to spreadsheets, data types and data handling	**Programming** An introduction to Python Programming Constructs, Variables, Data Types, Data Handling and GUI design using the Python programming language		**Media - Vector Graphics** Using Shapes, paths and nodes to create icons as a vector image.	**Developing for the Web** Creating a web page, HTML, CSS, considering sources and images.
Year 9	**Introduction to Computer System** Investigating the 3 layers of Hardware, Software and Operating System	**Working with Data** Introduction to spreadsheets, data types and data handling	**Programming** An introduction to Python Programming Constructs, Variables, Data Types, Data Handling and GUI design using the Python programming language		**Media - Animation** Colour, Scale, Rotate, Move. Complex models and organisation. Rendering video files.	**Developing for the Web** Creating a web page, HTML, CSS, considering sources and images.
Year 10	**Exploring User Interface Design Principles and Project Planning Techniques** Interface Design and Development for individuals and organisations, Project Planning and Interface Reviews.				**Collecting, Presenting and Interpreting Data** Data Collection and the impact on individuals. Data Processing and Modelling.	
Year 11	**Collecting, Presenting and Interpreting Data (Cont.)** Data Processing (2) and Producing Summaries and Reports, incl Dashboards.		**Effective Digital Working Practices** Modern Technologies: Wireless Technologies and Cloud-based Computing. Impact of Modern Technologies: Collaboration, Accessibility, Inclusivity and Communications. Cyber Security: Threats to Data, Policies and the Impact of Breaches. Legal and Ethical Issues of technology and its use. Planning and Communication.			
KS4 Core IT	**Data Modelling, Manipulation and Reporting** Using spreadsheets to handle data and create complex models **Computing Systems and The Impact of Technology** Computer Networks, Artificial Intelligence and Ethical Issues **Cyber Security** Data Protection, Security Threats and the Impact of Security Breaches.					

** KS4 will be starting from September 2022