Computing Curriculum Map

YEAR	TERM					
	Autumn One	**Autumn Two**	**Spring One**	**Spring Two**	**Summer One**	**Summer Two**
Year 7 (KS3)	**Computing systems and networks - Communication** Recognising how the WWW can be used to communicate and be searched to find information.	**Creating media - 3D modelling** Planning, developing, and evaluating 3D computer models of physical objects.	**Creating media - Web page creations** Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation.	**Data and information - Spreadsheets** Answering questions by using spreadsheets to organise and calculate data.	**Programming A - Variables in games** Exploring variables when designing and coding a game.	**The Internet** Recognising the internet as a network including the WWW, and why we should evaluate online content.
Year 8 (KS3)	**Impact of technology: collaborating online respectfully** Identifying how to use online collaboration tools respectfully. An introduction to the computing lab.	**Modelling data: spreadsheets** Sorting and filtering data and using formulas and functions in spreadsheet software.	**Networks: from semaphores to the internet** Recognising networking hardware and explaining how networking components are used for communication.	**Programming essentials in Scratch: part I** Applying the programming constructs of sequence, selection, and iteration in Scratch.	**Programming essentials in Scratch: part II** Using subroutines to decompose a problem that incorporates lists in Scratch.	**Using media: gaining support for a cause** Creating a digital product for a real-world cause.
Year 9 (KS4)	**Computing systems** Exploring the fundamental elements that make up a computer system.	**Developing for the web** Using HTML and CSS to create webpages.	**Introduction to Python programming** Applying the programming constructs of sequence, selection, and iteration in Python.	**Media: vector graphics** Creating vector graphics through objects, layering, and path manipulation.	**Mobile app development** Using event-driven programming to create an online gaming app.	**Representations: from clay to silicon** Representing numbers and text using binary digits.
Year 10 (KS4)	**Cybersecurity** Identifying how users and organisations can protect themselves from cyberattacks.	**Data science** Using data to investigate problems and make real-world changes.	**Media: animations** Creating 3D animations through object manipulation, and tweaking and adjusting lighting and camera angles.	**Online safety** Recognise ways to build a positive online reputation. Discuss the ethics surrounding big data. Identify fake news and explain why it exists. Describe the laws governing online content. Recognise illegal content and describe how to report it.	**Spreadsheets** Use functions, formulas, and formatting in a spreadsheet. Develop a spreadsheet for a given scenario.	**Representations: going audio-visual** Representing images and sound using binary digits.
Year 11 (KS4)	**IT and the world of work** Examine modern technology tools that assist with inclusivity and accessibility. Evaluate effective online communication and collaboration. Create a positive work environment for remote working.	**IT project management** Identify why project management is important and recognise the common tools used. Manage a project for a given scenario.	**Functional Skills Preparation** Exams			