Computing Curriculum Plan



	Half Term	Year 7	Year 8	Year 9	Year 10	Year 11
Autumn Term 2024	1	7.1 Intro: This unit prepares pupils to use the technology that will support their learning in Year 7 and beyond. We look at password security, email, show my homework, google drive, input and output devices, how to print in school, how to search the internet and then an introduction to copyright and plagiarism	8.1 HTML (notepad) Pupils learn to program for the web by using HTML to create a website. They learn about tags and how to structure a webpage. Skills learn include formatting text, use of colour (including RGB colour chart) tables and hyperlinks	9.1 Photo editing, vector and bitmap and file types. In this unit the focus is on how to edit images for a particular audience. Pupils learn that images that they see are not necessarily real as they may have been edited. There is also a focus on the types of files that can be used for images and the differences between them including file compression.	Creative iMedia R093: Creative iMedia in the media industry (TA1) R093: How style, content and layout are linked to the purpose. Client requirements and how they are defined (TA2) R093 Audience demographics and segmentation (TA2) R093: Media codes used to convey meaning, create impact and/or engage audiences (TA2).	2nd Optional Unit of choice: R097: Features and conventions of interactive digital media R097: Resources required to create interactive digital media products or R099 Digital Game concept and creation
	2	7.2 E safety: Within this unit pupils are taught how to keep themselves safe online and when using a computer. We look at how cyberbullying affects an individual and what to do if someone is being cyberbullied. We look at social media and discuss the advantages and disadvantages of such technologies. Pupils look at netiquette and how they are leaving a digital footprint	8.2 Animation and Video Editing Pupils look at how animations are created using frames and layers. They learn about frame rate. This develops into using transitions to create a video for a target audience	9.2 Coding and Data Representation This unit looks at how a computer stores text, images and sound as binary values. It looks at how data is stored (compressed) using different methods. Pupils look at how analogue sound files are sampled into digital sound files.	R093: Work planning and documents used to support ideas generation (TA3) R093: Documents used to design/plan media products (TA3) R094: NEA Assessment (Working on and submit for moderation)(with R093 key content embedded) R094: Visual identity and digital graphics, Purpose features, elements and design of visual	
Spring Term 2025	3	7.3 Spreadsheets: Pupils learn the basics of spreadsheets in order to analyse data. They look at basic formulas and functions and learn how to display information in graphs.	8.3 Web Authoring Pupils move from text based programming of a website to using an editor to develop a webpage. They learn more advanced features and focus on audience needs and purpose alongside accessibility features to make the website more usable. Students will create web pages which cover the following topics: E-Safety, information, reliability, bias, legislation, plagiarism, ethical issues. Topic History and the Future of Computing	9.3 Database relational; This unit looks at developing pupils' understanding of databases and teaches the use of relational databases to show how information can be retrieved from more than one related table.	identity, Graphic design concepts and conventions, Properties of digital graphics and use of assets, Visual identity and digital graphics, Purpose features, elements and design of visual identity, Graphic design concepts and conventions, Properties of digital graphics and use of assets, Techniques to plan visual identity and digital graphics, Tools and techniques to create visual identity and digital graphics, Technical skills to source, create and prepare assets for use within digital graphics	
	4	7.4 Cryptology, Flowol Sequence/shapes/Boole an operators. This unit looks at how data is secured on a computer using cryptography.	8.4 Python Chatbot Within this unit pupils develop their understanding of Python to further understand variables and data types. Pupils build upon	9.4: Python; Searching and Sorting Pupils' knowledge of python is further developed by learning how to read and write to txt files. They develop skills in handling data in Python and		Preparation for exam - R093 - May/June. Students will need to understand the purpose and content of pre-production, R093: Sectors and products in the media industry. Job Roles in the

			knowledge of iteration (loops) to make more efficient programs.	being able to question the data to find answers. Additionally pupils learn how to search and sort data effectively using Linear and Binary searches and bubble and merge sorts. Pupils also learn about how computers hold data in arrays.		media industry. Factors influencing product design. Client requirements. Audience demographics and segmentation. Research methods. Media codes. Pre-production planning including documents used to design and plan
Summe r Term 2025	5	7.5 Scratch Within this unit pupils look at computational thinking and learn block programming to create a game. Pupils learn about Cartesian coordinates, IF statements, Forever loops and then move onto variables. Pupils learn about sequence, selection and iteration.	8.5 Spreadsheets: This unit looks at developing spreadsheet skills to enable pupils to ask 'what if' questions to a model. Work develops to look at naming cell ranges, sorting data, vlookups and other more advanced skills such as writing macros and protecting the cells.	9.5 and 9.6: The final double unit brings together many aspects of computing where pupils develop an understanding of the system life cycle by planning, Researching,	2nd Optional Unit of choice: R097: Features and conventions of interactive digital media R097:	media products. Legal issues include IP, copyright, regulation, certification and classification. Health and safety.
	6	7.6: Introduction to text based programming (logo, turtle, Python)This is pupils' first introduction to text based programming. In this unit pupils learn the syntax of python and develop programming skills that require accuracy and problem solving.	8.6 Database Flat file: It is important that pupils understand how data is stored. This unit explains this and teachers pupils how to create and use a database that they can search to find the information that they require.	Designing, Implementing and Reviewing a large project. They use tools learnt throughout KS3 to help them undertake this task such as the use of spreadsheets and databases to create financial models and store information.	Resources required to create interactive digital media products or R099 Digital Game concept and creation	