Computer Science & Media Studies Year 7 Curriculum Overview

What is the Year 7 Computer Science & Media Studies curriculum aiming to achieve?		
What do we want our Year 7 Computer Scientists to be like?	How are we building on prior learning?	How can parents/carers support their child's learning?
• Independent and thoughtful researchers • Resilient with user interfaces • Understand the need for organised file management • Be inquisitive problem solvers	• Building upon logical reasoning in order to improve decomposition skills and problem solving skills • Develop student evaluation skills in terms of sources • Start to understand how computers work • Explore how different applications can be used in unison	• Encourage students to use IT programs available outside of lesson • Encourage students to explore and trouble shoot when using IT devices • Talk to students about the internet at home

How are we organising the Year 7 Computer Science and Media Studies curriculum?						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	Ciphering. IT Systems: email, epraise, file management, remote files, E-Safety.	Spreadsheets: Formatting, formula, functions, graphs, conditions.	Sequencing: game design, debugging, looping.	Reliability of the internet: Sources of information, research, referencing.	Computer Basics: Hardware; input/process/output, Networks, Introduction into binary.	Working with databases and combining the use of multiple applications.
Threshold Concepts	How to keep work areas tidy and organised, Being safe online, Presentation for a given audience.	Data handling, and analysing data. Understanding conditions.	User requirements, Successfully sequence, Debug sequences, Introduction to variables.	Checking the accuracy and reliability of sources used in order to present factual ideas on debatable topics.	An introduction into Computer Science topics, and how the topics relate to one another in order to appreciate how a device follows the input, process, output loop.	Gain an understanding that applications can be used in conjunction with each other.
Skills	Code breaking Development of organised file management IT competence using school IT	Analyse data, format data to aid the user, be able to use formula and functions, and output data into various graphs	Decomposition, Debugging and trouble shooting, Sequencing.	Evaluate data, Analyse websites and their reliability, understanding URLs, Present data in an unbiased way.	Be able to identify parts of a computer, be able to identify input and output devices, be able to turn denary numbers into binary numbers and vice versa	Create, search and sort a database. Creating front end user interfaces.
Enrichment within the curriculum	Students will have the opportunity to study a wide range of Computer Science and Media based topics to develop their understanding of the opportunity this subject can offer. One moment students will be producing their own game and the next they will be organising a group project and delegating roles. Throughout year 7 the focus will be around building student resilience and independence in their use of technology and how they approach new ideas or interfaces.					
Cross curricular links	• Computer Science is indeed a science where students work through and anticipate problems and solutions • Mathematics is another core foundation of Computer Science with many of the topics being data based and logic based; this is an excellent subject for developing your mathematical problem solving. • Within most units of work students have the opportunity to provide feedback to develop their work, and develop their evaluation skills.					
Extra-curricular opportunities	In year 7 students could have the opportunity to take part in various external Computer Science schemes within the school coding club. Students are encouraged to use various online sources to develop their computational thinking skills.					

What are the intended outcomes of the Year 7 Computer Science & Media Studies curriculum?						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Opportunities to show progress (Assessments)	Presentation, feedback and evaluation.	Written test	Written evaluation and finished code	Presentation and sources table	Computer Basics fact file	Well structured data
Impact on personal development (SMSC)	*Students explore their use of IT and consider the information that they come across daily, they consider the use of social media and fake news, being safe online, how we consider information sort online and how we evaluate these sources. They are also asked to consider the user during various projects, so trying to consider another person's point of view and ensure they apply this knowledge in the design and creation of projects.*					
Preparation for the next stage of education	*Many year 7 students will eventually choose to study either Computer Science or Media at KS4 and our curriculum is designed for these two disciplines. This year is focused around allowing students to become more confident in the way they approach a range of topics and develop their own working practising surrounding IT.*					