Computer Science & Media Studies Year 8 Curriculum Overview

What is the Year 8 Computer Science & Media Studies curriculum aiming to achieve?		
What do we want our Year 8 Computer Scientists to be like?	How are we building on prior learning?	How can parents/carers support their child's learning?
• Improving problem solving • Developing programming experience • Develop a range of media skills and industry understanding • Explore designing and creating media products for a given client brief	• Building upon an introduction to programming • Understanding how computers work, and appreciate computer language • Building upon students ability to 'think like a computer' • Being creative	• 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 8 Computer Science & Media Studies curriculum?						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	Sequencing: Introduction to computer language, Iteration using flowcharts, Selection using flowcharts.	Image manipulation, The impact of photo editing, Introduction to codes and conventions of media products, Introduction to graphic properties.	Web authoring: Codes and conventions of web design, Introduction to working to a brief and understanding target audience, Evaluate a media product against the original brief.	Computational thinking introduction; Logical thinking and decomposition, introduction to programming language.	Functionality of a computer: CPU, RAM, ROM, how computers store data, data representation.	Programming constructs within a programming language, debugging and problem solving in order to refine programs.
Threshold Concepts	Programming constructs, Input/process/output.	Combine skills learned in order to mimic a professional media product.	Combine skills learned in order to create a website suitable for a client brief. Be able to assess the success of the media product against the client requirements.	Being able to break problems down into small logical steps, Understanding how to construct code through learning programming language.	Understand how instructions are stored and executed within a computer system.	How to write a computer program for a given situation, understand how to use sequence, selection and iteration.
Skills	Basic programming constructs. Following, interpreting and creating algorithms	Photo editing Codes and conventions of a media industry	Website development Evaluation Design	Programming Computational thinking Decomposition	Identify internal parts of a computer Binary and hexadecimal	Problem solving Programming Debugging
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. Throughout year 8 the focus will be around continuing to build 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 8 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 8 Computer Science & Media Studies curriculum?						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Opportunities to show progress (Assessments)	Completed flowcharts	Magazine cover using photo editing skills	Completed website	Written evaluation and test	Completed task sheets	Completed code and written evaluation
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 photo manipulation in the media as well as the use of websites to convey information. 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 8 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.*					