Curriculum Summary Documents Year 9 Computing

Module/Unit of Learning	Taught During	What will students learn?	How does this deepen understanding and enrich experience?	Links to other Subjects
Visual Identity and marketing	Half term 1	This media-based topic looks at branding and marketing and helps pupils to understand what makes a good, logo and visual identity and how to create market a brand. Pupils will use vector image software (Adobe illustrator) to create several logos and Visual Identities for brands with different target audiences then go through the steps of creating and marketing a soft drink brand.	Some of the key skills and understanding needed for KS4 imedia are introduced. Also an awareness and understanding of brands and marketing are given so that pupils are aware of how brands use them to engage with people.	English – persuasive writing
Computer Science Theory	Half term 2	This builds upon previous knowledge about how computers work and covers a variety of topics from hardware components to data representation and encryption	Knowledge of how digital technologies work is essential in the modern world	
Cyber security	Half term 3	This topic looks at how methods hackers use and how to prevent them. Students will learn about threats to computer systems and networks covering, cyber security threats, social engineer techniques, malware, Denial of service attacks and other cyber security threats. Methods to detect and prevent cyber security threats will also be considered.	Knowledge of how to stay safe and not susceptible to hacking techniques is essential in the modern world.	
Artificial intelligence		This topic looks at how to use AI to increase pupils own productivity as well as how others use it and the issues linked to it's use	Using AI effectively is a skill that will help pupils in their future. However, being aware of it's limitations and ethical issues is also vital.	

IMedia Game project	Half term 4	Pupils will go through the process of creating a mini imedia project, giving them a taste of and preparing them for what the KS4 imedia course is like. Initially they will plan using preproduction documents then develop their game using the G-develop game engine.	This builds on understanding gained in previous topics such as year 8 game programming and year 9 Visual identity and marketing topics.	
Python programmin g	Half term 5	Pupils will continue to further their programming knowledge using sequencing, selection and iteration to program microbits (mini computers) and robots to perform various tasks. They will use a mixture of text-based and drag and drop programming to make these physical devices function in a specified way.	This builds on knowledge and skills from Python Programming topics from year 7 and year 8. It also looks to show how computer programs are embedded in a wise variety of objects, not just PC's phones and portable computers.	Different courses link to different subjects
IDEA digital award	Half term 6	Pupils will work through a wide variety of mini online courses all somehow linked to digital technologies to gain knowledge in areas that interest them and prepare them for life in a digital world.	The courses cover a plethora of subjects from cyber security to social media marketing, even technology in farming. Some course will have been taught previously and allow for a deeper understanding and some will be new to them.	