

In Year 9, the curriculum covers both IT/digital literacy and computing topics. The theory elements of the topic are taught and students demonstrate their knowledge through the production of an IT based product.

Methods of deepening and securing knowledge:

Interleaving	Theory and practical skills are revisited throughout the year, the connection/link between topics is highlighted as appropriate.
Real world examples	Theory is linked to real world scenarios so that students can see their application in everyday life and the workplace.
Knowledge organisers	These are used in all units of work to support the understanding and application of key words and knowledge/concepts.

	Autumn term 1	Autumn term 2	Spring term 1
Topic(s)	<p>Computer Science: Algorithms</p> <ul style="list-style-type: none"> • Computational thinking. • Searching algorithms. • Sorting algorithms. • Flowcharts and pseudocode. <p>IT: Pre-production documents Understand the purpose and uses of pre-production documents:</p> <ul style="list-style-type: none"> • Mood boards. • Storyboards. • Mind maps/spider diagrams. • Visualisation diagrams. 	<p>Computer Science: Python Programming</p> <ul style="list-style-type: none"> • Variables. • Logic statements. • Selection. • Repetition. • Turtle programming (graphics). <p>IT: Pre-production documents Plan and create pre-production documents:</p> <ul style="list-style-type: none"> • Interpret client requirements. • Identify timescales. • Produce work plans and production schedules. • Identify the target audience. • The hardware, techniques and software used. • Health and safety requirements and legislation. • Review pre-production documents. 	<p>Computer Science: Python Programming</p> <ul style="list-style-type: none"> • Lists. • Functions. • Using text files. <p>IT: Graphics Skills Understand the purpose and properties of digital graphics:</p> <ul style="list-style-type: none"> • Why digital graphics are used. • How digital graphics are used. • Types of digital graphics. • File formats. • Properties of digital graphics and their suitability for use in creating graphics.

Assessment	End of unit algorithms/pre-production assessment.	Ongoing teacher assessment of classwork.	Ongoing teacher assessment of classwork.
CEIAG <i>(Careers that are linked to that topic)</i>	Computer Science: Software development, programming. IT: Working in the digital media sector, working with clients.	Computer Science: Software development, programming. IT: Working in the digital media sector, working with clients.	Computer Science: Software development, programming. IT: Working in the digital media sector, working with clients.

	Spring term 2	Summer term 1	Summer term 2
Topic(s)	<p>Computer Science: Logic and Languages</p> <ul style="list-style-type: none"> Types of languages <ul style="list-style-type: none"> Translators. Compilers. Interpreters. Assembly. Logic Diagrams. <p>IT: Graphics Skills Plan the creation of a digital graphic:</p> <ul style="list-style-type: none"> Interpret client requirements. Understand the target audience. Produce work plan. Producing a visualisation diagram. Identifying the assets needed to create a digital graphic. Identifying resources needed to create digital graphic. Legislation. 	<p>Computer Science: Number Systems</p> <ul style="list-style-type: none"> Binary and hexadecimal. Binary addition. Image representation. Sound representation. Data compression. <p>IT: Graphics Skills Create a digital graphic:</p> <ul style="list-style-type: none"> Sourcing identified assets. Creating identified assets. Ensuring technical compatibility. Creating a digital graphic using a range of tools and techniques. Saving and exporting for required use. Reviewing a digital graphic against a required brief. 	<p>Computer Science: Programming Programming/graphics skills project.</p>
Assessment	End of unit assessment.	End of unit assessment.	Assessment of final product.
CEIAG <i>(Careers that are linked to that topic)</i>	Computer Science: Software development, programming. IT: Working in the digital media sector, working with clients.	Computer Science: Hardware/computer engineer/developer. IT: Working in the digital media sector, working with clients.	Computer Science: Software development, programming. IT: Working in the digital media sector, working with clients.

Independent Study

Short practical tasks are set to complete away from the classroom as well as revision to consolidate learning of theory aspects.