Richmond School & Sixth Form College
Being the best we can be

Year 9 IT and Computer Science

Text-based programming, learning about the different data types, selection, iteration, lists and functions and will use these skills to solve a variety of computations problems including designing their own programs.
Video editing – Gives students the opportunity to undertake creative projects using existing digital artefacts. Students will be taught a range of video editing techniques as well as how to plan, design, create and evaluate a project.
Students will consider the impacts of computers on society by looking at the social, cultural, moral, legal and ethical issues.
In the last term, students consider the purpose of websites before learning skills to create their own website for a specific purpose. Students are then given the opportunity to complete an independent project on a topic of their choice from the IT and Computer Science curriculum.

Methods of deepening and securing knowledge:	
Retrieval practice	Starter activities are used whilst students login to computers, these are knowledge retrieval activities.
Interleaving	Programming skills are revisited several times in Year 9. Key concepts are repetitively covered using different language and are interleaved within the curriculum.
Concrete examples	Concrete examples are used as the Teacher demonstrates completed projects or tasks in creative or practical lessons to demonstrate how the skills taught can be applied to different scenarios.
Dual coding	Dual coding is used as instructions for tasks including written steps and images showing what icons or tools look like.

	Autumn term 1	Autumn term 2	Spring term 1	Spring term 2	Summer term 1	Summer term 2
Topic(s)	**Text programming with Python** - Variables - Selection - Iteration - Lists - Functions	**Video editing** - Editing techniques - Image slide show - Transitions - Sound - Titles and captions - Trim, multi-trim and scene detection - Movie trailer analysis - Plan/design movie trailer	**Video editing** - Create movie trailer from designs - Evaluate **Social, cultural, moral, legal and ethical issues** - Morals - Threats - Cultural - Environmental	**Social, cultural, moral, legal and ethical issues** - Legislation - Open source and proprietary software **Web design** - Purpose of websites - WWW/the internet	**Web design** - HTML Plan and design web application for given audience. - Create functional navigation system - Select and adapt appropriate digital artefacts	**Web design** - Include multimedia elements - Evaluate **Independent project** - Complete Proposal - Explore topic of interest - Develop independent skills

Assessment	- Python assessment	- Video storyboard	- Create movie trailer	- Social, cultural, moral, legal and ethical	- Web design planning	- Completed website
CEIAG *(Careers that are linked to that topic)*	- Computer programming - Software developer	- Film editor	- Software developer - Cyber scurity specialist	- Software developer - Cyber security specialist	- Web designer - Web developer	- Web designer - Web developer

Independent Learning:
Independent learning extends the learning in the classroom with tasks including reading technology news, articles or research or researching and finding materials online to be used in the next lesson.