

ICT KS3 Year 9

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Curriculum Intent:

In a world where new technology is constantly evolving and the impact that has on the way we live, work and interact, we feel that pupils should be equipped with skills that will keep them safe, allow them to thrive and adapt in an ever-changing digital environment, and provide them with the skills they will need in a future workplace.

Our ICT curriculum at Key Stage 3, aims to create a supportive and challenging environment to explore a range of topics relating to Computer Science and Digital Literacy. Moving through the Key Stage, pupils will use more sophisticated techniques and explore a wider range of digital media products. They will understand the importance of e-safety and know tools for minimising risks. They will use computational thinking to solve problems, developing their ability to think logically and innovatively. They will research, plan, create and critically evaluate a range of digital products including animation, audiovisual, graphics and apps. They will be confident in a range of software, when producing slideshows, using spreadsheets, producing reports, posters and animations. They will understand the job roles that exist relating to ICT and the skills and subjects that will be important to progress onto these.

In Year 9, they will be introduced to programming using Python, they will learn about cybersecurity and develop media products in animation and audiovisual. The skills and knowledge developed in Year 9 will provide the final instalment to ensure they are ready, should they choose to continue their studies in Key Stage 4 in Computer Science and/or iMedia.

Core Knowledge		Procedural Knowledge
	Topics:	Pupils will:
Autumn Term 1	E-Safety Representations – going audiovisual	- Plan an audiovisual product using storyboards and production plans. - Capture and edit audio and video content effectively. - Use audiovisual techniques to communicate messages to a specific audience. - Analyse how media represents people, events and issues.

		• Evaluate the credibility of audiovisual content. • Identify and challenge misinformation and manipulated media. • Apply copyright, licensing and attribution correctly. • Publish media safely while protecting their digital identity. • Evaluate and improve media products based on feedback. • Conduct safe and effective internet searches. • Evaluate the credibility of online information. • Recognise and respond appropriately to common online safety risks. • Manage personal information and privacy settings responsibly.
Autumn Term 2	Media - Animations	• Plan an animation using storyboards and production plans. • Create and organise digital assets. • Use animation software to produce animated media. • Apply frame-by-frame and timeline-based animation techniques. • Synchronise audio and visual elements effectively. • Design animations for a specific audience and purpose. • Apply copyright and licensing rules appropriately. • Test, debug and refine animated products. • Evaluate the effectiveness of an animation against a design brief.
Spring Term 1	Python programming with sequences of data	• Create and manipulate lists in Python. • Access, modify and process data stored in sequences. • Use loops to process collections of data. • Apply selection to filter and search data. • Manipulate strings and validate user input. • Use built-in functions to analyse data.

		• Create programs that collect, store and process multiple pieces of information. • Test and debug programs involving sequences. • Evaluate and improve solutions.
Spring Term 2	Introduction to cybersecurity	• Identify common cybersecurity threats and vulnerabilities. • Assess risks to data, devices and online accounts. • Create and manage secure passwords and authentication methods. • Detect and respond appropriately to phishing attempts. • Apply safe and secure online practices. • Explain and use basic encryption concepts. • Manage digital identities and privacy settings responsibly. • Investigate simple cybersecurity incidents. • Follow security procedures to protect data and devices. • Evaluate the effectiveness of cybersecurity measures.
Summer Term 1	Themed project - utilising skills developed in Autumn and Spring terms	• Analyse a brief and identify project requirements. • Conduct effective research using credible sources. • Plan and manage a digital project independently. • Select appropriate software and digital tools. • Create digital products for a defined audience and purpose. • Apply copyright, licensing and e-safety principles. • Test and improve products systematically. • Evaluate outcomes against success criteria.
Summer Term 2		

- Present and justify their work effectively.

Homework:

For every 6 hours of lesson time, a homework task will be set by the class teacher. Pupils will receive feedback on this task. The task should take no more than 30 minutes to complete and will enable the pupil to master a skill or key concept that they have learnt in class. The task will not require the pupil to have access to specific software. Example tasks may include producing a mood board or mind map, explaining a key concept or procedure.

Assessment:

Formative assessment will be used to regularly monitor student progress and check for understanding. This will include retrieval practice, low-stakes quizzes, end of topic tests, in class questioning and assessing the products they have planned, created and reflected upon.

Summative assessments:

For each of the assessments detailed below, pupils will be provided with revision materials including topic lists for each specific assessment.

Autumn – this in class assessment will mainly cover concepts and themes from E-Safety and

Representations – going audiovisual, as well as some early content from Media – Animations. The 45 minutes assessment will be completed on the computer and will be a series of multiple choice, closed response, short and extended answer questions.

Summer – this in class assessment will cover concepts and themes from E-Safety, Representations – going audiovisual, Media – Animations, Python programming with sequences of data and Cybersecurity. The 45 minutes assessment will be completed on the computer and will be a series of multiple choice, closed response, short and extended answer questions.

Links to Personal Development:

Our Year 9 ICT curriculum supports personal development by helping students become safe, creative and confident users of digital technology. Through e-safety and the introduction to cybersecurity, learners develop an awareness of online risks and the importance of protecting data and digital systems. Topics such as representations – going audiovisual and media animations encourage creativity, communication and digital content creation skills, while Python programming with sequences of data develops logical thinking, resilience and problem-solving abilities. The themed project allows students to apply their knowledge independently, improving their organisation, teamwork and project-management skills. Together, these experiences help students build confidence, critical thinking and digital literacy, preparing them for further study and life in an increasingly technology-focused world.

How is my knowledge further developed in Key Stage 4?

The Key Stage 3 curriculum has been designed to suitably prepare our students with a strong foundation to succeed on the Key Stage 4 optional courses we offer.

The first is the Cambridge OCR iMedia qualification, that provides a more vocational approach to learning about digital skills and the media industry. For this course, they will be able to further develop their knowledge, understanding and skills related to pre-production, production and post-production.

The second is the Cambridge OCR GCSE in Computer Science, which will build on the computer science elements of Key Stage 3 learning; including programming languages, algorithms, memory, storage, network security.