

Curriculum Map

Subject

Computing

Year

Unit	Summary	Skills	Assessment	British Values and SMSC	Career links	Cross-curricular links
Advanced Python	Students explore how to create functions and break down programs into smaller 'chunks'.	Decomposition Abstraction Problem solving Team working	Online MS Forms	Cultural – game expansions – how this impacts business Rule of law - copyright	Programmer Games Designer IT specialist	Maths Physics Business STEM English
Cryptography	Students explore cryptography through the ages and learn about historical techniques and how they impact on technology today.	Decomposition Abstraction Problem solving Team working	Online MS Forms	Cultural – how encryption impacted WWII Social – how your data is treated now Rule of law – DPA/GDPR/FOI	Banking Crypto Analyst Programming Cyber Security	History Geography Maths Business STEM English
Understanding How Computers Think	Students develop their knowledge of data representation by exploring binary, hexadecimal and logic gates.	Identifying hardware & software Converting to different number systems (binary & hex) How hardware works (logic gates)	Online MS Forms	Social – how technology influences the local area Cultural – appreciating the impact gaming has made on society	Programmer Games Designer IT specialist Hardware Engineer	Maths Physics Business STEM
Python - Files	Students start to work with data stored in external files.	Decomposition Abstraction Problem solving Team working Working with external data sets	Online MS Forms	Social – how technology influences the local area Cultural – how data storage impact the job market	Programmer Games Designer IT specialist	Maths Physics Business STEM English
Photoshop - Advanced Skills	Students recap key skills in photoshop and develop specific pieces of digital art to meet set criteria.	Photoshop Skills Sourcing Images Developing a sense of audient and purpose	Online MS Forms	Rule of law – laws around copyright Individual liberty – the ability to express yourself Social – which demographics are you?	Photographer Artist Graphic Designer Journalist 2D/3D Artist Game Designer	Art Geography Business STEM
Comic Life	Students explore a range of pre-production documents and create a comic book to meet a client brief.	Interpreting a client brief Identifying target audience demographics Developing a sense of audience and purpose	Online MS Forms	Cultural – how comics differ around the world Social – comic books are a tool for freedom of expression?	Project manager Digital Illustrator Graphic Designer Journalist 2D/3D Artist Game Designer	Maths Physics Business STEM English