

## Curriculum Map 2023-24

## Year 10

Half term	Unit title with hyperlink to scheme of work	Unit summary	Skills & content covered	Skills & content revisited	Summary of formative marking, feedback and student response	Summative assessment schedule, including assessment criteria
Autumn 1	<a href="#">Computational thinking and Python recap + python next steps</a>	Students learned about basics in KS3 and in Year 9. Our aim is to have some sort of programming activities every week.	Students will be revisiting python learned in Year 9 by looking at different problem solving scenarios. More complex programming skills such as 1D and 2D arrays, subroutines and file handling.	Python basics and abstraction, decomposition, algorithmic thinking	Homework, Teams activities/tasks and verbal feedback. Identifying and correcting common misconceptions.	<a href="#">End of unit test</a>
Autumn 2	<a href="#">Network basics, threats and prevention</a>	This unit allows learners to explore how a computer network works from the hardware required to the protocols used for communication. This unit enables students to gain knowledge and understanding of the range of cybersecurity threats impacting the world, our organisations, as well as us as individuals. Learners will explore	What is network and its advantages + disadvantages. Topology, protocols, network layers. Vulnerabilities of a network and how to protect it from external attacks. Students will learn and discuss about real life incidents and analyse potential cause and solution.	Revisiting network and different types taught in KS3	Homework, Teams activities/tasks and verbal feedback. Identifying and correcting common misconceptions.	<a href="#">End of unit test</a>
Spring 1	<a href="#">Defensive design and database</a>	Learners explore the key terms used in a database and learn why relational databases are used to eliminate redundancy and inconsistencies that can occur in a flat file database. They will learn basic SQL commands to query a database.	Students will learn about the use of database and how to create one. They will then learn basic SQL commands to run queries on a database.	Experience of using websites/apps that contain databases.	Homework, Teams activities/tasks and verbal feedback. Identifying and correcting common misconceptions.	<a href="#">End of unit test</a>
Spring 2	<a href="#">Testing</a>	Students will learn testing their programs and the suitability of different types of testing.	White box and black box testing. Alpha and Beta testing. Identifying the needs of testing and creating test tables.	Tested products in previous KS3 units to assess its suitability.	Homework, Teams activities/tasks and verbal feedback. Identifying and correcting common misconceptions.	<a href="#">End of unit test</a>
Summer 1	<a href="#">Cultural and ethical issues</a>	Ethical, legal, environmental issues of computing and their effect on human lives.	Analytical skills through reading various scenarios and planning an answer suitable for the given context by applying their knowledge.	An understanding of laws and their uses in general. Awareness of modern inventions in CS fields, such as AI, and their effects on our society.	Homework, Teams activities/tasks and verbal feedback. Identifying and correcting common misconceptions.	<a href="#">End of unit test</a>
Summer 2	<a href="#">Revision for mocks</a>		All content taught so far	Topics covered so far.	Class discussion, modelling answers, addressing common misconceptions	<a href="#">2 papers</a>