

## Curriculum Map 2023-24

## Year 12

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="#">Network</a>	This unit allows students to explore how networks are connected and gather indepth knowledge on how the Internet works.	Students will learn the following: structure of network, Internet communication, network security, HTML and CSS, JavaScript, how search engine works including PageRank algorithm and client side/server side processing.	This topic was taught in GCSE and students should be able to reapply their knowledge	Teams assignment, quiz, homework	<a href="#">End of unit test</a>
Autumn 2	<a href="#">Data Types</a>	Students will look at how data is stored on computer as binary	Numbers, hex, ASCII, sound, images, compression techniques	Students have learned about binary in KS3, KS4	Teams assignment, quiz, homework	<a href="#">End of unit test</a>
Spring 1	<a href="#">Boolean Algebra</a>	This unit allows students to explore how negative and decimal numbers are represented/stored by computer	Sign-magnitude and 2's complement, fixed point and floating point numbers. Binary subtraction, division and multiplication	This topic is a continuation from binary nummber system taught in GCSE and in Year 12	Teams assignment, quiz, homework	<a href="#">End of unit test</a>
Spring 2	<a href="#">Data Structure</a>	This unit allows student to work with different abstract data structures beyond variables	1D + 2D array, record, tree, graph, queue, stack and associated algorithms to manipulate these datastructures.	Concept of data structure but only limited to array, list and record	Teams assignment, quiz, homework	<a href="#">End of unit test</a>
Summer 1	<a href="#">Coursework</a>	NEA will be introduced. Students must start researching what they could create as a solution to their coursework	Practical application of computational thinking and programming skills	Programmig, test plan taught in GCSE	Several deadlines will be set for students to complete sections of NEA	<a href="#">NEA is moderated upon completion</a>
Summer 2	<a href="#">Revision</a>	All content taught so far	All content taught so far	All content taught so far	All content taught so far	<a href="#">One combined paper</a>