Curriculum Map 2025-2026						
Year 12						
Half Term	Unit title with hyperlink to scheme of work	Unit summary	Skills & content covered	Skills & content revisited	Summary of formative marketing, feedback and student response	Summative assessment schedule, including assessment critertia
Autumn 1	Component 1 - Network Web Technologies	Network topology Client-server and peer-to- peer Wireless networking, CSMA and SSID Communication and privacy ,The challenges of the digital age	Students will learn about essential features of a network, different types of network and hardware, network protocols and security.	Students have covered elements of networking in GCSE. They have learned about security features, topologies and protocols.	Homework, Teams activities/tasks and verbal feedback. Identifying and correcting common misconceptions. Feedback sheets identifying student's targets and student response.	End of unit assessment
Autumn 2	Component 1 - Data types and Component 3 - Introduction to NEA	Data representation, NEA proposal	Students will learn about number systems, Bits, bytes and binary, Binary arithmetic, Bitmapped graphics, representation of sound, compression and encryption	Students have learned about data representation in GCSE. They have also covered compression techniques		End of unit assessment
Spring 1	Boolean Algebra, analysis and investigation	Logic circuits, truth table and karnaugh map	Students will construct truth tables for a variety of logic gates, will draw and interpret logic gate circuit diagrams involving multiple gates write a Boolean expression for a given logic gate circuit draw an equivalent logic gate circuit for a given Boolean expression	KS4 -Systems architecture, why computers understand binary		End of unit assessment
Spring 2	Component 1 - Computer related legislation Privacy and censorship Cultural issues	Legislation to protect people, data, privacy	Students will learn about GDPR, Patent, Computer misuse act, RIPA	KS4 - OS and its fuctions		End of unit assessment
Summer 1	Component 3 - Nea - Analysis and investigation	Student will work on their first draft of Analysis and investigation	Students will start researching about existing solutions, identify features to include in their own project, carry out interviews and survey to finalise success criteria of their NEA.	KS4 - Problem solving and computational techniques		End of unit assessment
Summer 2	Revision and students will continue working on NEA as the deadline for analysis and design is due	Students will review all the content covered throughout the year to consolidate their understanding and prepare for their mock exams. They will focus on key topics from both Paper 1 and Paper 2, reinforcing their knowledge and practicing exam techniques to ensure readiness for the assessments.	Revision	Revision		Mock Exams

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Autumn 1	Component 2 - Computational Thinking and programming concepts	Python programming skills, IDE, Abstraction, decomposition, algorithm writing, Pipelining, backtracking, data mining, data visualisation	Students will also learn about prgramming techniques and apply their knowledge to problem solving. They will learn about computational thinking and methods.	Python basics and abstraction, decomposition, algorithmic thinking	Homework, Teams activities/tasks and verbal feedback. Identifying and correcting common misconceptions. Feedback sheets identifying student's targets and student response.	
Autumn 2	CPU structure, memory and storage. Students will also continue with programming practice and complete a mini project	FDE cycle, RAM vs ROM, Various storage types such as magnetic, flash and optic. This will also include assembly language and how CPU works	Students will revisit internal computer hardware, The processor , Input - output devices, Secondary storage devices, assembly language	KS3 Understanding computers KS4 Systems architecture		
Spring 1	Software Development and system software	Operating system software and industry specific developmental strategies	Students will learn about different software development methodologies such as waterfall, RAD, agile, spiral and their application in real life	KS4 - OS and its fuctions		
Spring 2	Python Programming and data structure	Queues, Lists, Stacks, Hash tables and dictionaries, Graphs, Trees, Vectors	Students learn the concept and uses of a queue, stack, list, graph, tree, hash table, dictionary and vector	Python next step, problem solving, 1D/2D array		
Summer 1	Component 3 - Nea - Analysis and investigation	Student will work on their first draft of Analysis and investigation	Students will start researching about existing solutions, identify features to include in their own project, carry out interviews and survey to finalise success criteria of their NEA.	KS4 - Problem solving and computational techniques		End of unit assessment
	Data structure by applying the knowledge in coding them	Continuation of Data structure	Students will implement array, list, tree, graph, hash table using codes and will learn to apply them in their NEA	Python next step, problem solving, 1D/2D array		
Summer 2	Revision and students will continue working on NEA as the deadline for analysis and design is due	Students will review all the content covered throughout the year to consolidate their understanding and prepare for their mock exams. They will focus on key topics from both Paper 1 and Paper 2, reinforcing their knowledge and practicing exam techniques to ensure readiness for the assessments.	Revision	Revision		Mock Exams