



SUBJECT: Curriculum Overview
Year 9

Half Term	Topic studied	What will I learn?	How will I be assessed?
Year 9 Autumn 1	Networks, Protocols and Cyber Threats	• LANs, WANs, wired and wireless networks • Network hardware, topologies and performance factors • Protocols and how the internet works • Malware, phishing, social engineering and brute-force attacks • Prevention methods and secure use of networks	Through classwork and homework on Google Classroom. End of unit assessment follows.
Year 9 Autumn 2	Python Algorithms, Boolean Logic and Problem Solving	• Designing algorithms before coding • Subroutines, lists and string handling • Boolean operators and logic in conditions • Validation, searching and problem-solving techniques • Testing, debugging and improving Python programs	Assessed through practical programming challenges and an end of unit programming assessment.
Year 9 Spring 1	Data, Databases and Searching	• Tables, fields, records and data types • Primary keys and relationships between tables • Flat-file and relational databases • Queries using criteria, logical operators and wildcards • Forms, reports and calculated queries	Assessed through practical database tasks and a final database challenge.
Year 9 Spring 2	Artificial Intelligence, Data and Bias	• What artificial intelligence and machine learning are • How systems can be trained using data • Patterns, predictions, accuracy and limitations • Bias in data and technology • Responsible, ethical and effective use of AI tools	Assessed through classwork, case-study analysis and an end of unit assessment.
Year 9 Summer 1	Technology, Ethics, Law and Digital Society	• Legal, ethical, cultural and environmental impacts of technology • Data privacy, surveillance and customer data • Automation, banking, retail systems and the digital divide • Misinformation, trust and media literacy • Emerging technologies and future careers in Computing	Assessed through classwork, discussion tasks and a written case-study response.
Year 9 Summer 2	GCSE Transition Project: Design, Code, Test and Refine	• Analysing a problem and defining success criteria • Designing algorithms using flowcharts and pseudocode • Coding a solution using Python • Creating a test plan and refining the program • Evaluating the final solution and explaining improvements	Assessed through a GCSE-style project portfolio containing design, code, testing evidence and evaluation.