Curriculum Plan: Computer Science

Year Group	Autumn 1 - 7 weeks	Autumn 2 - 7 weeks	Spring 1 - 6 weeks	Spring 2 - 5 weeks	Summer 1 - 7 weeks	Summer 2 - 7 weeks
7	Networks and Security • Basic Computing skills • Passwords & digital footprint • staying safe online	Data representation • creating spreadsheets • Using formulas in a spreadsheet • Creating charts from a spreadsheet	Computational Thinking • Sequencing with Scratch • Variables with Scratch • Lists with scratch • Loops with Scratch	Programming • Programming essentials in scratch	Computers • operation systems • Software	IT and the Media • Graphics- Design a magazine
8	Networks and Security • Computer viruses • Social engineered attacks • Securing your computer • Hacking	Data representation • Producing and editing sounds • Producing and editing images • How computers produce text	Computational Thinking • Decomposition • Abstraction • Flow Diagrams	Programming • Programming essentials in Python Turtle	Computers • Hardware • Storage • Memory	IT and the media • Impacts of Technology & Web Design

9	Networks and Security - Network Types - Network Security - Internet and transferring data	Data representation - Binary - Hex - Boolean Logic	Computational Thinking - searching & sorting - Programme planning - Debugging	Programming - Programming essentials in Python	Computers - Fetch, Execute Cycle - File Management - Linux	IT and the media - AI - App Design
10 Digital Information Technology 2024 onwards	User interfaces - **Types of user interfaces** - **Audience needs** - **Design Principles**	User Interfaces - **Creating a project proposal and plan** - **Developing a User interface**	User Interfaces - **Reviewing a User interface**	**Collecting, Presenting and Interpreting Data** - **Representing information** - **Collecting Data**	**Collecting, Presenting and Interpreting Data** - **Data processing and manipulation methods** -	Collecting, Presenting and Interpreting Data - **Presenting data** - **Drawing conclusions**

Year Group	Autumn 1 - 7 weeks	Autumn 2 - 7 weeks	Spring 1 - 6 weeks	Spring 2 - 5 weeks	Summer 1 - 7 weeks	Summer 2 - 7 weeks
11 Computer Science GCSE Ending 2025	**Component 1** ● Unit 1 recap ● Mock assessment	**Component 1** ● Unit 1 recap advised by mock assessment **Component 2** ● Component 2 recap ● Mock assessment	**Component 2** ● Unit 2 recap advised by mock assessment	**Revision** ● Full past paper assessment	**Revision** ● Mock review ● Revision and exam technique	**Exams**
12 Computer Science A level	**Component 1** ● Structure ● Types of processor ● Input, Outputs and storage **Component 2** ● Programming techniques	**Component 1** ● System software ● Application generation ● Software development **Component 2** ● Programming techniques	**Component 1** ● Types of programming language ● Compression, encryption and hashing ● Databases **Component 2** ● Programming techniques	**Component 1** ● Websites ● Web technologies **Component 2** ● Programming techniques	**Component 1** ● Data types **Component 2** ● Programming techniques	**Component 1** ● Boolean Algebra ● Legislation **Component 2** ● Programming project
13 Computer Science A level	**Component 1** ● Data types ● Data structures ● Boolean Algebra **Component 2** ● Programming project	**Component 2** ● Thinking procedurally ● Thinking concurrently ● Algorithms ● Computational methods	**Component 2** ● Algorithms ● Programming project ● Mock assessment	**Revision** ● Mock review ● Revision and exam technique	**Revision** ● Mock review ● Revision and exam technique	**Exams**

		• **Programming techniques**				