



Year 12 Computer Science Curriculum Map						
Half Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Big Themes	The characteristics of contemporary processors, input, output and storage devices. Components of a computer and their uses.	Software and software development. Types of software and the different methodologies used to develop software	How data can be compressed, encrypted and stored.	How data is exchanged between different systems.	Data types, data structures and algorithms. How data is represented and stored within different structures. Different algorithms that can be applied to these structures	The individual moral, social, ethical and cultural opportunities and risks of digital technology. Legislation surrounding the use of computers and ethical issues that can or may in the future arise from the use of computers.
Knowledge and skills covered	<ul style="list-style-type: none">• 1.1.1 Structure and function of the processor• 1.1.2 Types of processor• 1.1.3 Input, output and storage• Dedicated programming lessons	<ul style="list-style-type: none">• 1.2.1 Systems software• 1.2.2 Application generation• 1.2.3 Software development• Dedicated programming lessons	<ul style="list-style-type: none">• 1.2.4 Types of programming language• 1.3.1 Compression, encryption and hashing• 1.3.2 Databases• Dedicated programming lessons	<ul style="list-style-type: none">• 1.3.3 Networks• 1.3.4 Web technologies• Dedicated programming lessons	<ul style="list-style-type: none">• 1.4.1 Data types• 1.4.2 Data structures• 1.4.3 Boolean algebra• Dedicated programming lessons	<ul style="list-style-type: none">• 1.5.1 Computer-related legislation• 1.5.2 Ethical, moral and cultural issues• Programming Project - Defining Project

Knowledge organisers and more detailed topic resources can be found on all student Google Classrooms



Year 12 Key 'Subject' Assessment Dates 2021-22		
Data Drop 1	Data Drop 2	Data Drop 3
Revision Focus: Each topic taught this term. Assessments: Written end of topic tests Feedback sessions: At the end of each topic	Revision Focus: Each topic taught this term. Assessments: Written end of topic tests Feedback sessions: At the end of each topic	Revision Focus: Each topic taught this term. Assessments: Written end of topic tests Feedback sessions: At the end of each topic