KS4 Year 10 CURRICULUM OVERVIEW

Computer Science: Year 10

	Topics being taught	What you will be assessed on	How you can support at home
Autumn Term	**Systems Architecture**	• 1.1 System Architecture – components and registers • 1.2. Memory – RAM, ROM, virtual storage • 1.3. Storage- secondary storage devices	Pre teach Key terminology Vocabulary Exam-Style Questions – GCSE Computer Science Revision - BBC Bitesize
	OCTOBER 1/2 TERM **Programming Fundamentals**	• Inputs, Variables and Data Types • The 3 mains programming constructs, Sequence, Selection and Iteration.	Pre teach Key terminology Vocabulary Python - Intermediate - 101 Computing
Spring Term	CHRISTMAS **Data Representation**	• 2.6 Binary and Denary Conversions • Hexadecimal • Sound and Images • ASCII	Pre teach Key terminology Vocabulary Binary Logic for GCSE (101computing.net)
	FEBRUARY 1/2 TERM **Programming Fundamentals**	• The 3 mains programming constructs, Sequence, Selection and Iteration. • String Manipulation • Trace Tables	Pre teach Key terminology Vocabulary Python - Intermediate - 101 Computing
Summer Term	EASTER **Algorithms and Computational Thinking**	• Computational Thinking, Algorithms and Programming • Searching and Sorting Algorithms • Designing, creating and refining algorithms	Pre teach Key terminology Vocabulary Algorithm a Day Lite - CSUK:ReviseCS
	MAY 1/2 TERM **Programming Fundamentals**	• Subroutines • Arrays and Lists • File Writing • Practical Programming Summer Project	Pre teach Key terminology Vocabulary Python - Intermediate - 101 Computing

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KS4 Year 11 CURRICULUM OVERVIEW

Computer Science: Year 11

	Topics being taught	What you will be assessed on	How you can support at home
Autumn Term	**Computer Networks**	• 1.3 Networks • 1.4 Wired and Wireless Networks • 1.4 Network Topologies • 1.5 Network Topologies, Protocols and Layers	Pre teach Key terminology Vocabulary OCR GCSE Computer Science Revision Notes 2022 | Save My Exams
	OCTOBER 1/2 TERM		
	Systems Software and Security	• Threats to computer systems and networks • Identifying and preventing vulnerabilities • Operating systems • Utility software	Pre teach Key terminology Vocabulary OCR GCSE Computer Science Revision Notes 2022 | Save My Exams
	CHRISTMAS		
Spring Term	**Producing Robust Programming**	• 2.3 Defensive design • 2.4 Computational Logic • 2.5 Translators	Pre teach Key terminology Vocabulary Binary Logic for GCSE (101computing.net)
	FEBRUARY 1/2 TERM		
	Ethical, Legal, Cultural and Environmental Issues	• 1.8 Ethical, Legal, Cultural and Environmental Concern. • Extended answer questions • Legislation	Pre teach Key terminology Vocabulary OCR GCSE Computer Science Revision Notes 2022 | Save My Exams
	EASTER		
Summer Term	**Revision Techniques & Exam Practice**	• Walking and talking Mock • Practice Papers • Past Papers	Pre teach Key terminology Vocabulary Free Resources - CSUK:ReviseCS
	MAY 1/2 TERM		
	Revision Techniques & Exam Practice	• Walking and talking Mock • Practice Papers • Past Papers	Pre teach Key terminology Vocabulary OCR GCSE Computer Science Past Papers - Revision World

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