

## EPCHS Computing Department: Year 11 Computer Science Programme of Study

*Our intent is for pupils to understand and apply the fundamental concepts and principles of Computer Science. To be able to analyse problems in computational terms through practical problem-solving experience. Enable learners to think creatively, innovatively, analytically, logically and critically. Understand the components that make up digital systems and how they communicate with one another. Understand the impacts of digital technology to the individual and wider society. Apply mathematical skills relevant to Computer Science.*

Year/Term	Unit of Work	Intent
Autumn	2.1 Computational Thinking & Algorithms	To understand the concept that a set of instructions completed in-order is an algorithm.
	2.2 Programming Fundamentals	To develop programming skills in Python, Little Man Computer (LMC), HTML, and SQL to be able to identify sequence, selection and iteration in code. To understand the importance of Defensive Design and Testing during development.
Spring	2.3 Producing Robust Programs	To understand the aspects of writing computer code that supports its maintenance and development.
	2.4 Logic	To know the use of the key logic operators of AND, OR and NOT.
Summer	2.5 Translators & IDEs	To understand how programming languages are converted from high-level code to machine code.

	Revision for Exams	Revisiting topics for exams. Using Smart Revise as a revision aid.
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