



# Computing

		Autumn		Spring		Summer	
		Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 12	Knowledge	1.1.1 Structure and function of the processor 1.1.2 Types of processor	1.1.3 Input, output and storage 1.2.2 Application Generation 1.2.1 Operating systems - systems software	1.2.4 Types of programming language 1.3.2 Databases 1.3.1 Compression Encryption & Hashing	1.2.3 Software development	1.4.2 Data structures part 1 2.1.1-2.1.5 Computational thinking NEA	NEA
	Skills	Python: <ul style="list-style-type: none"> <li>• Subprograms</li> <li>• Selection</li> <li>• Iteration</li> <li>• Number operations</li> <li>• Arrays/lists</li> </ul>	Python: <ul style="list-style-type: none"> <li>• Parameter Passing</li> <li>• Local vs global</li> <li>• String operations</li> <li>• Serial Files</li> <li>• Recursion</li> </ul>	Python: <ul style="list-style-type: none"> <li>• OOP principles</li> <li>• Use SQL to interrogate a database</li> </ul>	<ul style="list-style-type: none"> <li>• PYGame</li> </ul>	<ul style="list-style-type: none"> <li>• OOP and procedural implementation of data structures</li> <li>• Read and write Pseudocode</li> <li>• Read and write Trace tables</li> </ul>	<ul style="list-style-type: none"> <li>• NEA</li> </ul>
	Assessment	End of term assessment on topics covered this half term Programming Challenges	End of term assessment on topics covered this half term Programming Challenges	End of term assessment on topics covered this half term Programming Challenges	End of term assessment on topics covered this half term	End of term assessment on topics covered this half term	End of term assessment on topics covered this half term

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Year 13	Knowledge	NEA - programming project		1.4.1 Data Types 2.2.2 Computational Methods 2.3.1 Algorithms	1.3.4 WebTechnologies 1.4.3 Boolean algebra 2.3.1 Algorithms	Revision	
	Skills	Analysis Design Development Evaluation		Binary Arithmetic	Create algorithms to solve problems  Apply key computational algorithms to solve problems		
	Assessment	Stages of NEA		Past Questions on computational methods/ binary  Mock Exam	Past Questions on Algorithms/boolean algebra  Mock Exam		

