Computer Science

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

	1	2	3	4
Year 7	Esafety quiz in	PC	Plan and creation	Python
	Scratch	components	of your own	Assessment
		presentation	Scratch game	
Year 8	Esafety website	Crazy	Python assessment	Plan and creation
	coded in HTML	Computing in-		of your own
	and JavaScript	class end of		game in Kodu
		unit test		
Year 9	Esafety based	Cyber Security	Dynamic website	-
	Python text	presentation	creation using	
	based game		HTML, JavaScript	
			and CSS	
Year 10	Assessed via a 20 hour (Mock) Programming Project			
Year 11	Assessed via a 20 hour Programming Project			

Subject AO	Simple summary	
AO-1	Demonstrate knowledge and understanding of the key concepts and	
	principles of computer science.	
AO-2	Apply knowledge and understanding of key concepts and principles of	
	computer science	
AO-3	Analyse problems in computational terms:	
	to make reasoned judgements	

	• to design, program, evaluate and refine solutions
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Key Skills	
1	Analytical skills
2	Problem-solving skills
3	Creativity
4	Critical-thinking skills
5	Resilience

Useful resource links (web sites, books etc)			
www.computing.outwood.com/NEA/python/key-syntax.html			
www.stackoverflow.com			
www.python.org			
www.scratch.mit.edu			