



SUBJECT	<b>Computer Science</b>	YEAR	<b>10</b>
<p><b>Why do we study Computing?</b></p> <p><b>Students studying computer Science at Rushcliffe will develop the knowledge and skills to allow them to work and think like a computer scientist.</b></p>			
What you will learn this year	What you have learned before	Where you can read more	
Computer Architecture			
Advanced knowledge of PC components and the need for them How components impact speed of PC Advanced knowledge of the FDE cycle	Applying knowledge of saving files Understanding the concept of binary Basic knowledge of memory Basic knowledge of PC Components Basic knowledge of the fetch-decode-execute cycle		
Memory and Management			
Advanced knowledge of different types of memory and their uses. Data storage Advanced knowledge of binary Advanced knowledge of how images, characters and sound is stored on a computer Basic knowledge of compression	Basic knowledge of memory Understanding the concept of binary Advanced knowledge of the components within the CP Understanding of how images and sound are represented on a computer		
Computer Networks			
Advanced knowledge of how computers communicate over a network Different types of topologies Introduction to basic protocols	Basic knowledge of how computers communicate over a network Advanced knowledge of binary		
Computer Security			
How threats can be minimalised via a range of prevention techniques Importance of computer legislation and application to scenarios	Application of the computer misuse act to a particular scenario Greater understanding of computer legislation How computers communicate through networks		
System Software			
The need for and importance of the operating system The need for and importance of utility and system software	Applying knowledge of saving files Understanding the concept of binary Basic knowledge of memory Basic knowledge of PC Components Basic knowledge of the fetch-decode-execute cycle		
Ethical, legal, cultural and environmental impact			
Advanced knowledge of the legislations relevant to Computer Science	Application of the computer misuse act to a particular scenario Greater understanding of computer legislation		