



SUBJECT	Computer Science		YEAR	12
<p>Why do we study Computing? Students studying computer Science at Rushcliffe will develop the knowledge and skills to allow them to work and think like a computer scientist.</p>				
What you will learn this year	What you have learned before	Where you can read more		
Computer Architecture				
Advanced knowledge of the different types of processors Consolidation of PC components, FDE cycle.	Advanced knowledge of PC components and the need for them How components impact speed of PC Advanced knowledge of the FDE cycle			
Software Development				
Advanced knowledge of memory types, and application of these for a scenario. Advanced knowledge of compression Advanced knowledge of how applications are generated. Advanced knowledge of binary representation	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			
Networking				
Advanced knowledge, and able to compare topologies. Advanced knowledge of protocols and their need within a network Consolidation of how computers communicate. Advanced knowledge of HTML, CSS and SQL	Advanced knowledge of how computers communicate over a network Different types of topologies Introduction to basic protocols Knowledge of HTML, CSS and SQL			
Ethical, legal, cultural and environmental impact				
Advanced knowledge of legislations relevant to Computer Science, and how these apply to scenarios	Advanced knowledge of the legislations relevant to Computer Science			