

## KS4 Curriculum Map

## Computer Science

	Learning Cycle 1	Learning Cycle 2	Learning Cycle 3
Year 10	3.1 Fundamentals of algorithms	3.2.2 Programming concepts	3.3.7 Representing sound
	3.1.1 Representing algorithms	3.2.7 Input/output and file handling	3.3.8 Data compression
	3.1.2 Efficiency of algorithms	3.2.8 String handling operations in a	3.4 Computer systems
	3.2.1 Data types	programming language	3.4.1 Hardware and software
	3.3.2 Converting between number bases	3.2.9 Random number generation in a programming language	
		3.2.10 Subroutines (procedures and functions)	
		3.3.6 Representing images	
	Learning Cycle 1	Learning Cycle 2	Learning Cycle 3
Year 11	3.4.3 Software classification	3.6 Fundamentals of cyber security	3.6.2 Methods to detect and prevent cyber security threats
	3.4.4 Systems architecture	3.6.1 Cyber security threats	3.7 Ethical, legal and environmental impacts of
	3.5 Fundamentals of computer networks	3.6.1.1 Social engineering	digital technology on wider society, including issues of privacy
		3.6.1.2 Malicious code 3.2.2 Programming concepts	3.8 Aspects of software development
		3.2.7 Input/output and file handling	
		3.2.8 String handling operations in a	
		programming language	
		programming language  3.2.9 Random number generation in a programming language	