Year: 12
Subject: Computing

Term	Week	Focus	Summary	Learning Outcomes	Learning skills
Term 2.1	1	Mocks examinations			
	2				
	3				
	4	Computer organisation and architecture	Internal hardware including busses, main memory The CPU, addressable memory, stored program concept Assembly language	Describe the working of the internal hardware of a PC and how binary is used manipulated within this process	Logical thinking Linking to real world
	5	Computer organisation and architecture	Assembly language Fetch execute cycle Assessment	To write a low level language/assembly langue for given tasks	Logical thinking Collaboration Self-regulation
	6	Computer organisation and architecture	Feedback and DIRT Examination technique	Assessment and reflection time	Self-regulation
Term 2.2	1	Networking and Communication	Communication basics Networks	Explore the fundamentals of networking communication methods and how networks send/receive data using CSMA	Critical and logical thinking Collaboration and debating Real world links
	2	Consequences of using computers DIRT	Moral, ethical, legal and cultural issues Mock reflection	To discuss the consequences of using computers from moral, ethical, legal and cultural aspects	Real world links/scenarios Collaboration
	3	Programming and Algorithms	Programming fundamentals	Creating programs that use a variety of skills needed within the Alevel course	Precision, analysis and creating

	4	Programming and Algorithms and Data Structures	Trace tables Arrays Global and local variables	Ability to trace through an algorithms and evidence changes to data Advanced uses of 1d and 2d arrays Analysing the uses of local and global variables	Precision, analysis and creating
	5	Data Structures	External Data User defined data types Validation	Creating programs that read and write to external files Exploring enumerate Exploring how to prevent a variety of errors including run time errors	Precision, analysising, real world applications and logical thinking