KS5 - Computing and IT

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 12	**Level 3 BTEC National in Computing - *Extended Certificate***					
	Unit 1 **Principles of computer science** - Computational thinking - Algorithms	**Unit 1** **Principles of computer science** - Programming and Types of programming Languages	**Unit 1** **Principles of computer science** - Data representation and architecture - Project by programming a solution for a client - Hardware and software, Algorithms and programming, networks and databases.	**Unit 3** **System security and encryption** - Current IT security threats, information security and the legal requirements affecting the security of IT systems.	**Unit 3** **System security and encryption** - Cryptographic techniques and processes used to protect data	**Unit 3** **System security and encryption** - Techniques used to protect an IT system from security threats
Year 13	**Unit 2** **Fundamentals of computer science** - Hardware and Software - Computer Architecture - Data Representation	**Unit 2** **Fundamentals of computer science** - How Data is organised - How data is transmitted	**Unit 2** **Fundamentals of computer science** - Use of Logic and data flow in a computer system	**Unit 4** **Website development or Mobile Apps development** - Principles of website/ APP development	**Unit 4** **Website development or Mobile Apps development** - Design, develop and evaluate a website/ APP making use of scripting techniques.	**Course End**