

Year 11 GCSE COMPUTING

Overall Intent:

Students will learn about networks and the security risk associated with cloud computing and shared resources. This leads into term two where the students understand the legislation that has been developed to deter and sanction breaches. This teaches the skills of analysis, development, testing and evaluation. The final term ends with intensive revision and exam technique in order to fully prepare students to confidently organise their knowledge and apply it in a range of settings, which also supports preparation for the GCSE examinations.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic/area of study	NETWORKS AND TOPOLOGIES	ETHICAL, LEGAL, CULTURAL AND ENVIRONMENTAL IMPACT	THREATS TO COMPUTER SYSTEMS AND NETWORKS	EXAM PREPARATION	EXAM PREPARATION	FINAL EXAM
Key learning aims – knowledge and skills	Students will learn the different factors that affect network performance, know the tasks performed by each piece of hardware, show an awareness of the concept of the internet as a network of computer networks and be able to explain the advantages and disadvantages of	Students will acquire knowledge on a variety of examples of digital technology and how this impacts on society. They will know and explain the purpose of each piece of legislation and the specific actions it allows or prohibits and will be able to recommend a type of licence for a given scenario	Students will review knowledge from term one in the context of cyber security. They will know the threats posed to online devices and systems and will develop knowledge of the principles of each form of attack, such as how the attack is used and the purpose of the attack.	Students will recap and prepare the following skills ready for the exams: understand and apply the fundamental principles and concepts of Computer Science, including abstraction, decomposition, logic, algorithms, and data representation, analyse problems in computational terms through practical experience of solving such problems, including designing, writing and debugging programs, think creatively, innovatively, analytically, logically and critically, understand the components that make up digital systems, and how they communicate with one another and with other systems, apply mathematical skills relevant to Computer Science.		Students will sit their final exam in the early part of this term. At this point, the course concludes.

	various network topologies.	including benefits and drawbacks.				
Assessment	Baseline Assessment	Unit test	Unit test	Unit test	Final GCSE	Final GCSE