Year 11 Computer Science

Subject and Year Group	Autumn Year 11	Autumn 2 Year 11	Spring 1 Year 11	Spring 2 Year 11	Summer 2 Year 11
Topic/Unit to be studied	**Theory:** Computational Logic and Languages **Practical:** File writing and defensive design **Theory:** Computer networks, protocols		**Theory:** Network Security and Threats Software and CS Issues, Revision **Practical:** SQL, Revision		Revision
Core Knowledge and skills	• To understand how decisions are made within the CPU. • To demonstrate how data can be permanently stored using files in programming • To understand the components that make up digital systems, and how they communicate with one another and with other systems.		• To be able to understand the different threats to a network and to describe ways that these threats can be prevented. • To be able to understand the impacts of digital technology to the individual and to wider society . • To demonstrate using SQL to a query a database and retrieve information		
Assessment (How do we know if pupils have learnt what we've taught them?[8])	**Formative:** Practical programming Assessment **Summative:** Test 1: Networks Wired and Wireless **Summative:** Mock exam Paper 1 and Paper 2 **Formative:** Programming Test: Robust programming, IDLE		**Formative:** Practical programming Assessment **Summative:** Topic Test 1 Data and Ethics Topic Test 2: SQL and Programming **Summative:** Mock exam Paper 1 and Paper 2 Interleaved exam questions		**Formative:** Practice Papers **Formative:** Programming and Algorithms Booklet