



# Computing

	Content
<b>Year 10 HT1</b>	Programming Concepts - Basic Syntax, Variables, Sequence, Selection, Iteration, Data Types.
<b>Year 10 HT2</b>	System Architecture - Computer Components, Boolean Logic, Von Neumann Architecture, Low Level Languages and Assemblers, CPU Performance and Embedded Systems, Primary Storage, Secondary Storage and Characteristics.
<b>Year 10 HT3</b>	Data Representation - Numbers, Characters, Images, Sound, Compression. Binary, Hexadecimal.
<b>Year 10 HT4</b>	Programming Languages, IDE's and Practise Projects.
<b>Year 10 HT5</b>	Networks - How Networks Work, Network Hardware, the Internet, Topologies, Network Protocols.
<b>Year 10 HT6</b>	Algorithms - Students explore algorithmic design, flow charts, search and sorts.
<b>Year 11 HT1</b>	Operating Systems & Utility Software - Students explore how their devices are managed and maintained using a variety of software.
<b>Year 11 HT2</b>	Programming Techniques - Students will learn more about how to structure and write efficient programs using procedures and functions.
<b>Year 11 HT3</b>	Computational Logic & Robust Design - In this unit students will learn more about the use of logic gates to create and plan flowcharts and formulas to create effective algorithms. They will also learn about robust design, enabling them to create programs that can withstand misuse.
<b>Year 11 HT4</b>	Ethics, Legal & Environmental Concerns - Students will discuss many different scenarios and concerns throughout computing, and the use of technology in the modern world.
<b>Year 11 HT5</b>	<u>Students will be completing formal GCSE exams</u>
<b>Year 11 HT6</b>	<u>Students will be completing formal GCSE exams</u>