

Develop learners who are resilient problem solvers with the ability to independently explore and apply their knowledge to the 21st century.



Computer Science						
	Term 1		Term 2		Term 3	
Year 10	<u>1.1 System Architecture</u> <i>Pupils look at the CPU and how the CPU, Cache and RAM work together to process instructions</i>	<u>1.2 Memory and Storage</u> <i>Pupils are introduced Cache, RAM, ROM and VM whilst also being introduced to the three types of storage: Optical, Magnetic and Solid State</i>	<u>1.3 Network connections and protocols</u> <i>Pupils learn how network connect devices together, along with the hardware required and learn how data is transmitted.</i>	<u>1.4. Network Security</u> <i>Pupils look into how Network breaches can take place and how to protect against internal and external threats.</i>	<u>1.5 System Software</u> <i>Pupils look at different Operating Systems and their functions, along with user interfaces.</i>	<u>1.6 LSEC</u> <i>Pupils will develop a deeper understanding of all the Legal, Social, Ethical and Cultural implications with the world of Technology and Computing.</i>
Year 11	<u>2.1 Algorithms</u> <i>Pupils are made aware of the types of sorting and searching algorithms. Pupils use said algorithms on sets of data.</i>	<u>2.2 Programming Fundamentals</u> <i>Pupils introduced to programming concepts; Selection, Iteration, Operators, Data Types, File Functions etc.</i>	<u>2.3 Producing Robust Programming</u> <i>Pupils look at creating programs that can withstand external threats.</i>	<u>2.4 Boolean Logic</u> <i>Pupils are made aware of the three Logic Gate: AND, OR, NOT. Pupils record input and outputs of circuits via Truth Table.</i>	<u>2.5 Programming Languages and IDE</u> <i>Pupils look at High Level Language and Low Level Language. Translators and Interpreters looking into and IDE's.</i>	<u>Revision and GCSE Exam</u> <i>Exam is usually early May. Lesson(s) spent revising and applying knowledge to exam questions / exam practice.</i>