



Verulam School: Key Stage 5 CURRICULUM INFORMATION

Department: Computer Science

Subject Leader: Mr P Schalker

Subject Vision: The aim of the Computer Science curriculum is to provide students with the knowledge and tools that will allow them to design and implement effective, economical, and creative solutions for the needs of individuals, society, and the high-tech economy. Problem solving being the key element that pulls all topics together. The curriculum's required courses give the student a strong foundation in both the software, hardware and programming aspects of computing, as well as the mathematics and science that underlie the discipline.

	YEAR 12					
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic/Unit Title	01 - The characteristics of contemporary processors, input, output and storage devices. 02 - Elements of computational thinking. Problem solving and programming	01 - Data types, data structures and algorithms. 02 - Elements of computational thinking. Problem solving and programming	01 - Software and software development. 02 - Elements of computational thinking. Problem solving and programming	01 - Exchanging data. 02 - Elements of computational thinking. Problem solving and programming. 03 - Programming Project documentation.	01 - Exchanging data. 02 - Elements of computational thinking. Problem solving and programming. 03 - Programming Project documentation.	02 - Elements of computational thinking. Problem solving and programming. 03 - Programming Project documentation.
	YEAR 13					
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic/Unit Title	01 - Software and software development. 03 - Programming Project development.	01 - Exchanging data. Data types, data structures and algorithms. 03 - Programming Project development.	01 - Data types, data structures and algorithms. 03 - Programming Project development.	02 - Elements of computational thinking. Problem solving and programming. 03 - Programming Project development.	02 - Problem solving and programming. Algorithms. 03 - Programming Project development.	Exams