



Verulam School: Key Stage 3 CURRICULUM INFORMATION

Department: Computing
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 7						
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic/Unit Title	Introduction to Verulam, Computing History and E-Safety	Block programming with Micro:bit.	Algorithms – Encryption, Searching and sorting & making a game	Images - Pixel art and GIF animation.	Text based programming with Python.	Robotics.
YEAR 8						
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic/Unit Title	E-Safety and Kodu 3D Game design.	Flowcharts and problem solving.	Programming with Micro:bit and Python.	Hardware and software.	HTML and website design.	Spreadsheet modelling.
YEAR 9						
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic/Unit Title	Python Programming.	Python Programming.	Machine Learning - Artificial Intelligence.	Mathematics of Computing.	Animation and Photoshop	iDEA.