

Year 11 Computer Science

The Year 11 curriculum has been devised to be engaging and practical, encouraging creativity and problem solving. It encourages students to develop their understanding and application of the core concepts in Computer Science. Students also analyse problems in computational terms and devise creative solutions by designing, writing, testing and evaluating programmes.

Methods of deepening and securing knowledge:	
Retrieval practice	Starter activities are used whilst students log on to computers, these are knowledge retrieval activities. Retrieval homework tasks are set.
Interleaving	Programming skills are revisited several times. Key concepts are repeatedly covered using different language and are interleaved within the curriculum.
Concrete examples	Concrete examples are used as the teacher demonstrates efficient coding practice.
Other	Dual coding is used as instructions for tasks include written steps and images showing what icons or tools look like.

	Autumn term 1	Autumn term 2	Spring term 1	Spring term 2	Summer term 1	Summer term 2
Topic(s)	Theory revision for PPE - Data representation - Logic and languages - Algorithms - Computer architecture - Ethical, legal and Cultural Issues - Networking threats	System Software - Networking threats - Identifying and preventing vulnerabilities - Operating systems - Utility software	Networking - The Internet - Local area networks - Wireless networking - Client-server and P2P networks - Protocols and layers	Revision All theory units	Revision All theory units	
Assessment	Year 11 PPE - November	System software assessment	Networking assessment	Practice exam paper	GCSE exam - May	
CEIAG (<i>Careers that are linked to that topic</i>)		IT Technician	Network Manager			

Homework:

Homework is a core part of learning and serves to support the learning in class. Regular homework is set to coincide with the majority of theory lessons. Homework is mainly set through the online tool Google Classroom, however some paper based homework tasks are set. Preparing for assessment is an essential part of each topic as each assessment allows teachers and students to see their progress. It is crucial that revision is completed so students can show what they know.