

Curriculum Overview

Subject: Computer Science

Year Group: 10



Students will begin by understanding and applying the principles of Computer Science including abstraction, decomposition, logic, and algorithms through practical experience of solving problems, including designing, writing, and debugging programs.

They will then focus on topics for GCSE paper 1. Here they will develop their knowledge of the components that make up digital systems and how they communicate with one another and with other systems. They will also understand the impacts of digital technology to the individual and to wider society.

TERM 1	TERM 2	TERM 3
KNOWLEDGE/SKILLS Programming concepts: <ul style="list-style-type: none"> • Sequencing • Selection • Iteration To create: <ul style="list-style-type: none"> • Efficient programs • Modular designs • Search for and manipulate data 	KNOWLEDGE/SKILLS 1.8 Environmental, Ethical, Cultural and Legal 1.1 Systems Architecture 1.2 Memory 1.3 Storage	KNOWLEDGE/SKILLS 1.4 Wired & Wireless Networks 1.5 Network topologies, protocols and layers 1.6 System Security 1.7 System Software
KEY ASSESSMENTS Half term 1: Intro to programming assessment Half term 2: Iteration and Lists assessment	KEY ASSESSMENTS Half term 1: 1.8, 1.1, unit assessment Half term 2: 1.2, 1.3, unit assessment	KEY ASSESSMENTS Half term 1: 1.4, 1.5, unit assessment Half term 2: 1.6, 1.7, unit assessment
Extended reading suggestions and external resources: OCR J276 Specification - OCR GCSE Computer Science J276 Specification BBC Bitesize KS4 - GCSE Computer Science - OCR - BBC Bitesize Craig n Dave Videos - Craig'n'Dave - YouTube		