

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: • Sequencing • Selection • Iteration To create: • 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		

Curriculum Overview

Subject: Information
Technology

Year Group: 11

OCR have set assignments which we have to follow. Students work their way through the 4 tasks which are usually: Research, Planning, Practical, Review. Unit R050 is the mandatory unit and is an externally based assessment in the form of an examination, usually an hour and a quarter in length. Students are assessed, internally moderated and then moderated externally by a moderator from OCR. The course is graded at Pass, Merit and Distinction.

TERM 1	TERM 2	TERM 3
KNOWLEDGE/SKILLS - R070: Recap - TA2 - Designing an AR model prototype (2.1 Planning and design consideration, 2.2 Design tools) - R070: Recap - TA3 - Creating an AR model prototype (3.1 AR model prototype, 3.2 Triggers, 3.3 Layers/ user interaction, 3.4 Information output) - R070: TA4 - Testing and reviewing (4.1 Testing, 4.2 Reviewing the process of creating the AR model prototype) - R070: NEA Assessment (working on) - R050: TA3 testing Recap	KNOWLEDGE/SKILLS - R070: NEA Assessment (submit for moderation) - R050: TA3 - Data and testing (3.5 Application of testing to a range of contexts) - R050: TA4 – Cyber security & legislation 4.1. Threats. 4.2. Impact - R050: TA4 - Cyber-security and legislation (4.2 Impact of attacks, 4.3 Prevention measures, 4.4 Legislation related to the use of IT systems) - R050: Exam Revision	KNOWLEDGE/SKILLS R050: Exam Revision
KEY ASSESSMENTS Half term 1: Completed R070 Units Assessment Past paper questions R050 Half term 2: Mock paper sat in class Completed R050 Units Assessment(s) PPE R050	KEY ASSESSMENTS Half term 1: Completed R070 Units Assessment Past paper questions R050 Half term 2: Mock paper sat in class Completed R050 Units Assessment(s) PPE R050	KEY ASSESSMENTS Half term 1: Past papers sat in class. Revision for final examination. Half term 2: Final examination R050

Extended reading suggestions and external resources:

OCR Cambridge National resources: [Cambridge Nationals - IT Level 1/Level 2 – J836 - OCR](#)

OCR-set assignments for NEA units are live for one year: <https://www.ocr.org.uk/qualifications/past-paper-finder/>

Candidates have one resubmission opportunity. All resubmissions must be based on the assignment that is live for the submission series.