Year 10 GCSE Computer Science 2023-2024

Autumn First Half Term
Topic 1 Systems Architecture and Storage
CPU Components
Von Neumann
Fetch decode execute.
Types of storage
Application of storage
Embedded systems
Topic 2 Systems Software
Operating systems
Utility software
Autumn Second Half Term
Topic 3 Data Representation
Binary
Hexadecimal
Binary addition and shifts
ASCII
Character set
Spring First Half Term
Topic 3 Data Representation
Bitmaps
Sound
Compression
Topic 4 Computer Networks and Protocols
Types of network
The internet
Wired and Wireless networks
Network Speeds
Spring Second Half Term
Topic 4 Computer Networks and Protocols
Common Protocols
The four layer TCP IP Protocol
Star and Bus Network Topology
Mesh Network Topology
Summer First Half Term
Topic 5 Network and Cyber Security
Network Security
Malware
Social Engineering
Protecting Digital Systems

Summer Second Half Term
<u>Topic 6 Ethical, Legal and Environmental Issues</u> Ethical issues Environmental issues Privacy Legislation Robotics Intellectual Property

Year 11 GCSE Computer Science 2023-2024

Autumn First Half Term
<u>Topic 7 Algorithms and Computational Thinking</u> Flowcharts/Algorithms Interpreting flowcharts onto python Iteration – theory and python practical Searching and sorting algorithms Errors in programming <u>Topic 8 Clarification of programming languages</u> Python practical throughout the half term.
Autumn Second Half Term
<u>Topic 9/ Topic 10 Python programming techniques</u> Python programming techniques, basic and advanced
Spring First Half Term
<u>Topic 9/ Topic 10 Python programming techniques</u> Python programming techniques, basic and advanced
Spring Second Half Term
Students revise for exams - preparation for final exam
Summer First Half Term
Students revise for exams - preparation for final exam

Year 11 BTEC Creative Media Productions 2023-2024

Autumn First Half Term
Component 2
Developing Digital Media Productions
Completion of component 2 assessment
Autumn Second Half Term
Component 2
Completion of component 2 assessment
Spring First Half Term
Component 3 Create a Media Product in Response to a Brief
Build skills in preparation for the final external assessment.
Students to prepare to complete the final external assessment
Spring Second Half Term
Component 3 Create a Media Product in Response to a Brief
Students to complete the final external assessment