Curriculum Plan

Computer Science

Year 7

Autumn 1
- My Online Identity

Spring 1
- Physical Computing

Summer 1
- Data Representation

Autumn 2
- Computational Thinking

Spring 2
- Introduction to Programming

Summer 2
- User-Centred Design

Year 8

Autumn 1
- Digital Media

Spring 1
- Python Fundamentals

Summer 1
- Algorithms

Autumn 2
- Creative Programming

Spring 2
- Computer Systems

Summer 2
- Ethics and Emerging Technologies

Year 9

Autumn 1
- Digital Responsibly

Spring 1
- Networks and Cyber Security

Summer 1
- Data Representation and Digital Media

Autumn 2
- Python Programming and Boolean Logic

Spring 2
- Computer Logic and Hardware

Summer 2
- Software Project

Year 10

Autumn 1
- CPU architecture
- CPU performance
- Embedded systems
- Primary storage (memory)
- Secondary storage (memory)
- Programming fundamentals

Spring 1
- Networks and topologies
- Wired and wireless networks
- Threats for computer systems / networks
- Identifying and preventing vulnerability
- Programming fundamentals

Autumn 2
- Units
- Data storage
- Compression
- Networks and topologies
- Programming fundamentals
- Data types

Spring 2
- Operating systems
- Utilities
- Ethical, environmental, cultural and legal issues
- Additional programming techniques

Curriculum Plan
Computer Science

Summer 1
- Ethical, environmental, cultural and legal issues
- Designing, creating and refining algorithms
- Searching and sorting algorithms

Summer 2
- Computational thinking
- Additional programming techniques
- Boolean logic

Year 11

Autumn 1
- Computational thinking
- Designing, creating and sorting algorithms
- Searching and sorting algorithms

Spring 1
- Additional programming technique

Summer 1
- Revision

Autumn 2
- Defensive design
- Testing
- Boolean logic
- Languages
- The integrated developer environment

Spring 2
- Additional programming technique