



COMPUTER SCIENCE CURRICULUM MAP

FURTHER STUDY

A level Computer science • Computing and IT • Computing and engineering • Cyber Security • Data Science • Computer Games Programming • Digital Forensics • Digital Media

CAREER PATHS

Programmer • Data Analyst • ICT Technician • Cyber security • Games developer • Software developer • Computing Engineer • IT manager • Systems analyst • Forensic computer scientist • Network manager

SKILLS

Programming • Logical Thinking • Communication • Problem Solving • Analytical thinking • Literacy • creativity • Research • Mathematical • Resilience

INTEREST

Learning to be inquisitive and creative

EXAMS

01: Computer Systems
02: Computational thinking, algorithms & programming

Creating Robust Systems and Defensive Design

Revision

Revision

System Security

End of Year Assessment

YEAR 11

Computer Networks

Ethical, Legal and Cultural Issues

Programming Project

Computational Thinking

Searching and Sorting Algorithms

Software

A01
A02
A03

End of Year Assessment

YEAR 10

GCSE style programming project

Cyber Security

Spreadsheets: The Cost of Living Project

Representation of sound and images

Computer Architecture

Memory and Storage

Programming Fundamentals

Representing Data

A01
A02
A03

End of Year Assessment

YEAR 9

Representing Algorithms

Searching and Sorting Algorithms

Boolean Logic in circuits and programming

Binary Recap

ICT Skills: Zoo Project

Python Turtle Programming

Introduction to Spreadsheets

Ethical, Legal, environmental and Cultural Technology Issues

Word Processing Skills

A01
A02
A03

The start of your first GCSE unit

End of Year Assessment

YEAR 8

Computational Thinking

Introduction to Binary

Introduction to programming in Python

Algorithms and Flowcharts

Code breaking: Ciphers and Encryption

Esafety

Programming Concepts.

Presentation Skills

A01
A02
A03

YEAR 7

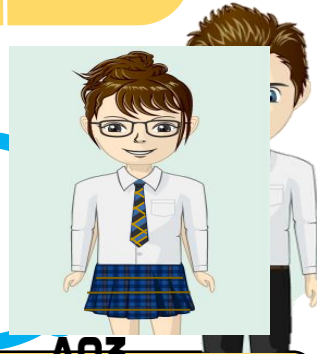
Microbits - Programming

Software Introduction to programming (Scratch)

Introduction to the school computer systems.

Computer Components

A01
A02
A03



A01

Demonstrate knowledge and understanding of the key concepts and principles of Computer Science.

A02

Apply knowledge and understanding of key concepts and principles of Computer Science.

A03

Analyse problems in computational terms to make reasoned judgements and to design, program, evaluate and refine solutions.