



COMPUTER SCIENCE

“The GCSE in Computer Science is engaging and practical, encouraging creativity and problem solving. It encourages students to develop their understanding and application of the core concepts in computer science. Students also analyse problems in computational terms and devise creative solutions by designing, writing, testing and evaluating programs.”

What will you study during the course?

Unit 1: Computer systems and programming (50%)

This unit is assessed by examination. It covers the following topics:

- Systems architecture
- Memory and storage
- Computer networks, connections and protocols
- Network security
- Systems software
- Ethical, legal, cultural and environmental impacts of digital technology

Unit 2: Computational thinking, algorithms and programming (50%)

This unit is assessed by an examination. The paper has 2 sections: A and B. Section A will have questions about the following topics:

- Algorithms
- Programming fundamentals
- Producing robust programs
- Boolean logic
- Programming languages and Integrated Development Environments

Section B of the paper will assess students' ability to write or refine algorithms. In preparation for this, during the course, students will undertake one or more computer programming tasks.

How will the course be taught?

The course will be taught through a mixture of whole class teaching, some group work and individual tasks. The development of skills will be taught through a number of practical activities.

How will your work be assessed?

Both units 1 & 2 will be assessed by a written examination (1 hour 30 minutes) worth 80 marks each. The unit 1 paper and section A of the unit 2 paper will include short answer questions and at least one long answer question. Units 1 & 2 will be externally assessed.

Where can it lead?

It's a great way to develop critical thinking, analysis and problem-solving skills, which can be transferred to further learning and to everyday life. Students who want to go on to higher study and employment in the field of computer science will find it provides a superb stepping stone.