



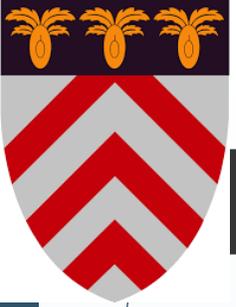
GCSE Computer Science

GCSE Computer Science is designed for those students who want to learn about the theory of computers, how to program them, how they work, how games are created and how software is produced.

Students will gain an understanding of the fundamental concepts around creating software applications and develop an understanding of the use of algorithms. They will be able to create computer programs to solve problems.

The course consists of two components: Computer Systems and Computational Thinking. These two components are assessed at the end of year 11 with two written exams which are worth 50% each. We also undertake a programming project which will build on students' skills in the Python programming language in creating a solution to a problem.

The course is mainly based around programming and designing programs using algorithms, but we also learn about topics such as how a computer runs programs, binary logic, security of computer systems and also how computers communicate over networks.



Frequently asked questions

How is the course assessed?

The course consists of two exams: Computer Systems and Computational Thinking. These cover the following topics:

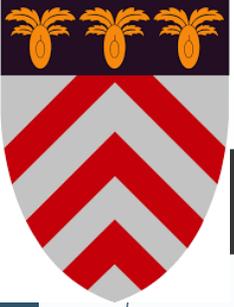
- Programming
- Algorithms
- Producing robust programs
- Computational logic
- Systems architecture
- Network topologies
- Systems security
- Wired and wireless networks

What skills do I need?

You should have a keen interest in computer science and particularly in programming. You will build on the programming skills you developed in years 7,8 and 9, but we will begin with the basics of programming. You will only become a good programmer through practice, so you must be prepared to do lots of programming outside of the classroom and in your own time.

How can I find out more information about the course?

Speak to your ICT teacher at the end of the lesson with any questions you have. Booking an appointment with your ICT teacher on parents evening is also a good opportunity to find out more about the subject.



Student feedback

Why choose GCSE Computer Science?

- It's a great way to learn how to program and how to write algorithms.
- It's a really good mix of practical skills and learning about how computers work.

What's the most interesting thing you learn about on the course?

- How to use all the different parts of the Python programming language.
- How computers communicate and how to create games using programming.

What do you like about the subject?

- The practical skills of learning how to program – this is a large part of the course.
- The enjoyment of seeing programs I have created myself running successfully.
- Being able to understand how complicated computer systems are put together.