

Computer Science

GCSE – OCR

Subject Leader: Mr Mander

What's it all about?

Everything we use today seems to be described as 'digital', whether it be televisions, computers, drones or mobile phones. What does all this mean and how do all these devices actually work? GCSE Computer Science is aimed at students who want to find out the answers to these questions. You don't have to be a 'techie' to do this course, just interested in finding out.

Who should take it?

You must:

- Be interested in how computers work
- Have a logical and mathematical type approach to solving problems
- Be able to develop solutions to problems according to a design specification
- Have the determination to solve problems; not giving up when faced with challenge.

What will I learn on this course?

The course is broken down into three units as follows:

Unit 1 (Computer Systems): This unit covers computer systems, networking, security, software and concerns in Computer Science.

Unit 2 (Computational thinking, algorithms and programming): This unit covers algorithms, programming techniques, problem solving, data representation and logic.

Unit 3 (Programming project): You will be given a programming challenge and produce a fully working solution to the problem. You will also develop your analysis, design, development, testing and evaluation skills throughout.

How will I be assessed?

Unit 1: This is a formal examination lasting 1 ½ hours. It is worth 40% of your overall mark.

Unit 2: This is a formal examination lasting 1 ½ hours. It is worth 40% of your overall mark.

Unit 3: You will have 20 hours to complete a non-examination assessment. It is worth 20% of your overall mark.

What do your current students say?

"Computer Science is really interesting and covers a range of topics. Since starting the GCSE we have been taught programming from scratch and have support sessions which we can drop in to."

"So far in the course I have developed my problem solving skills to a level where I now feel comfortable searching for solutions. The theory links in nicely with the programming tasks."

Is there anything else I need to know?

There are a number of options available for students successfully completing a GCSE in computer science. The course provides excellent preparation for higher study and employment in the field of computer science. People who have studied computing have gone on to be games programmers, hardware engineers, aerospace engineers, the list is endless!

Who can I contact for further information?

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