

GCSE COMPUTER SCIENCE

What Will I Be Studying?

This course contains three distinct, yet linked elements:

Computer systems	Computational thinking, algorithms and programming	Programming project
<ul style="list-style-type: none">• Systems Architecture• Memory• Storage• Wired and wireless networks• Network topologies, protocols and layers• System security• System software• Ethical, legal, cultural and environmental concerns	<ul style="list-style-type: none">• Algorithms• Programming techniques• Producing robust programs• Computational logic• Translators and facilities of languages• Data representation	<ul style="list-style-type: none">• Programming techniques• Analysis• Design• Development• Testing, evaluation and conclusions

How Will I Be Assessed?

Paper 1: Computer systems

- 80 marks
- 1 hour and 30 minutes
- Written paper
- 50% of total GCSE

Non-exam assessment: Programming project

- 40 marks
- 20 hours in total



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Who Would Enjoy This Course?

Students who can understand and apply the fundamental principles and concepts of Computer Science, including abstraction, decomposition, logic, algorithms, and data representation will do well on this course and therefore a good level of quantitative skill is needed. Students also need to analyse problems in computational terms, through practical experience of solving such problems, including designing, writing and debugging programs and thus problem-solving skills would be beneficial. Learners who like to think creatively, innovatively, analytically, logically and critically will find the course both challenging and enjoyable as well as being able to appreciate the wider impacts of digital technology on society. A substantial proportion of the course involves, applying mathematical skills to computer science and an interest in the wider impact of digital technology will help students to achieve good grades and enjoy the course.

How Will This Course Help Me In The Future?

GCSE Computer Science is a qualification that enables learners to progress to further qualifications, either Vocational or General. There are a number of information and Computer Technology opportunities within the sixth form and students often go on to study related degrees in Computer Science and Technology.