

# GCSE Computer Science

**Exam Board:** OCR



## **Aims:**

Most aspects of today's world rely on computers. The need for robotics and applications to complete tasks is increasing consistently, but they still need someone to program them. Taking GCSE Computer Science provides students with the key skills required to become one of these people. Students will use logical thinking and problem solving skills to be able to apply key content to scenarios from the knowledge built up. Students will also undertake a number of programming tasks and challenges to design and create programs that provide solutions to given problems. The course provides excellent preparation for higher study and employment in the field of Computer Science.

## **Course content**

### Computer Systems

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| <ul style="list-style-type: none"> <li>• 1.1 Systems architecture</li> <li>• 1.2 Memory and storage</li> <li>• 1.3 Computer Networks, connections and protocols</li> </ul> | <ul style="list-style-type: none"> <li>• 1.4 Network security</li> <li>• 1.5 Systems Software</li> <li>• 1.6 Ethical, Legal, Cultural and Environmental impacts of digital technology</li> </ul> |
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### Computational thinking, algorithms and programming

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| <ul style="list-style-type: none"> <li>• Algorithms</li> <li>• Programming fundamentals</li> <li>• Producing robust programs</li> </ul> | <ul style="list-style-type: none"> <li>• Boolean logic</li> <li>• Programming languages and integrated Development Environments (IDEs)</li> </ul> |
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## **Assessment**

- A Computer Systems written exam lasting 1 hour 30 minutes - 50% of the marks
- A Computational thinking, algorithms and programming written exam lasting 1 hour 30 minutes - 50% of the marks

## **Note:**

Due to the necessary application of logic and mathematics within the context of this course, students will need to be predicted a GCSE Grade 5 or above in Mathematics.

**For further information, contact Mr L Walters**