

# COMPUTER SCIENCE

FOR MORE INFORMATION PLEASE CONTACT  
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## WHY SHOULD I CHOOSE COMPUTER SCIENCE?

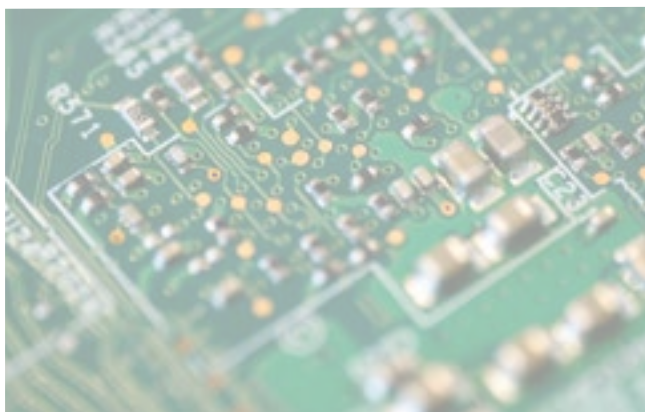
The Computer Science course focuses on computational thinking, helping students to develop the skills to solve problems, design systems and understand human and machine intelligence. They will be able to apply the academic principles they learn in the classroom to real-world systems in an exciting and engaging way.

GCSE Computer Science counts towards the English Baccalaureate, offering students an option that achieves maximum recognition. Careers in computing include web design, programming, computer games development and artificial intelligence.

## HOW WILL I BE EXAMINED?

GCSE (9–1) Computer Science is assessed through two written examinations. Each exam is worth 50% of the qualification. Programming is a core skill which continues to be a focal point of the course. Candidates will develop programming skills as part of the GCSE which will reinforce and support access to the content in the written examinations.

- Component 1: Computer systems
- Component 2: Computational thinking, algorithms and programming.



## WHAT WILL I STUDY?

- Component 1: Computer systems
  - Systems architecture
  - Memory and storage
  - Computer networks, connections and protocols
  - Network security
  - Systems software
  - Ethical, legal, cultural and environmental impacts of digital technology
- Component 2: Computational thinking, algorithms and programming.
  - Algorithms
  - Programming fundamentals
  - Producing robust programs
  - Boolean logic
  - Programming languages and Integrated Development Environments

## RECOMMENDED TEXT BOOKS, ONLINE RESOURCES AND ADDITIONAL READING

- OCR GCSE (9-1) Computer Science, Textbook by P. M. Heathcote and S. Robson
- Revise OCR GCSE (9-1) Computer Science Revision Workbook: For the 9-1 Exams, by David Waller
- Code: The Hidden Language of Computer Hardware and Software, by Charles Petzold