



# GCSE Computer Science



## Introduction / Why Study GCSE Computer Science?

GCSE Computer Science provides pupils with an opportunity to study and investigate the modern/changing world of computer science. Like all sciences, Computer Science is a combination of theory and practical elements where learners can apply the knowledge and skills learned in the classroom to real-world problems.

This qualification helps to develop deeper computational thinking skills, enabling learners to design and use problem solving systems, whilst also studying the theoretical principals underpinning the subject.

## Exam Board

The OCR exam board specification is available at:

<https://www.ocr.org.uk/qualifications/gcse/computer-science-j277-from-2020/>

## What Will I Study / What Skills Will I Develop?

### **Unit 1: Computers Systems**

*System Architecture*

*System Storage, Memory & Data*

*Network*

*Security*

*Ethical, Legal & Moral Issues with IT*

### **Unit 2: Computational Thinking**

*Algorithms*

*Programming Techniques*

*Robust Programs*

*Computational Logic*

## How Will I Be Assessed?

The course is assessed in 2 exams:

- **Unit 1 Exam (50%)** – A written exam at the end of Year 11, testing Computer System knowledge.
- **Unit 2 Exam (50%)** – A Written exam at the end of year 11, testing Computational Thinking knowledge.

## Points to Consider When Selecting This Option

GCSE Computer Science focuses on one of the three strands of computing studied during Key Stage 3 ICT. Pupils should be aware that while learning to use a programming language forms part of the course, it is their understanding of programming concepts and the topics listed above that they will be examined in through written assessment (as opposed to coursework/on-screen assessment)

Given the wide range of study required, pupils will be expected to complete regular weekly homework to support their understanding.

## What Might GCSE Computer Science Lead To?

The course will provide excellent progression to 'A' level Computer Science, vocational courses and on to degree level courses in the areas of Computing, Engineering and Science. The course provides the knowledge, skills and understanding that a growing number of employers are demanding.

## Further Information

Please contact Curriculum Area Leader: Mr Springett ([LSpringett@wadebridge.cornwall.sch.uk](mailto:LSpringett@wadebridge.cornwall.sch.uk))