

Course Information



A Level Computer Science

What is A Level Computer Science?

A Level Computer Science teaches individuals:

- ◆ A good grounding in mainstream computing theory and understanding
- ◆ A deep understanding of problem solving
- ◆ Experience in creating logical and efficient solutions to problems
- ◆ Skills to help write down solutions to problems for other people to understand
- ◆ Valuable thinking skills that are extremely attractive in the modern workplace

Entry requirements: Grade 6 in GCSE Computer Science

Year 12:

What will the course cover?

Paper 1

(40% of qualification)

- ◆ Fundamentals of programming
- ◆ Fundamentals of data structures
- ◆ Fundamentals of algorithms
- ◆ Theory of computation
- ◆ Systematic approach to problem-solving

Paper 2

(40% of qualification)

- ◆ Fundamentals of data representation
- ◆ Fundamentals of computer systems
- ◆ Fundamentals of computer organisation and architecture

Year 13:

What will the course cover?

- ◆ Consequences of uses of computing
- ◆ Fundamentals of communication and networking
- ◆ Fundamentals of databases
- ◆ Big Data
- ◆ Fundamentals of functional programming

NEA 'coding' assignment

(20% of qualification)

- ◆ The non-exam assessment assesses student's ability to use the knowledge and skills gained through the course to solve or investigate a practical problem.

How is it assessed?

Exam Board: AQA

Students take exams for both papers at the end of Year 13. Paper 1 is assessed in an on-screen exam and Paper 2 is assessed in a written paper. Each exam lasts 2 hours 30 minutes. The NEA Coursework is completed under supervision, mainly in Year 13, and moderated externally.

What next?

Students who study Computer Science have access to a wide range of career and educational opportunities. It is seen by many to be a highly demanding area of study and the analytical and problem-solving skills learned can prove vital to a student's future course or career. Computer Science combines effectively with **Maths** and **Science** subjects to create an attractive portfolio of qualifications, enabling a student to move on to a range of University Technology, Maths or Science-based courses. For more information about the course, your suitability and possible career paths for students, please talk to Mr Foster.