

Computer Science

Course highlights:

Computer Science continues to have a growing importance. This means there will be a greater demand for professionals who are qualified in this area. This is a course that has real relevance in our modern world. Whilst students will no doubt already have some knowledge of computers and related areas, this course will give them an in-depth understanding of how computer technology works and a look at what goes on "behind the screens".

Studying Computer Science will help students develop critical thinking, analysis and problem solving skills. For many it will be a fun and interesting way to develop these skills, which can be transferred to other subjects and applied in day-to-day life, as well as stimulating interest and engagement in the IT sector and IT related careers.

Learning styles used:

- Practical work, e.g. programming and designing coding solutions
- Use of ICT to give presentations to an audience
- Written work (theory) to provide evidence for assessment

How is it assessed?

Assessment is subject to change but the current format is:

Unit	Unit Title	Assessed	Weighting
Unit 1	Understanding Computer Science	1 hour 45 minute examination assessing theory content of the specification	50%
Unit 2	Computational Thinking and Programming	2 hour external assessment to assess the practical application of knowledge and understanding through a series of on-screen tasks.	30%
Unit 3	Software Development	Controlled assessment to develop a piece of work using programming software following a task brief	20%

Other Information:

It is an essential requirement that students who opt for GCSE Computer Science are working at a Grade 5 in Mathematics to be able to meet the demands of the course.

This course will:

- Give you a real, in-depth understanding of how computer technology works.
- Provide excellent preparation for higher study and employment in the field of computer science.
- Develop critical thinking, analysis and problemsolving skills through the study of computer programming.

This course encourages students to develop their interest in Computing by becoming creators of games, apps and systems, rather than simply using programs designed by others.

Employability Skills and Careers available in Computing

This course will be useful in many types of employment due to the ever-increasing use of ICT and Computing in many industries.

Skills developed include problem solving, innovation, reasoning, logic, resourcefulness, precision, problem solving and clarity. These skills will enable students to become authors of computational tools rather than simply users.

A good grounding in Computing will teach young people how to deal with change later in life and play an active and effective role in the digital world.

Course combinations:

This course complements GCSE Business and GCSE Mathematics.

Due to content overlap, students cannot study both GCSE Computer Science and ICT.

Please see Miss Hornett (B5) to discuss this course.