

### 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.

Computer Science is engaging and practical, encouraging creativity and problem solving. It encourages students to develop their understanding and application of the core concepts in computer science. Students also analyse problems in computational terms and devise creative solutions by designing, writing, testing and evaluating programs.

### Learning styles used:

- Practical work, e.g. programming and designing coding solutions
- Written work (theory) to provide evidence for assessment

### How is it assessed?

Assessment is subject to change but the likely format is:

Unit 1: Computer systems	1 hour 30 mins written exam paper 50% of GCSE
Unit 2: Computational thinking, algorithms and programming	1 hour 30 mins written exam paper 50% of GCSE

### Other Information:

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

**If you are not in Set 1 or Set 2 for Mathematics, and would like to take Computer Science, please speak to your Business and Computing teacher.**

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 problem-solving 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 **Mrs Hornett (B5)** to discuss this course.