Computing Science and PE are only available for students to study in year 10 and 11. Students will be given the opportunity to select both subjects during the year 9 options review process which will take place during the first half of the summer term next year. These subjects are not available for study in year 9 and are included here to inform the future choices at GCSE.

Computer Science

We follow the OCR Computer Science (J277) specification

What is GCSE Computer Science?

This course is split into theoretical Computer Science and programming concepts.

In the theoretical component, students will understand the components that make up digital systems, the types of communication between these systems, and the social impacts of digital technology.

Students will gain a better understanding of the current advancements and limitations of digital technology.

The programming component involves creating solutions to a wide range of problems. Students will understand and apply Computer Science concepts, including abstraction, decomposition, logic and data representation. They will also learn how to analyse problems using a variety of techniques like algorithmic design, writing programs, and debugging programs.

Why take this course?

Computer technology grows at a rapid rate and it changes practically every year. It affects every field of study. There is currently no profession that cannot be complemented by using computer technology and algorithmic design.

How do we create applications that does not crash by pressing the wrong button? How do we make reliable and maintainable code? These are all skills that are taught in the GCSE Computer Science course. The course will also allow students to solve a wide range of computational problems. Pupils will learn to troubleshoot their problems as they come across errors. They will start look at problem solving in a new lens.

What are the assessment objectives?

Learners are expected to:

Assessment Objectives

AO1 Demonstrate knowledge and understanding of the key concepts and principles of Computer Science.

AO2 Apply knowledge and understanding of key concepts and principles of Computer Science

AO3 Analyse problems in computational terms:

• to make reasoned judgements

• to design, program, evaluate and refine solutions

There is no non-exam assessment (NEA) for this course; however, students will be given the opportunity to undertake programming projects during this course.