



Time, Equipment and Expenses:

There are no equipment costs. It is expected that students will have access at home to a computer with internet access.

For more information please speak to Mrs Walder, Head of Maths or your Computing teacher.

GCSE Computing (Code: Co) **Exam Board: OCR**

Why Study Computer Science?

Computer technology touches our lives in almost everything we do. Computing is a discipline that offers rewarding and challenging possibilities for a wide range of students. It develops critical thinking, analysis and problem solving skills, which can be transferred to further learning in any subject area and to everyday life. It offers great opportunities for creativity and innovativeness. And of course it can lead on to exciting future opportunities in the wider world. The GCSE builds on the knowledge, understanding and skills established in KS3.

The GCSE in Computer Science will encourage student to understand and apply the fundamental principles and concepts of Computer Science, including abstraction, decomposition, logic, algorithms and data representation. Students will analyse problems through practical experience including designing, writing and debugging programs. Students are encouraged to think creatively, innovatively, analytically, logically and critically. They will understand the components that make up digital systems and how they communicate with one another and with other systems. They will also look at the impacts of digital technology to the individual and to wider society.

Assessment is done through two papers, one focussing on the theory of Computer Science and one on the programming and algorithms. The project provides students the opportunity to develop and demonstrate their practical ability. They will create algorithms to provide a solution to a problem, code their solution in a suitable programming language and test and evaluate their solution.

Assessment Overview

Computer Systems (01) 80 marks –

1 hour and 30 minutes written paper. 40% of total GCSE

Computational Thinking (02) 80 marks –

1 hour and 30 minutes written paper. 40% of total

GCSE Programming Project (03/04) 40 marks –

20 hours non exam assessment. 20% of total GCSE.

