Computer Science

A Level

Computer Science is an exciting subject that encourages students to think creatively, logically and critically and to develop advanced problem solving skills. Students choose to study Computer Science because they are passionate about computers and want to learn about computer architecture; communications and networking; fundamentals of data representation and data structures.

Course Overview

Unit 1: Computing Principles.
Unit 2: Algorithms and Problem Solving.
Unit 3: Programming Project.

How will I learn?

The subject requires much independent work and students will need to access a wide variety of resources to supplement their knowledge of theory. Students will learn to develop algorithms and will implement these using a variety of programming paradigms including procedural, object oriented and functional techniques. Python is the main language used, but other languages will be experienced throughout the course.

Where can I go after the course?

Careers: Computing; ICT; Administration; Business; Web and Graphic Design; Communications; Media; Animation; Software Engineering.

Further Education: Business Studies; Computing; Web and Graphic Design; Computer Animation; Computer Science; Games Design; Games Programming.

Entry Requirements

Standard 6th Form entry requirements. It is preferred that students have a minimum of a GCSE grade 6 or BTEC Distinction at Level 2 in this or a related subject and a grade 6 in Mathematics. Students will find it beneficial to study A Level Mathematics (essential for Computer Science at degree level) and Physics.

Assessment at the end of Year 2

Two x 2 hour 30 minute exams (40% each) and a programming project that is internally assessed and externally moderated (20%).