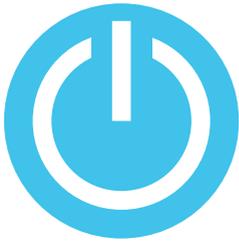


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# A Level Computer Science





**Computer Science is not about using computers. It is about controlling and shaping the digital world through programming. From Snapchat and Facebook to running nuclear power stations, software development is at the heart of modern living.**

### Introduction

The course has an emphasis on abstract thinking, problem solving, programming skills, algorithmic and mathematical reasoning and computational hardware. If you want to learn about programming, networking, how hardware and software operates and enjoy solving complex problems, then you will enjoy this course.

**Level** Level 3

### Specific course entry requirements

College entry to include a minimum GCSE Mathematics grade 6. You do not need to have studied Computer Science at GCSE (please refer to the Entry Requirements section page 24 for further details).

### What will I study?

You will acquire knowledge and understanding of software, system development, data and applications.

### The course will focus on

- + Analysis of user requirements, design and implementation of solutions
- + Gaining an in-depth knowledge of computing and related topics
- + Developing knowledge of programming theory
- + Building practical skills in developing software programs
- + Using the visual basic programming environment

### The coursework will:

- + Develop your skills in analysis, design, software development, documentation, testing and evaluation of a system leading to a solution to the given problem

### This will include:

- + Design, create and test computer programs
- + Research and understand computing concepts
- + Enhance your ability to work with numbers
- + Develop your problem solving skills

### How will I be assessed?

80% Examination  
20% Coursework

In the coursework component students are required to undertake an in depth programming project to solve a realistic problem which is worth 20% of the marks for the qualification.

### Where will this course lead me?

This subject is ideal if you intend to go on to study Computer Science or Software Engineering at degree level. There are many related courses where knowledge of programming is an advantage. It is viewed as a challenging and rewarding subject, in the same way as Mathematics and Science A levels.

Please note that it is not necessary to take A level Computer Science in order to study Computer Science at university but it can be an advantage.

