

# A Level Computer Science



**Exam Board:** AQA

**Entry Requirements:** grade 5 or above in English & Computer Science

## Why study Computer Science?

Advances in computing are transforming the way we work. Taking Computer Science will help further develop your skills in the future development of computing and exploring your first steps into the computing industry. Most organisations require a computer system in order to connect with the rest of the world. Strong technical support and skills are required to create and maintain these systems.

If you have keen interest in programming or love solving logical puzzles this might be the course for you.

## What does the course involve?

Students are required to be able to both understand the basics of problem-solving and be able to express the theory in good written English. Students will also be required to:

- understand a range of Computer Science theory.
- choose an area of interest for the non-examination assessment project.
- develop their skills in problem-solving through investigation.
- plan, research, carry out and evidence the project.

All candidates are required to meet the following formal assessments. The Assessment Objectives are weighted as indicated below:

	<b>Assessment Objective</b>	<b>Weighting</b>
<b>Paper 1</b>	Develop the student's ability to program, as well as their theoretical knowledge of computer science. Topics include: Fundamentals of Programming and Data Structure and Theory of Computation	40% on-screen exam
<b>Paper 2</b>	Develop the student's knowledge of computer science. Topics include: Fundamentals of Data Representation, Computer Systems, Computer Organisation & Architecture, Uses of Computing, Communication and Networking and Fundamentals of Databases	40% written exam
<b>Non-Exam Assessment</b>	The non-examination assessment assesses the student's ability to use the knowledge and skills gained through the course to solve or investigate a practical problem. Students will be expected to follow a systematic approach to problem solving.	20% project

## Where will Computer Science lead me post Sixth Form?

Computer Science is a very diverse subject that can be applied all over the world: using computing skills you can explore anything from nanotechnology, robotics to developing computer programmes for a specialist field. Computer Science allows you to explore a huge range of work in different locations all across the globe with a constant stream of jobs and competitive salaries. You can also take on apprenticeships at companies as you work and develop into a fully-fledged computer scientist.

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