Computer Science

AQA (7517)

May be taught with other schools

What do I need to know or be able to do before taking this course?

You do not need to have studied Computer Science to do A Level Computer Science however you should have **at least** a grade C in GCSE Mathematics (preferably higher).

This course will include learning to program using the language C# which will require much practice beyond the set homework tasks, so students should have a keen interest and be prepared to commit themselves to their studies.

What will I learn on this A Level course?

The A Level in Computer Science should encourage students:

- To develop the capacity for thinking analytically, logically and critically
- To build an understanding of computer systems including software, hardware, data and communications
- To develop the ability to apply skills, knowledge and understanding of computing, including programming, in a range of contexts to solve problems
- To show project and time management skills
- To understand the consequences of the use of computers including social, legal, ethical and other issues
- To be aware of emerging technologies and appreciate their impact on society

What kind of student is this course suitable for?

A Level Computer Science is suitable for students who want to work in the IT/Computing industry, to go on to University to take a computer related course or just know more about how the computer works and how to program it. Scientists, architects and animators are all careers that benefit from having a grounding in Computer Science.

What examinations will I have to take to get my qualification?

Scheme of Assessment

Paper	Unit	A Level %	Assessment
1	The fundamentals programming, data structures	40%	2 1/2 Hour
	and algorithms along with the theory of		
	computation.		On-Screen Examination
2	The fundamentals of data representations;	40%	2 1/2 Hour
	computer systems; the computer's organisation		
	and its architecture; communication and		Written Examination
	networking; databases and Big Data; functional		
	programming and the consequences of computing		
	uses.		
3	Using a systematic approach to problem solving	20%	Coursework
	students will have to complete a practical project.		
			75 Marks

Where can I find out more?

Full details of the specification can be found on AQA's web site: www.aqa.org.uk