

A Level Computing



Computers are widely used in all aspects of government, business, industry, education, leisure and the home. In this increasingly technological age, a study of computing and particularly how computers are used in the solution of a variety of problems, is not only valuable to the students themselves but also essential to the future well-being of the country.

Computing links well with subjects across the curriculum. It demands both logical discipline and imaginative creativity in the selection and design of programs; it relies on an understanding of the rules of language at a simple level; it encourages an awareness of the management and organisation of computer systems; it extends the students' horizons beyond the school or college environment in the appreciation of the effects of computer applications on society and individuals. It provides a range of different opportunities including being creative, logical thinking and the chance to become a competent programmer.

Subject specific entry requirements

In addition to the standard entry requirements, the following subject entry criteria should be met:

- 5 in GCSE Maths; 4 in GCSE English; GCSE computing at grade 5 preferable

Most important for those who want to study A level Computer Science is a proven track-record at GCSE Computer Science and/or very strong mathematical ability and evidence of programming ability. An enthusiasm for the subject and a willingness to learn will also be essential. Those students who are unsure of their suitability for the course should speak to a Computing Teacher.

Exam Board

AQA Specification-Computer science 7517

<https://filestore.aqa.org.uk/resources/computing/specifications/AQA-7516-7517-SP-2015.PDF>

Assessment

The content of this A Level in Computer Science is divided into three components:

- Paper 1(This paper tests a student's ability to program, as well as their theoretical knowledge of computer science)
- Paper 2 (Theory based exam with a wide range of topics from data representation to the internet)
- A Programming Project

A Level – two year course	
Paper 1 (40%)	A written 2hr 30 mins exam set and marked by exam board.
Paper 2 (40%)	A written 2hr 30 mins exam set and marked by exam board.
Programming project	Non-exam assessment (strict controlled assessment)

This course will lead to:

This is perfect preparation for anybody who wants to study a computer-related discipline at university. Some universities will give preference to students who have specifically studied programming for these courses. Employers value the problem solving skills you will develop.

"I love learning how to program –finding out about how computers work is very satisfying!" Jon Haddow