

Course Structure & Assessment

Students opting for Computer Science will study the full two year A Level.

The course focuses on three main areas:

- Problem Solving
- Programming
- Fundamentals of Computer Science

A Level

Unit 1 - 40%

- Fundamentals of programming
- Data structures
- Software development
- Theory of computation

On-screen Exam 2½hours

Students answer a series of short questions and write/adapt/extend programs in an Electronic Answer Document.

A Skeleton Program is provided by AQA and students will have time to practise with this by adapting and extending it prior to sitting the exam.

Unit 2 - 40%

- Fundamentals of data representation

- Computer systems
- Computer organisation and architecture
- Uses of computing
- Communication and networking
- Fundamentals of databases
- Big data
- Functional programming

Written Exam 2½ hours

Compulsory short-answer and extended-answer questions.

Unit 3 - 20%

- Practical Project - complete a report on a computer-based solution to a real problem that they have identified.

Coursework Internally Assessed

Entry Requirements

- A minimum of 5 GCSEs at Grade 9-4 (or equivalent), including English and Maths. However, students with a minimum grade of 6 in Mathematics are more likely to succeed.
- ICT and/or Computer Science at GCSE can help your preparation for this course but is not a prerequisite.
- If you have taken an ICT qualification at GCSE you should have achieved at least a grade 5.
- An understanding of VB.NET would be a distinct

Who is the course suitable for?

- Those who see their future careers involving computers.
- Students who are enthusiastic about computers and want to spend time making them do something useful.
- Students who enjoy using a computer and want to know more about how a computer system works.

Where does it lead?

- A qualification in Computer Science can lead to a pure computer science course in higher education. Or it can lead to courses in IT as single-subject or combined courses with a huge variety of options.
- Additionally an A level in Computer Science will be an asset to those going on to follow courses in Business, Economics, Journalism, Media, Science, Geography - the list is endless.