



## Computer Science GCSE

**GCSE**

**9-1**

**AQA**

**Who is this course aimed at?**

This is a course that has real relevance in our modern world. While learners will no doubt already have some knowledge of computers and related areas, the course will give them an in-depth understanding of how computer technology works and a look at what goes on “behind the scenes”. As part of this, they will investigate computer programming, which many learners find interesting. The course will help learners develop critical thinking, analysis and problem solving skills. For many, it’ll be a fun and interesting way to develop these skills, which can be transferred to other subjects and even applied in day-to-day life.

In this way, the course will stimulate interest and engage with technology and technology-related careers. In fact, information technologies continue to have a growing importance. This means there will be a bigger demand for professionals who are qualified in this area. If learners want to go on to higher study and employment in the field of Computer Science, they will find that this course provides a superb stepping stone. Learners who have taken a Computing GCSE and who then progress to study the subject at A Level or university will have a sound underpinning knowledge of this subject area.

**How will I be assessed?**

The course is made up of three units -two exams and an externally set programming project.

**Will I enjoy the course?**

You are most likely to enjoy this course if you have a real interest in how computers works, you are a logical thinker and a good problem solver. It will give you an introduction to the ‘behind the scenes ‘of how computers work and programming.

**What will be expected of me?**

Students are expected to attend all lessons, complete all tasks set in class, complete home learning to the best of their ability, be prepared to work hard, always give 100% and be a positive, pro-active member of the class.

### What will I study?

**Unit1-50% exam**

This unit covers the body of knowledge about computer systems on which the examination will be based. This will include areas such as; Systems Architecture, Memory, Storage, Wired and wireless networks, Network topologies, protocols and layers, System security, System software, Ethical, legal, cultural and environmental concerns

**Unit 2-50% exam**

This unit covers areas of knowledge in regard to computational thinking, algorithms and programming. This will include areas such as; Algorithms, Programming techniques, Producing robust programs, Computational logic, Translators and facilities of languages, Data representation

**Unit 3- Practical Programming Project that must be completed to pass the course.**

Candidates will be given a problem to solve—they will create a programming solution to the stated problem. They will create and use a suitable test plan with appropriate test data. The code and test results must be suitably annotated to describe the process. Candidates will need to provide an evaluation of their solution based on the test evidence.