Computer Science

A Level

Exam Board: AQA

Subject Specific Criteria:

- Grade 5 in English
- Grade 6 in Mathematics
- Students with GCSE Computer Science should have Grade 9 – 5

Units Studied:

- Fundamentals of Algorithms
- Fundamentals of Programming
- Fundamentals of Data Representation
- Fundamentals of Computer Networks
- Fundamentals of Computer Systems
- Theory of Computation

Course Information:

Computer Science is about designing algorithms to solve problems. In this sense Computer Science is no more about computers than astronomy is about telescopes. Many challenges lie in the future for Computer Scientists to solve. This course, with its emphasis on abstract thinking, problem-solving, algorithmic and mathematical reasoning, is a good foundation for understanding these future challenges. This is an ideal course to study alongside Maths and Science subjects.

Skills Required:

- Problem Solving
- Algorithmic Thinking
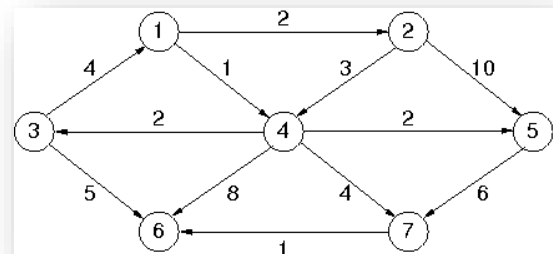- Mathematical Reasoning

Futures:

Once students have completed their Computer Science A-Level they may further continue their studies at University or enter the job market.

This Computer Science qualification is recognised by the **Russell Group** as really useful for degrees in Computer Science, Mathematics, Physics, Engineering, Chemistry, Medicine, Economics, Optometry and other related subjects.

Subject Enrichment:

Various opportunities to enter Computational Thinking competitions throughout the year.

Student Quote:

"A fun subject with lots of crossover into other subjects, such as Mathematics."   -Ben Rowan

"Lots of fun but challenging problem solving. A very interesting subject."   -Lewis Stevens

"Increases success in the areas of problem solving and critical thinking."   -Joseph Gill