Computer Science A Level

Examination Board: OCR

Who should take the course?

This course will appeal to you if you are interested in understanding the fundamental principles and concepts of computer science, and in being able to apply them to create software and solve problems. The course includes abstraction, decomposition, logic, algorithms and data representation.

You will enjoy this course if you would like to develop:

- an understanding of the organisation of computer systems, including software, hardware, data, communications and people.
- the ability to apply skills, knowledge and understanding of computer science, including programming, in a range of contexts to solve problems.
- skills in project and time management
- an understanding of the consequences of using computers, including social, legal, ethical and other issues.
- an awareness of emerging technologies and an appreciation of their potential impact on society.

What is the course about?

This is a new qualification, introduced in September 2015. It focusses on programming, and emphasises the importance of computational thinking as a discipline.

- You will develop the skills to solve problems, design systems, and understand the power and limits of human and machine intelligence.
- Computer science is a practical subject, where you can apply the academic principles learned in the classroom to real world systems.

How is it assessed?

- The qualification consists of two main components, Computer Systems, and Algorithms and Programming. Each component will be assessed by an externally marked exam paper. Each exam is a written paper which lasts for two and a half hours, and counts for 40% of the total marks available.

- The other 20% will be coursework, which consists of a programming project. You will choose a computing problem to work through, following a specified process, including;-

    - Analysis of the problem
    - Design of the solution
    - Developing the solution
    - Evaluation

Where will it take me?

Those with knowledge and skills in computer science have the opportunity to pursue new and exciting careers in the conception of computer systems, that increasingly shape work and leisure activities. You may choose to develop your interest further through entry to Higher Education; this is an excellent course for anyone wishing to study for a degree in Computer Science, Computer Programming or Computer Games Design. You will also have the necessary skills and

knowledge to seek employment in areas that utilise computing, and continue to develop through practical experience and training.