

Computer Science

About the course

The OCR GCE in Computer Science will above all else be relevant to the modern and changing world of Computing. Computer Science is a practical subject where students can apply the academic principles learnt in the classroom to real world systems. It is an intensely creative subject that combines invention and excitement and can look at the natural world through a digital prism. Students will develop skills in computational thinking, problem solving, system design and understanding the power and limits of human and machine intelligence.

The A-Level is divided into three units:

Unit one: Computer Systems

- The characteristics of contemporary processors, input, output and storage devices
- Software and software development
- Exchanging data
- Data types, data structures and algorithms
- Legal, moral, cultural and ethical issues

Unit two: Algorithms and Programming

- Elements of computational thinking
- Problem solving and programming
- Algorithms

Unit three: Programming Project

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



A good computer scientist does not just have skills but learns how to adapt to technological change with its challenges and opportunities

***Imperial College London
Faculty of Computing***

How it will be assessed

Units One and Two: each assessed by a 2 hours 30 minutes written paper, 140 marks, 40 % of A-Level.

Unit Three provides the other 20% of the final mark.

What it prepares you for

The qualification is suitable for students who intend to pursue a career in which an understanding of technology is required. It will provide students with a range of transferable skills and has strong cross curricular links with maths, science and design technology.

