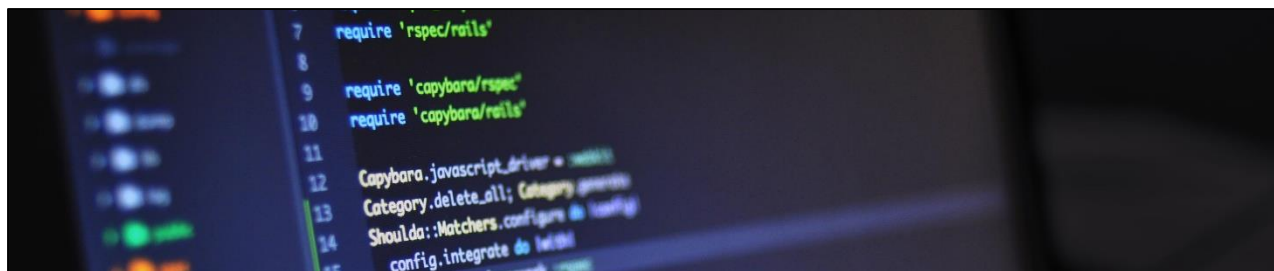


ICT & COMPUTING

A Level Computer Science



Examination Board: OCR
Subject Leader(s): Dr A Middleton



Course Structure

Unit	Topics/Unit Title	Assessment	A Level(%)
1	Computer Systems	Exam	40%
2	Algorithms and Programming	Exam	40%
3	Programming Project	Coursework	20%

What does the course involve?

- The characteristics of contemporary processors, input, output and storage devices
- Software and software development
- Exchanging data
- Data types, data structures and logarithms
- Legal, moral, cultural and ethical issues
- Elements of computational thinking
- Problem solving and programming
- Algorithms to solve problems and standard algorithms

On the project you will also work through a computing problem by analysing the problem, designing the solution, developing the solution and evaluating it. This solution can be written in any software program of your choice but we prefer those written in Python.

The course will have a mixture of theory and practical delivery and Dr Middleton will deliver the majority of the theory within 12 distinct workbooks with regular questions practice linked to each of the conceptual ideas.

Further Study/Employment Prospects

If you want to go on to take computing studies at degree level, or if you are considering employment in the field of computer science, this A level provides a superb preparation.

Computer Science is a forward-looking area that offers excellent prospects. All industries use computers so naturally computer scientists can work in any field. Problems in so many other areas can be solved by computers so it's up to the computer scientist to figure out how, and design the software to apply the solution.

Entry Requirements

A minimum of a C in ICT or Computing at GCSE

Grade 5 or equivalent in Mathematics at GCSE

A logical mind, to enable you to understand and use programming languages.

A step-by-step approach to problem solving.

The ability to work independently and to keep to deadlines.