

Course Title: A Level COMPUTER SCIENCE

Awarding Body: OCR

Further information available from: MRS LEES

**Course requirements:** There is no requirement that you will have studied Computer Science at GCSE but you will be at a *significant* advantage if you have done so, especially as the course is based around the ability to solve problems using computer programming skills. You should enjoy logic and mathematical problem solving and have achieved a GCSE grade 5 or higher in Maths.

We live in a world dictated by technology and understanding how it works is becoming an increasingly important skill. There is an ever growing demand for workers who have the ability to design, program and install computing systems. A Level Computer Science is a challenging, yet rewarding course that gives students a clear progression into higher education and a range of future career paths, as the course was designed after consultation with members of BCS, CAS and top universities.

The OCR Computer Science specification is relevant to the modern and changing world of computing and covers the following areas of study:

- Computer Programming with an emphasis on the importance of computational thinking as a discipline.
- Algorithm design and mathematical problem solving.
- Computational thinking learning the skills necessary to break down a problem
  into the fundamental steps that will lead to a solution, helping students to
  develop the skills to solve problems, design systems and understand human and
  machine intelligence.
- The legal, moral, social and cultural impacts of technology in modern society.

The course comprises three units, all examined at the end of Year 13

- Unit 1 Computer Systems Written Examination, 2.5 hours, 40%
- Unit 2 Algorithms and Programming Written Examination, 2.5 hours, 40%
- Coursework Programming Project 20% completed in Year 13