



# A Level Computer Science OCR

Curriculum Leader: Mrs Smith

## Course Overview:

The OCR A Level in Computer Science will encourage learners to be inspired, motivated and challenged by following a broad, coherent, practical, satisfying and worthwhile course of study. It will provide insight into, and experience of, how computer science works, stimulating learners' curiosity and encouraging them to engage with computer science in their everyday lives and to make informed choices about further study or career choices.

Unit 1 – Computer systems (worth 40% of the qualification and assessed by a 2 hour 30 minutes exam)

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 2 – Algorithms and programming (worth 40% of the qualification and assessed by a 2 hour 30 minutes exam)

Elements of computational thinking;  
Problem solving and programming;  
Algorithms to solve problems and standard algorithms.

Unit 3 – Programming project (worth 20% of the qualification)

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

### Works well with:

- Mathematics
- Further Mathematics
- Sciences
- Sociology
- Business

### Progression Opportunities:

Having A-level computing is highly regarded when you venture into employment or to university. Having an A-level computing qualification opens you up to a world of possibility, with so many avenues and sectors you can get into. Computing at AS and A level will prepare you for one of the many courses available at university including computing, software, engineering, business and computing or computing graphics, amongst others.