# Computer Science A Level (OCR)

## **Programme of Study:**

# Year 1

- Data types and structure
- Programming techniques
- Computational Thinking
- Algorithms
- Boolean Algebra
- Input, output and storage
- Hardware
- Operation System/Applications
- Networks
- Web Technologies
- Legislation
- Ethical, moral and cultural issues

## Year 2

- Programming Project
- Thinking Logically
- Thinking Procedurally
- Thinking Concurrently
- Databases
- Software Development
- Compression, encryption and hashing

#### **Assessment**

Paper 1: Computer Systems 2hrs 30mins 40%

Paper 2: Algorithms and Programming 2hrs 30mins 40%

Coursework: Programming Project 20%

#### **Entry Requirements**

A minimum of a Grade 6 in Maths and English Language. Where students have studied Computer Science at GCSE, we require them to have achieved at least a Grade 7.

## **Recommended Reading and Subject Enrichment**

OCR A Level Computer Science by George Rouse, Jason Pitt , Sean O'Byrne My Revision Notes OCR A level Computer Science by George Rouse, Sean O'Byrne, Jason Pitt <a href="https://craigndave.org/">https://craigndave.org/</a>

## **Higher Education and Career Pathways**

Computer Science A level is a firm foundation for higher education or employment pathways in a range of technology design or management, programming, project management etc. You could also work for an organisation, go on to study a technical apprenticeship or code the next big thing in technology.

# **Complimentary Subjects**

Students who take Computer Science tend to have strengths in Maths and Physics. If you like to think about tasks and issues in a systematic way then you would enjoy studying this subject.