

# AS/A Computer Science



## Entry Criteria:

- You will need to achieve the pathway criteria, please see the prospectus for further information
- You will need to achieve a Grade 4 or above in GCSE Mathematics from a higher tier paper.

## Coursework/Examination Requirements:

AS Assessment	One on-screen examination and one written examination each worth 50%
A Level Assessment	One on-screen examination and one written examination each worth 40% and one non-examined assessment worth 20%

## Awarding Body/Specifications: AQA

**Advanced Level (A Level):** Computer Science is both a practical and theoretical subject, where you will apply the academic principles learned in the classroom to real-world systems. It is also a creative subject, where you will explore the possibilities of computing, and will learn to look at the world through a digital prism.

## AS/Lower Sixth Units

- Fundamentals of Programming
- Fundamentals of Data Structures
- Fundamentals of Algorithm
- Theory of Computation
- Fundamentals of Data Representation
- Fundamentals of Computer Systems
- Fundamentals of Computer Organisation and Architecture
- Consequences of Uses of Computing
- Fundamentals of Communication and Networking

## A Level/Upper Sixth Units

- Fundamentals of Programming
- Fundamentals of Data Structures
- Fundamentals of Algorithms
- Theory of Computation
- Fundamentals of Data Representation
- Fundamentals of Computer Systems
- Fundamentals of Computer Organisation and Architecture
- Consequences of Uses of Computing
- Fundamentals of Communication and Networking
- Fundamentals of Databases
- Big Data
- Fundamentals of Functional Programming

**Progression:** It is excellent preparation for students looking to take Computing Studies at degree level or for anyone considering any kind of career in Computing.

**Opportunities:** Students can become involved in after school coding clubs and there will be entries to various coding and cyber security competitions.