COMPUTER SCIENCE

EXAM BOARD: OCR

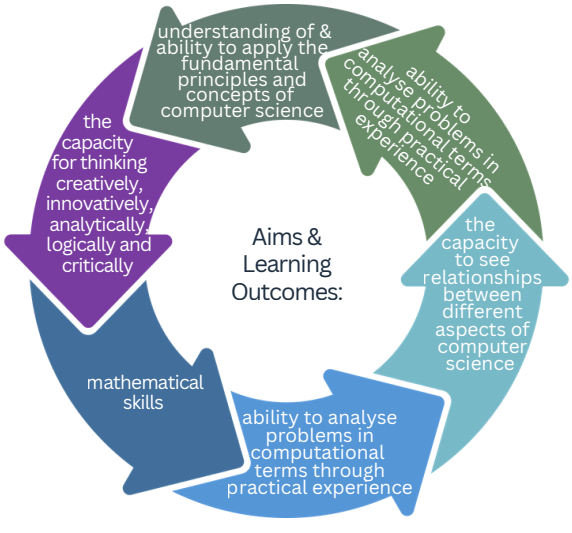
PERSONAL INVESTIGATION 60%	EXTERNALLY-SET ASSIGNMENT 40%

Why study Computer Science?

Computer Science is a practical subject where learners can apply the academic principles learned in the classroom to real world systems.

An A-Level in Computer Science values computational thinking, helping learners to develop the skills to solve problems, design systems and understand the power and limits of human and machine intelligence.

Learners will develop an ability to analyse, critically evaluate and make decisions and the project approach is a vital component of 'post-school' life.



It is an intensely creative subject that combines invention and excitement, and can look at the natural world through a digital prism.

Content Overview:

1. Contemporary Processors
2. Software & Its Development
3. Exchanging Data
4. Data Types, Structures & Algorithms
5. Legal, moral, cultural & ethical issues
6. Elements of computational thinking
7. Problem solving and programming
8. Algorithms to solve problems and standard algorithms

The learner will choose a computing problem to work through:

ANALYSIS OF THE PROBLEM → DESIGN OF THE SOLUTION → DEVELOPING THE SOLUTION → EVALUATION

Assessment overview:

Learners must take 3 components; 1, 2 & 3 or 1, 2 & 4

(1) Computer Systems	(2) Algorithms & Programming	(3) Programming Project Moderated upload, non-exam, 20% or (4) Programming Project Moderated postal, non exam, 20%
2hrs 30 mins written, 40%	2hrs 30 mins written, 40%	

Progression Pathways:

Developing software and hardware that solves key problems is crucial to a vast range of careers. Computing personnel are required by industries as diverse as space and aeronautics, national defence, sports equipment, transport and travel, modern media and social networking.

As well as leading to degrees and apprenticeships in computer science, software engineering, cyber security, artificial intelligence and robotics, A-level computer science helps you develop the skills needed to analyse big data, leading to careers in banking, stock broking and finance.



Our students, beyond Stratford: our 2026 Computer Scientists have gone onto study Computer Science, Computer Science with Artificial Intelligence, Artifical Intelligence & Robotics at the universities of Warwick, Coventry and Oxford Brookes.