OCR AS & A Level Computer Science

Course Overview

Advances in computing are transforming the world around us and computer science continues to be one of the fastest developing industries. As more and more aspects of our lives come to rely on computer systems, there is more need for skilled computer scientists to be able to work within this field.

The UK, originally a pioneering country in computer science, has now become a consumer, simply using software and products developed by other countries. As a result, we are no longer at the front. The new A-level in computer science are designed to change that. To develop essential skills for students to progress into this dynamic industry, be it as a bedroom programmer developing the next 'Flappy Birds' or as a software developer working for one of the industry giants.

Course Content

Year 12	Year 13
AS-Level. The characteristics of contemporary processors, input, output and storage devices, Software and software development, Programming, Exchanging data, Data types, data structures and algorithms, Legal, moral, ethical and cultural issues, Elements of computational thinking, Problem solving and programming Algorithms.	**A-Level.** The A level focuses on the same core themes as the AS-level but to a deeper level. The A-Level also introduces a NEA (non-examined assessment) where the students design and create a programmed solution to a problem

Assessment

AS level:	A-Level:
• Paper 1: Computing Principles - 1 hour 15 minutes written paper. (50%) • Paper 2: Algorithms and Problem Solving - 1 hour 15 minutes written paper. (50%)	• Paper 1: Computer Systems - 2 hours 30 minutes written paper. (40%) • Paper 2: Algorithms and Programming - 2 hour 30 minutes written paper. (40%). • Non-examined assessment - Programming Project (20%)

Entry Requirements

5 A*-C (9-5) at GCSE including English Language and Maths. Minimum of Grade 6 at GCSE Maths. If Computer Science is studied at GCSE, a minimum of Grade B is required.

Progression

Undergraduate degrees at UK wide universities in a vast and varying range of Computer Science degrees. A wide range of apprenticeships and careers ranging from IT support to software development

Course Contact

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