

## Computer Science

This qualification helps students understand the core academic principles of computer science. Classroom learning is transferred into creating real-world systems through the creation of an independent programming project. OCR A Level Computer Science will develop the student's technical understanding and their ability to analyse and solve problems using computational thinking.

### ASSESSMENT and CONTENT

The course assessment includes two exams of 40% each plus a programming project worth 20%.

Content Overview	Assessment Overview
<p>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</p>	<p>Computer systems (01) 140 marks 2 hours and 30 minutes written paper (no calculators allowed). 40% of total A Level</p>
<p>Elements of computational thinking.                      Problem solving and programming.                      Algorithms to solve problems and standard algorithms</p>	<p>Algorithms and programming (02) 140 marks, 2 hours and 30 minutes written paper (no calculators allowed) 40% of total A Level</p>
<p>The learner will choose a computing problem to work through according to the guidance in the specification.</p> <ul style="list-style-type: none"> <li>• Analysis of the problem</li> <li>• Design of the solution</li> <li>• Developing the solution</li> <li>• Evaluation</li> </ul>	<p>Programming project                      03 - Repository or 04 - Postal or 80 Carry forward (2018 onwards).                      70 marks non-exam assessment.                      20% of total A Level</p>

### FURTHER OPPORTUNITIES

Application analyst, Applications developer, Cyber security analyst, Data analyst, Database administrator, Forensic computer analyst, Game developer, Information systems manager, IT consultant, Software engineer, System analyst, UX designer, Web designer, Web developer, IT sales professional, IT trainer, Nanotechnologist, Network engineer, Supply chain manager, Telecommunications researcher.

### The course requirements...

Advantageous to have a solid GCSE in Mathematics - Grade 6 or above