

<https://www.aqa.org.uk/subjects/computer-science-and-it/as-and-a-level/computer-science-7516-7517>

## Why Computer Science?

Study Computer Science and be inspired and equipped to tackle the IT challenges facing our modern world. You will learn how computers work and start programming in formal scripting languages.

You will develop your own software project and associated reports to solve a real-life problem – enabling you to become a real problem solver, to analyse information effectively and to plan projects properly. This project can also form a useful discussion topic for UCAS applications.

You will learn about the technology that really powers all those things you love using, from websites such as Facebook and Twitter to the games you enjoy playing like Call of Duty and The Sims.

Computing will help you with any subjects which require a degree of critical thinking – which is virtually all of them!

## Assessment

40 % - Paper 1  
Programming - On Screen Exam

40 % - Paper 2  
Written Exam

20 % - Paper 3  
Non-Exam Assessment - A practical project - Internally Assessed

## Recommended Reading

AQA A Level Computer Science Text book

AQA A Computer Science Revision Guide

<https://www.codecademy.com>

<https://www.techmeme.com>

<https://www.python.org>

## Recommended Entry Requirements

Grade 6 Mathematics GCSE and Grade 6 in English

Grade 6 GCSE Computing desirable

A genuine interest in how computers work and in computer programming

## Future Pathways

University degrees and apprenticeships in Physics, Engineering or Computer Science related courses including Information Systems, Software Engineering, Artificial Intelligence, and Health Informatics. Careers in a rapidly growing industry including: AI, Cyber Security, IT consultant, Games Developer/Designer, Forensic Computer Analyst, Database administrator, Software or Web Developer, Machine Learning Engineer and more.

## Complementary A Levels

Maths, Physics, Chemistry, Biology, Philosophy and Ethics, Psychology, Art.

## Extra & Super Curricular

There is a national shortage of cyber security practitioners. To help secure our digital future, the Government has introduced Cyber Discovery. You will have the opportunity to test your skills in Ethical hacking, penetration testing, digital forensics, intrusion detection and coding.

*“Computing graduates are among the highest earners in the UK and recognised by all Russell group universities.”*

Mr Foley