

Computer Science

Specification OCR

Entry Requirements

Grade 6 in Computer Science GCSE; Grade 7 in Mathematics GCSE if Computer Science GCSE not studied.

What do I need to know or be able to do before taking this course?

Candidates wishing to study Computer Science should have studied a GCSE course in Computing/Computer Science or have extensive experience in programming.

It will be assumed that candidates have:

- an understanding of current and emerging technologies and how they work
- an ability to apply technical skills and an understanding of the use of algorithms to solve problems using programming
- an ability to work collaboratively
- an ability to evaluate the effectiveness of computer programs/solutions
- an ability to evaluate the impact of the use of computer technology in society

What will I learn on this course?

The course will offer candidates opportunities to learn about the following:

- The characteristics of contemporary processors, input, output and storage devices
- Software and software development
- Exchanging data, including databases, web technologies and networks
- Data types, data structures and Boolean algebra
- Legal, moral, cultural and ethical issues
- Elements of computational thinking
- Problem solving and programming
- Algorithms to solve problems and standard algorithms

How is the course structured?

Unit	Title	Weighting	Assessment Type
Unit 01	Computer Systems	40%	Exam
Unit 02	Algorithms and Programming	40%	Exam
Unit 03	Programming Project	20%	Non-exam assessment

What skills will I develop by doing this course?

This course will appeal to students who wish to develop their knowledge of or skills in:

- advances in technology
- solving problems by constructing and implementing complex algorithms
- writing computer programs to solve problems

What kind of student is this course suitable for?

This course is suitable for students with a keen interest in computers, programming and problem solving. Students taking Computer Science will find Mathematics complements their studies.

What could I go on to do at the end of my course?

Students could study the discipline further by opting to undertake a degree in Computer Science or a more specialised degree such as Software Engineering or Artificial Intelligence. Computer Science graduates have a very marketable degree. Jobs include: programmer/software developer; web

designer/developer; database administrator; IT technician; business analyst; systems architect; system designer; games developer; network engineer; cybersecurity analyst.