A LEVEL COMPUTER SCIENCE

Awarding Body: OCR (Course code H446)

FORTITUDINE CRESCAMUS

Examinations

Component 1: Computer Systems Written exam (2 hours 30 minutes) (40%)
Theoretical knowledge of computer systems, networking, and security.
Component 2: Algorithms and Programming Written exam (2 hours 30 minutes) (40%)
Tests problem-solving abilities, algorithm development, and programming techniques.
Component 3: Programming Project Coursework/NEA project (20%)
Allows students to apply their programming skills to solve a real-world problem.

Course Information

The OCR A-Level Computer Science course offers an in-depth understanding of computing, focusing on programming, computational theory, real-world problem-solving. It is ideal for students who

- Are looking to develop an advanced understanding of computer science
- Want to apply their coding ability to solve real-world problems
- Are looking at a computing orientated degree and aiming to work in the computing industry
- Are looking for an intercalation with STEM subjects.

Course content

Computer Systems Study of hardware, software, networking, and cybersecurity. **Algorithms and Programming** Focus on algorithms, data structures, and programming techniques.	**Programming Project** A practical coding project where students solve a real-world problem using a programming language.

Future Career Opportunities

Software Developer	Systems Architect	Network Engineer
Data Analyst or Data Scientist	Game Designer	AI Specialist
Cybersecurity Analyst	Web Developer	IT Consultant
Researcher in Computing	Ethical Hacker / Penetration Tester	Entrepreneur- Tech

Entry Requirements

GCSE Grades 7 or above in Maths **and** English **and** Computer Science. If Computer Science is selected alongside Further Maths, a GCSE grade 8 is required in both subjects.

Further Information

Associated Degrees: Subject to change with new courses added each year. Intercalation with other STEM subjects popular too.

Computer Science: Oxford, Cambridge, Edinburgh, Imperial Software Engineering: Sheffield, Glasgow, Southampton Artificial Intelligence: Edinburgh, Sussex, Warwick Cybersecurity: Warwick, Royal Holloway, Kent Data Science – Leeds, Southampton, Queen Mary	Computer Networks: Birmingham, Northumbria, Plymouth Game Development: Abertay, Staffordshire, Falmouth Robotics: Bristol, Sheffield, Leeds Mathematics and Computer Science: Oxford, Warwick, Bath Computing and Business Management – Reading, Leicester, Loughborough