

COMPUTER SCIENCE

"A ship in port is safe, but that is not what ships are for. Sail out to sea and do new things."

— Rear Admiral Grace Hopper, developer of the first compiler for a programming language and pioneer of COBOL.

Current Teaching Staff:

Mr P Meehan - Head of Department
Mr G Neighbour

Examination board and syllabus: AQA

Entrance requirement: Grade 6 in GCSE Maths and Grade 6 in English Language.

Year 1

1. Fundamentals of programming
2. Fundamentals of data structures
3. Systematic approach to problem solving
4. Theory of computation
5. Fundamentals of computer systems
6. Fundamentals of computer organisation and architecture
7. Consequences of uses of computing
8. Fundamentals of communication and networking.

Year 2

1. Fundamentals of databases
2. Big Data
3. Fundamentals of functional programming
4. Systematic approach to problem solving (advanced)
5. Non-exam assessment (NEA).

A-level assessment

Paper 1: On-screen exam with programming and problem-solving tasks
Paper 2: Written exam covering theory topics
NEA: Programming project.

Top 6 reasons to study Computer Science

1. Nowadays computers impact everything we do.
2. Expertise in computer science enables you to solve complex, challenging problems.
3. Computer science enables you to make a positive difference in the world.
4. This subject offers a pathway to many different types of lucrative careers.
5. Jobs in the computer science industry are here to stay.
6. Expertise in this subject will help you develop your skills, even if your primary career choice is something else.

CAREERS

Software Developer
Data Scientist
Cybersecurity Analyst
AI/Machine Learning Engineer
Web Developer
Network Engineer
Systems Architect
IT Consultant
Games Developer
Research Scientist