Bullers Wood School
Sixth Form
Be part of our success story

Computer Science A Level (AQA)

Why study this subject?
This linear course provides an excellent extension to either the single GCSE Information Technology or GCSE Computer Science.

Entry Requirements
Please see the entry requirements page on the school website.

Content
1. Fundamentals of programming
2. Fundamentals of data structures
3. Fundamentals of algorithms
4. Theory of computation
5. Fundamentals of data representation
6. Fundamentals of computer systems
7. Fundamentals of computer organisation and architecture
8. Consequences of uses of computing
9. Fundamentals of communication and networking
10. Fundamentals of databases
11. Big Data
12. Fundamentals of functional programming
13. Systematic approach to problem solving
14. Non-exam assessment – the computing practical

The course will include practical hands-on experience, projects and assignments, presentations, individual research, industrial and commercial visits and problem-solving activities.

Assessment
A Level examinations taken at the end of Year 13:
Paper 1 – This paper tests a student's ability to program, as well as their theoretical knowledge of Computer Science from subject content 1-4. It is an on-screen exam for 2 hours 30 minutes.
Paper 2 – This paper tests a student's ability to answer questions from subject content 5-12. It is a written exam for 2 hours 30 minutes.
Non-Exam assessment – This project assesses student's ability to use the knowledge and skills gained through the course to solve a practical problem. Students will be expected to follow a systematic approach to problem solving, as shown in section 13.

Future courses and possible careers
Computer Science is an expanding industry where changes in computing are forever altering the way we work and computing specialists are in much demand. This course prepares you for the more specialist Computer Science based higher education courses and for the world of work, in which women in particular, are under-represented and much valued!