



COMPUTER SCIENCE

Qualification: A-Level

Overview of subject:

The faculty follows the AQA A-Level Computer Science course and uses Python for our chosen programming language. The specification truly reflects the essence of computer science; is recognised by higher education as a rigorous scientific subject; and reveals the subject to be a fundamental, academic discipline underpinning other subjects.

Topics studied in the syllabus include:

- Programming and Data structures
- Algorithms and Theory of computation
- Data representation
- Computer systems and Computer organisation and architecture
- Communication and networking with consequences of uses of computing
- Databases
- Big Data
- Fundamentals of functional programming

The course might be of interest to:

Study computing if you want to explore and investigate how computers work and are used. You are most likely to enjoy the subject if you have a real interest in science, technology and/or mathematics; you are a logical thinker and enjoy problem solving.

Potential future pathways:

Well qualified and skilled programmers are in great demand as shown in numerous surveys. Further specialised study can lead to employment in the gaming industries. A computing qualification is a good basis for work as a software engineer, analyst, data modeller, systems administrator, technician, consultant, computer engineer, network administrator, software developer or programmer.