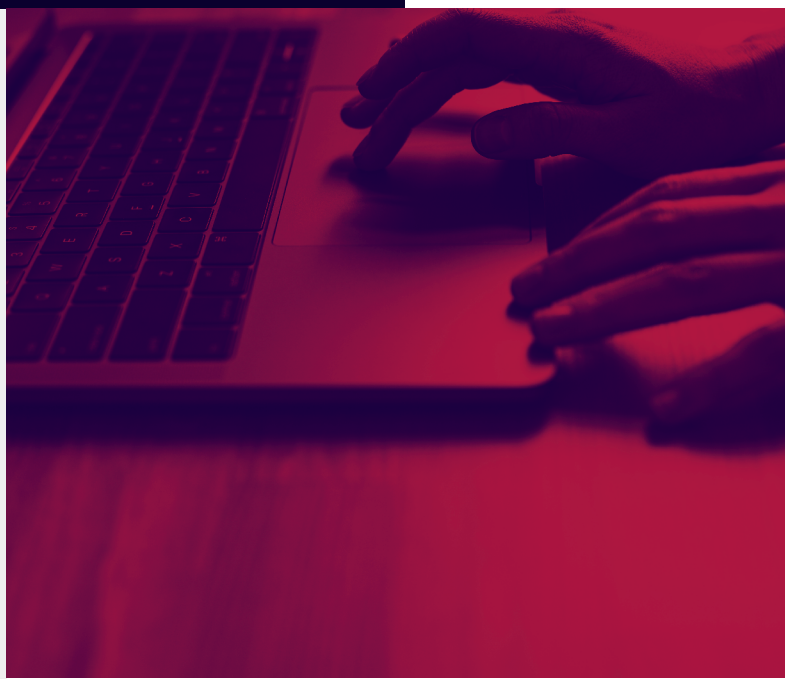
COMPUTER SCIENCE

Head of department: Mr C Wilde
Examination board: AQA 7517

*"Nobody can predict the future jobs market, but one thing that is certain in that automation and technology will play a huge role. The ability to think **creatively, solve problems,** understand computers and how to control them will prepare you for every eventuality. The best way to predict the future is to build it."*



PROGRAMME OF STUDY

The course is designed to develop a detailed understanding of computer science around hands on play based experience and project-based learning. From an understanding of the computer at a fundamental level we are able to develop a deep understanding of the complexities of computer science through engaging and though provoking activities that secure knowledge in the underlying algorithms that govern the subject. Topics will include the Fundamentals of programming, data structures, algorithms, computational thinking, data representation, computer systems, computer architecture, communication and networking, databases, functional programming and the consequences of uses of computing. Over the two years you will develop a strong ability to analyse problems, deconstruct them, spot patterns and formulate solutions, all of which are skills that are extremely valuable for further study and employment.

ASSESSMENT

- Two exams at the end of the course.
- A 20 hour Non Exam Assessment programming task on a topic of your choice.

FUTURE PLANS

If you are considering a career in STEM then Computer Science is an excellent subject to consider. It complements a wide range of subjects in Engineering and Science as well as Computer Science.

HOW TO APPLY

There are no requirements for studying Computer Science. A strong GCSE in Mathematics may be an advantage but is not required.