

Mathematics

A Level: Level 3

This Course

Are you enjoying Maths at school? Do you enjoy solving problems? If so, you should seriously consider A Level Mathematics.

A level Mathematics is an interesting and challenging course which goes beyond the methods and concepts learned at GCSE. These include applications of Pure Mathematics, Statistics, and Mechanics Mathematics.

The Pure Mathematics topics include algebra, co-ordinate geometry, polynomials, trigonometry, calculus, differentiation and integration techniques, partial fractions, vectors and differential equations.

In Statistics you will learn to collect and analyse data and use it to make predictions about future events. Many subjects and careers make use of statistical information and techniques. An understanding of probability and risk is important in careers like insurance, medicine, engineering and the sciences.

In Mechanics, you learn to model and analyse the physical world around us, including the study of forces and motion. Mechanics is particularly useful to students studying physics and engineering.

This is a two-year linear course which has a total of three exams of two hours each at the end.

Why Maths?

A Level maths is a challenging subject, but it is also one that is extremely rewarding if you are prepared to put in the time and the effort. It is about applying different concepts and thinking outside the box in solving problems. Maths is used in a wide range of industries such as engineering, architecture, business, finance, science, technology, aviation and many others. A mathematics A Level can open so many doors for you. In fact there is currently a national shortageshortage of qualified mathematicians, so this course will give you a competitive edge with future employers. Employers are constantly on the lookout for people who are competent in mathematics and are good problem solvers. This course will give you a solid grounding in these skills and will give you that extra edge in the competitive job market.

Throughout the course you will gain: an understanding of the mathematics that underpin many aspects of our lives

- the ability to apply a range of mathematical skills to different situations
- acute logical thinking and problem-solving abilities
- the ability to process, interpret and analyse information.

What's expected from me?

You should have a passion for mathematics, be resilient and open minded when developing your understanding of the concepts of the course. You need to be proactive, be good at managing your time and have good organisational skills in order to keep on top of your deadlines.

After Sixth Form

Many students go on to pursue careers in medicine, research and development, engineering, statistics, operational research, computing, accountancy, actuarial work, business management, insurance and teaching. If you are hoping to pursue a course in science, mathematics or engineering at university, maths is compulsory.

Entry requirements: students should have achieved a Grade 6 or above in GCSE Mathematics.