Mathematics (A Level)

What will the course involve?

Pure Mathematics

Pure Mathematics is is the study of the basic concepts and structures that underpin mathematics. Its purpose is to search for a deeper understanding and an expanded knowledge of mathematics itself. Traditionally, pure mathematics is split into three general areas: analysis, algebra, and geometry.

The three areas of Pure Mathematics are complementary to other studies and provide support for students taking A level courses in Science subjects.

Statistics

Statistics involves simulating or modelling real life problems and because of this it is an essential part of mathematics, biological science, social science and humanity courses. Statistics enables us to understand real world problems by analysing data, making judgements and carrying out further investigations.

Mechanics

The study of mechanics forms a natural link with science and technology. It is a fundamental part of mathematics, physics and engineering courses but also provides opportunities for learning modelling skills whilst using the pure mathematics of functions, calculus and geometry.

How will I be assessed?

Over the course of two years all pupils will study Pure Mathematics 1, Pure mathematics 2 and a Statistics and Mechanics module. Assessment is by three papers each 2 hours and equally weighted.

What skills will I develop?

- 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

Where can the study of mathematics lead?

Although an A level in mathematics may only be required for a few degree subjects, it is useful in gaining entry to many courses for which the competition is high. There is a shortage of people with mathematical qualifications and such people are in great demand in many Business and Industrial areas as well as in Further Education. Careers in Accountancy, Law, Business Administration, Education, Industrial Research and Management, Engineering, Surveying, Medicine, Technical Services, Information Technology, Electronics would all be assisted by a qualification in Mathematics.

Where can I get more information?

See Mrs McMahon and Miss Quine in the Mathematics department for more information.