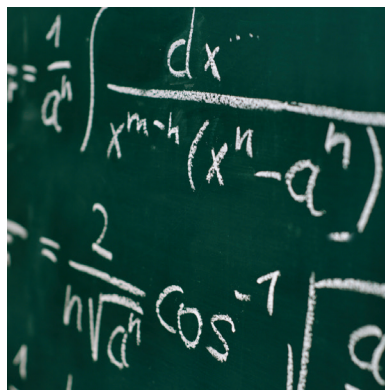


Mathematics



Examination Board: Edexcel



■ What is the course about?

In mathematics A Level, you will extend your mathematical knowledge and skills and learn about new areas of mathematics such as calculus.

■ For the A Level you will study:

- Pure mathematics (proof, algebra, functions, coordinate geometry, sequences, series, trigonometry, exponentials, logarithms, differentiation, integration, vectors and numerical methods).
- Mechanics (measures, kinematics, forces, Newton's laws and moments).
- Statistics (sampling, representing data, interpreting data, probability, distributions and hypothesis testing).

■ How is the course assessed?

This course is assessed by examination only, which take place at the end of Year 13.

■ What skills will I need and develop in this course?

You will need to be confident in all the algebraic processing skills and trigonometry you have been taught at GCSE. The ability to solve problems is also essential. These skills will be developed further throughout the A Level course.

■ Subject combination advice

Mathematics is a good subject to study alongside any A Level subject. If you are considering studying mathematics or a mathematics-related degree at University, it is essential and you should also study further mathematics at A Level. Many students choose mathematics to support science subjects or economics and finance.

■ What can the course lead to in terms of higher education and future careers?

Many degree subjects and careers desire A Level mathematics. The main subjects which would require A Level mathematics include mathematics, statistics, physics, astronomy, engineering, computer science, and economics. Also, medicine, architecture, laboratory and social sciences will have a certain amount of mathematical or statistical content.

■ What are the formal entry requirements?

GCSE mathematics Grade 7 or above.

■ What activities enrich this subject?

The UK Senior Mathematics Challenge, Mathematical Olympiad for Girls and the Team Challenge organised by United Kingdom Mathematical Trust provide opportunities to extend your thinking skills beyond the confines of the curriculum.