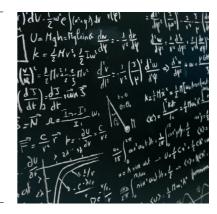
Further Mathematics



Examination Board: Edexcel



■ What is the course about?

Further mathematics A Level may be taken in addition to mathematics A Level. Further mathematics is an extension of the regular A Level course and will provide you with a challenge and the opportunity to explore new and more sophisticated mathematical concepts.

■ For the A Level you will study:

- Core pure mathematics (complex numbers, matrices, further algebra, further functions, proof, further calculus, further vectors, polar coordinates, hyperbolic functions and differential equations).
- Applied mathematics (decision mathematics and further mechanics).

■ How is the course assessed?

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

■ What skills will I need and develop in this course? You will need to be very confident in all the algebraic processing skills and trigonometry you have been taught at GCSE. The ability to persevere with challenging problems and work independently is essential.

■ Subject combination advice

Further mathematics is a good subject to study if you are considering studying mathematics or a mathematically related subject for degree at university.

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

If you are planning to take a mathematics-rich degree such as mathematics itself, engineering, sciences, computing, finance/economics, you will benefit enormously from taking further mathematics, at least to the end of Year 12.

If you are not planning to study for a mathematicsrich degree but are keen on mathematics, you will find further mathematics a very enjoyable course; having a further mathematics qualification identifies students as having excellent analytical skills, whatever area they plan to study or work within.

■ What are the formal entry requirements? GCSE Mathematics Grade 8/9.

■ 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.