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# FURTHER MATHS

A LEVEL

## Entry Requirements:

You need to have a Grade 7 or above at GCSE Maths to study Further Maths. You also need to be studying A level Mathematics.

## Is this for me?

Further Mathematics is for strong mathematics students who are interested in abstract mathematical ideas, such as infinity and imaginary numbers, and enjoy solving challenging problems. This is incredibly valuable should you want to study a Maths-related degree, such as Mathematics, Physics, Economics or Engineering. If you are considering applying to Oxford or Cambridge or a Russell Group university, the Further Maths A level will make your application stand out from the crowd, as universities recognise it as a challenging and relevant qualification.

There are many other benefits to studying Further Mathematics:

- ◆ Students who study Further Maths achieve, on average, one grade higher in their Maths A level than other students with the same GCSE average points score on entry. Studying Further Maths also improves students' grades in other subjects (especially in Physics, where many of the ideas in Mechanics overlap).
- ◆ Further Maths is a mandatory entry requirement for many Maths degrees.
- ◆ Some universities reduce offers and offer bursaries for students who have studied Further Mathematics, to encourage them to apply to their institution.
- ◆ Further Maths will make the first year of Maths-related degrees much more accessible.
- ◆ Further Maths is interesting and challenging and increases students' enjoyment of Maths, giving a broader view of what it means to work mathematically, and what mathematicians do.

## What will I do?

The Further Mathematics A level is made up of approximately three quarters of pure mathematics, where you will study many new topics, such as complex and imaginary numbers, proof, matrices, vectors, calculus and differential equations. Much of this content overlaps with content from the first year of Maths-related degrees, and therefore gives students a huge advantage when studying these courses.

The remaining quarter of the course is likely to be made up of decision mathematics, a branch of mathematics not studied at GCSE level. Decision maths includes working with algorithms and linear programming to find optimal solutions for problems. This complements computer science studies by tackling similar problems in a different way and also gives an overview of a new and exciting branch of mathematics

As all units are examined at the end of the course, there is no coursework.

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For more information please contact:  
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