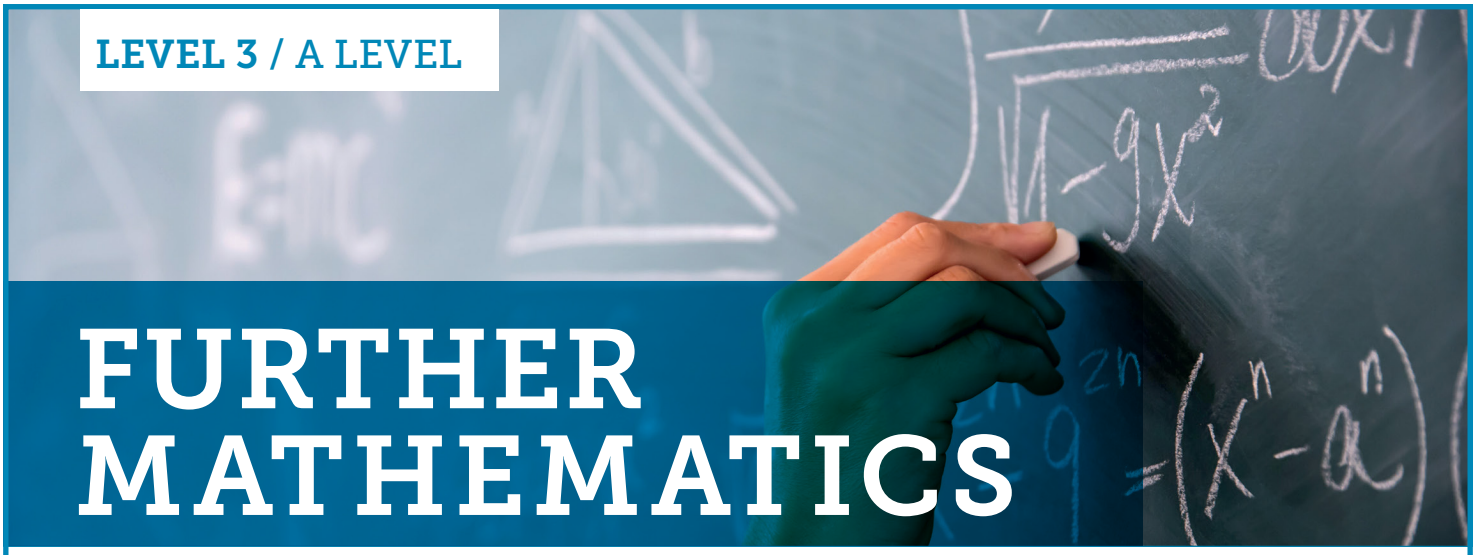
LEVEL 3 / A LEVEL



FURTHER MATHEMATICS

When studying A Level Further Mathematics you go deeper into the theory of Maths; learning the material in a more stretching and challenging way. Further Maths enables students to broaden their knowledge of Maths and also study Maths to a level similar to that studied at university, and as such, students go to university better prepared.

Specific course entry requirements

College entry to include GCSE Mathematics minimum Grade 7. A Level Further Mathematics and A Level Mathematics make up Double Mathematics and must be studied together (please refer to the Entry Requirements section on the college website for further details).

How will I be assessed?

100% Examination.

What will I study?

In addition to the topics covered within the A Level Mathematics course, Further Mathematics students also study:

- Imaginary numbers – How negative numbers can have square roots and what the consequences are. This is applied in complex calculus and is unexpectedly useful in Electrical Engineering
- Maclaurin's Series – The Maths behind how values of sines, cosines and tangents are found
- Polar Co-ordinates – How more complex functions can be graphed and their areas calculated
- Second Order Differential Equations – The Maths behind the stability of static and dynamics structures such as bridges and aircraft

Where will this course lead me?

Mathematics courses at university, but Further Mathematics is useful for other degrees such as Engineering, Sciences, Economics, IT and Computing.

It is also essential for those students wishing to study Mathematics at some of the top universities.