



A Level Further Mathematics

- Did you know that you can study a second A or AS level in Maths called Further Maths?
- Further Maths is an AS/A level which broadens and deepens the content covered in AS/A level Maths.
- Further Maths develops your mathematical ability and introduces you to new topics, such as matrices and complex numbers, which are vital for maths-rich degrees in areas such as sciences, engineering, statistics and computing, as well as Mathematics itself.
- Further Maths is studied alongside AS/A Level Maths.

Why study Further Maths?

Further Maths will introduce you to fascinating mathematical concepts. It will develop your problem solving skills, which will help to boost your performance in AS/A level Maths.

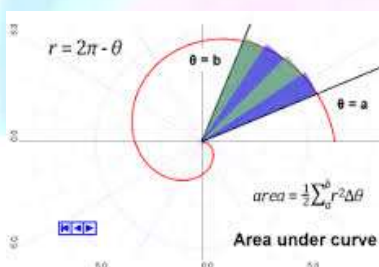
If you plan to apply for any degree that is rich in maths, a qualification in Further Maths will give your application an edge.

You will study more maths that is relevant to your university course, which will help you to hit the ground running. Some prestigious university degree courses now require a Further Maths qualification and many university courses prefer students who have studied Further Maths.

Is Further Maths for me?

If Mathematics is one of your favourite subjects and you want to study a mathematical based course at University then you should seriously consider A level Further Maths.

You would ideally have an A or A* in Mathematics at GCSE.



$$\int_0^{\pi/2} (2\cos 2\theta + 2\sin \theta) \cos \theta d\theta$$

$$\sin(\pi/2) \cdot \cos(\pi/2) + 1$$

$$\left(\begin{array}{ccc|c} 2 & 1 & 3 & 11 \\ 0 & 3 & 1 & 8 \\ 0 & 0 & 4 & 8 \end{array} \right)$$

$$\left(\begin{array}{cc|c} 4 & 2 & 6 \\ 0 & 1 & 5 \end{array} \right)$$

$$\left(\begin{array}{cccc|c} 1 & 0 & 4 & 2 & -1 \\ 0 & 4 & 2 & 2 & 4 \\ 0 & 0 & 2 & 3 & 1 \\ 0 & 0 & 0 & 0 & 0 \end{array} \right)$$

$$\left(\begin{array}{ccc|c} 1 & 2 & 3 & 4 \\ 0 & 0 & 4 & 5 \\ 0 & 0 & 0 & 3 \end{array} \right)$$

Where does Further Maths help?

Further Maths will help with University Courses and Careers in the following areas.

- Mathematics
 - Mechanical Engineering
 - Aeronautical Engineering
 - Electronic Engineering
 - Chemistry
 - Architecture
 - Physics
 - Chemical Engineering
 - Computer Science
 - Finance
 - Actuarial Science
 - Statistics
 - Civil Engineering
 - Astrophysics
 - Economics
- and many others

What would I study?

In Year 12: You will study the complete Edexcel A2 Mathematics Specification. This is six modules:

- Core Maths C1 to C4
- Decision 1
- Statistics 1

In Year 13: Work on the Edexcel Further Mathematics specification will begin at the end of the Year 12 and continue into Year 13. There are six modules to study:

- Further Pure Maths FP1 to FP3
- Mechanics 1 and 2
- Statistics 2

How would I be assessed?

Assessment is by written examination papers.

- There is one examination paper for each module.
- Each paper lasts for 90 minutes
- Papers are taken in May and June.

The criteria for getting an A* in A level Further Mathematics is to average over 80% overall and to average over 90% in the best three A2 modules.