

**HIGHAM LANE
SIXTH FORM**

Further Maths



HIGHAM LANE SIXTH FORM - ACHIEVE - BELIEVE - SUCCEED

FAQs

Do I need to do
A Level Maths
too?

Yes! You cannot take A
Level Further Maths
without studying A
Level Maths.

A-Level Further Mathematics is designed to broaden and deepen the mathematical knowledge and skills developed when studying A-level Mathematics. It is studied alongside A-level Mathematics and provides a stimulating experience for those who enjoy the subject.

A-level Further Mathematics is made up of three broad areas. These are Core Pure Mathematics, Further Statistics and Decision Mathematics.

Note: To study Further Mathematics you must also take A-Level Mathematics. Students will be required to take on further independent study to deepen their knowledge.

Assessment:

4 examination papers at the end of Year 13 worth 25% each covering:-

Core Pure Mathematics 1

Core Pure Mathematics 2

Further Statistics 1

Decision Mathematics 1

Note: Please also note that all providers will offer Core Pure 1 and Core Pure 2, however, HLS Sixth Form offer Further Statistics 1 and Decision Maths 1. Other providers may offer different options here.

FAQs

What's the difference between A Level Maths and Further Maths?

In A Level Maths, you will study Pure Maths, Statistics and Mechanics. A Level Further Maths will both deepen and broaden your mathematical knowledge. In Core Pure Maths, we will build on knowledge studied in A Level Maths and our scheme of learning is tailored to run simultaneously.

Similarly in Further Statistics, we will build on the Statistics knowledge covered in A Level Maths but also broaden your knowledge and cover topics such as Hypothesis testing which will give you an insight into statistical techniques used in research. Decision Mathematics is a new area of Mathematics which you will not have previously studied and introduces topics such as algorithms which will give you an insight into how delivery routes are planned and computing algorithms work.

Course Details:

Core Pure Mathematics includes:

Proof, Complex numbers, Matrices, Further Algebra and Functions, Further Calculus, Further Vectors, Polar Coordinates, Hyperbolic functions, Differential equations

Further Statistics includes:

Discrete probability distributions, Poisson and Binomial distributions, geometric and negative binomial distributions, Hypothesis testing, Central Limit Theorem, Chi Squared tests, probability generating functions, quality of tests

Decision Mathematics:

Algorithms and graph theory, Algorithms on graphs, Critical path analysis, Linear programming

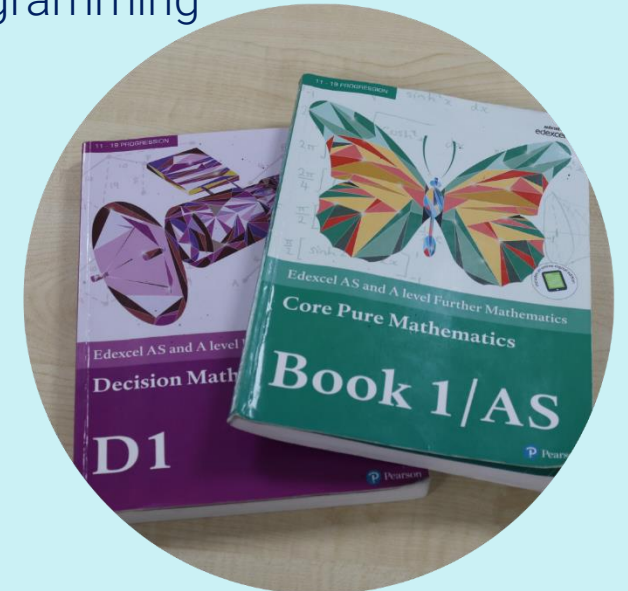
Other Learning Opportunities:

Maths master classes at local universities

Supporting KS3/4 students in Mathematics lessons

Being a member of the Maths Society

Become a member of the Further Maths Support Network




FAQs

Why should I
study A Level
Further Maths?

If you are interested in studying Maths at University then Further Maths is definitely for you! Maybe you just really enjoy Maths? Whilst it is a challenging subject, we highly recommend Further Maths for high-achievers and for anyone who is interested in doing Physics, Chemistry, Computer Science or Engineering at university. Students doing these subjects at University often do some first year Maths modules too and Further Maths will really help.

Where next with this course?

Studying Further Mathematics is excellent preparation for university, especially if you wish to study any mathematics related subject such as the sciences, engineering, computing, accountancy, financial mathematics or mathematics itself



Students with a Further Mathematics qualification could go on to work in many fields including Actuarial Analysis, Accountancy, Data Analysis, Academic Research, Statistical Analysis, Finance, Insurance, Meteorology, Investment Banking, Software Development.

FAQs

What optional modules do you offer?

Please note that all providers will offer Core Pure 1 and Core Pure 2, however, HLS Sixth Form offer Further Statistics 1 and Decision Maths 1. Other providers may offer different options here. Further Statistics 1 and Decision Maths 1 offer good breadth of knowledge whilst being accessible too.

Other providers may offer Further Mechanics 1, Further Pure Modules or additional Statistics and Decision modules. However, universities can only assume knowledge from Core Pure 1 and 2 so it doesn't really matter!

For more information about
courses that are available at
Higham Lane Sixth Form,
please visit our website

