Welcome to the HGSS Key Stage 5 Maths

A Level Mathematics

Teachers: Mrs J. Merrylees
Mr Richards
Mr J. Ortega

Our A Level Results have been outstanding during the past years

Grades	2021
A*	3
A	10
B	6
C	5
D	
E	
U	

Grades	2022
A*	3
A	2
B	7
C	2
D	2
E	
U	

Grades	2023
A*	4
A	11
B	8
C	3
D	0
E	2
U	1

Grades	2024
A*	0
A	5
B	4
C	7
D	6
E	1
U	

Grades	2025
A*	3
A	5
B	5
C	4
D	5
E	2
U	

We currently have more than 60 keen mathematicians studying AS/A level maths in Year 12 and 13 this year.

A level Mathematics

Why choose A Level Mathematics?

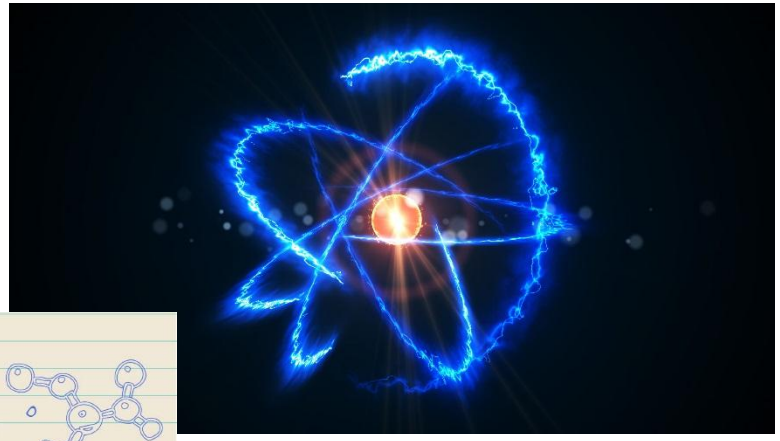
- To deepen your understanding of mathematics from GCSE level.
- Because you loved algebra and applied maths problem solving skills.
- To acquire a strong foundation to allow you to access a wide range of careers.
- To obtain mathematical knowledge to make logical and reasoned decisions in a variety of real contexts.

A level Mathematics

Leading to a career in:

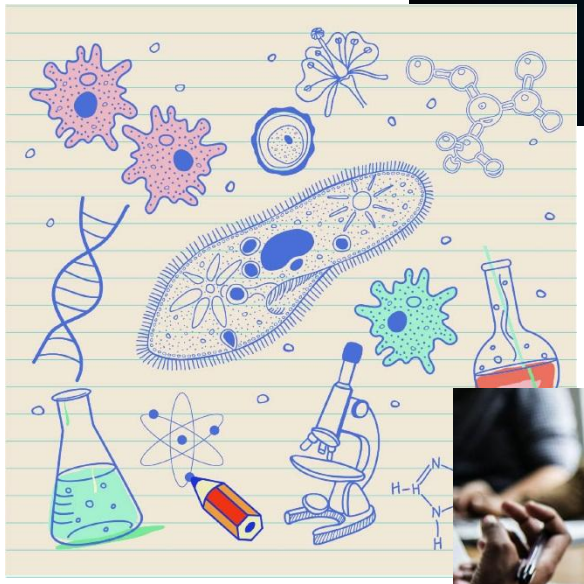
Actuarial Science
Aeronautical Engineering
Chemical Engineering
Civil Engineering / Architecture
Economist
Electrical/Electronic Engineering
Mechanical Engineering
Law
Veterinary
Medicine
Pharmacy
Physiotherapy
Teaching
Banking

A level Mathematics



This subject goes well with:

Physics	Geography
Design technology	Psychology
Chemistry	Sociology
Biology	Economics
Computing	Business Studies



A level Mathematics

Course Content:

Year 12

Pure Mathematics 1

Algebraic techniques, 2-D Geometry, Graph Sketching, Sequences and an Introduction to Calculus, Vectors, Trigonometry, Logs and Exponentials, Binomial Expansion and Geometrics Sequences and Series.

Statistics and Mechanics 1

Statistical sampling, Data presentation and interpretation, Probability, Kinematics, Forces and Newton's Law.

Year 13

Pure Mathematics 2

Functions, Numerical Methods, Proofs and Further Trigonometry. Exponential and logarithms, Vectors, Advanced Trigonometry, Algebra and Calculus, Sequence and Series.

Statistics and Mechanics 2

Further probability of significance testing. Kinematics, Forces, Moments.

A level Mathematics

Examinations:

Exam Board

Pearson Edexcel A level

2 Pure Mathematics Papers (33.33% each paper)

1 Applied Mathematics Paper (Statistics and Mechanics) (33.33%)

Entry Requirements for A Level course:

The minimum entry requirement is GCSE Maths Level 7

Double A Level in Maths + Further Maths

Why choose A Level Further Mathematics?

This course is suitable for those students who would like to significantly deepen and broaden their knowledge of Mathematics.

Students will need to be passionate about the subject and have the ability to work very hard and independently.

The course connects all the different areas of mathematics to other fields of study and allows the student to be aware of the relevance of mathematics to the world of work.

A qualification in Further Maths is highly valued as indicator of intellectual ability, and unquestionably for mathematically related degrees at top universities.

Double A Level in Maths + Further Maths

Course Content:

Year 12

Pure Mathematics 1 and 2

Algebraic techniques, 2-D Geometry, Graph Sketching, Sequences and an Introduction to Calculus. Vectors, Statistics and Mechanics. Trigonometry, Logs and Exponentials, Binomial Expansion and Geometrics Sequences and Series. Functions, Numerical Methods, Differentiation, Proofs and Further Trigonometry. Exponential and logarithms, Vectors. Advanced Trigonometry, Algebra and Calculus, Numerical Methods, Sequence and Series.

Statistics and Mechanics 1 and 2

Statistical sampling, Data presentation and interpretation, Probability, Kinematics, Forces and Newton's Law. Further probability of significance testing. Kinematics, Forces, Moments.

Year 13

Core Mathematics 1 and 2

Proof, Complex numbers, Matrices, Further algebra and functions, Further calculus, Further vectors, Polar coordinates, Hyperbolic functions, Differential equations.

Options are subject to staff availability:

Students will be directed towards their strengths.

- Further Pure Mathematics 1 and 2
- Further Statistics 1 and 2
- Further Mechanics 1 and 2
- Decision Mathematics 1 and 2

Double A Level in Maths + Further Maths

Examinations:

Exam Board

Pearson Edexcel A level

2 Core Pure Mathematics Papers

2 Options Papers (25% each paper)

Paper 1	Paper 2	Paper 3 options	Paper 4 options	Entry code
Core Pure Mathematics 1	Core Pure Mathematics 2	3A: Further Pure Mathematics 1	4A: Further Pure Mathematics 2	A
			4B: Further Statistics 1	B
			4C: Further Mechanics 1	C
			4D: Decision Mathematics 1	D
		3B: Further Statistics 1	4C: Further Mechanics 1	E
			4D: Decision Mathematics 1	F
			4E: Further Statistics 2	G
		3C: Further Mechanics 1	4D: Decision Mathematics 1	H
			4F: Further Mechanics 2	J
		3D: Decision Mathematics 1	4G: Decision Mathematics 2	K

Entry Requirements for Further Maths + A Level course:

The minimum entry requirement is GCSE Maths Level 9 recommended.

A level Mathematics

PURE lesson example

Thank You

Contact:

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