



# A Level Mathematics



## Examination Board:

Edexcel

## Assessment:

The courses are assessed through exams taken at the end of two years of study. The papers are on core maths, statistics and mechanics.

## Why Study Mathematics?

If you don't have much of a mathematical background, it can be quite hard to explain why studying advanced Maths is of such immense value that it is seen as the premier A-level. If you pick up a text and thumb through it, it looks impenetrable: It might as well be written in a foreign language with a strange script, like Mandarin. The subject deals simply with the foundation of the ideas which have shaped our scientific world, its technologies, and the thought-patterns which will be needed for the next generations of scientists, economists, statisticians and engineers. It has also influenced deeply the world of philosophers and poets.

## Your Future Pathways

The course specification has been designed for students who wish to go on to higher education courses or employment where knowledge of Mathematics would be beneficial. It is also designed to be way in which students who really enjoy Maths can develop their mental powers.

“Taking maths at A-level is more helpful for landing a place at a Russell Group university than studying at a grammar or private school, research from University College London’s Institute of Education suggests. There is even a maths premium for degree subjects that are not directly related to maths or

which require a different skillset, such as languages and humanities.” - Source: <https://schoolsweek.co.uk/a-level-maths-is-more-useful-for-top-university-places-than-private-school>

# What Will I Study?

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## **Pure Mathematics (66%)**

Methods and techniques which underpin the study of all other areas of mathematics, such as, proof, algebra, trigonometry, calculus, and vectors.

## **Statistics (17%)**

Working with data from a sample to make inferences about a population, probability calculations, modelling real life data using statistical distributions and hypothesis testing.

## **Mechanics (17%)**

The study of the physical world, modelling the motion of objects and the forces acting on them.