



Maths

Why study MATHEMATICS?

Mathematics has served humanity in our quest to understand the world and extend the possibilities that this ever-changing world can offer. Mathematics underpins the atomic fabric of the universe; the principles and patterns of which allow us to search for meaning in the universe with greater precision.

Studying A level Mathematics will raise your confidence to tackle and solve increasingly complex abstract and real-life problems. Mathematics helps you develop your abilities to be creative, think with clarity and reason logically.

Employers value the skills you will develop through your study. A level in mathematics is a strong indicator of your ability to succeed in a wide range of careers. Research has shown that students who have studied A level Mathematics can earn around 10% more than students who have not studied the subject.

[Courses in A Level Mathematics](#)

Exam Board: Edexcel

A Level

Three exams papers are taken for an award in A level Mathematics. Papers 1 and 2 assess pure Mathematics and the remaining two papers assess applied Mathematics. All examination papers are equally weighted and last 2 hours. Calculator usage is allowed in all three papers.

Overview of content of A level papers:

Paper 1

Pure: Algebra and functions; coordinate geometry in the (x, y) plane; sequences and series; trigonometry; exponentials and logarithms; differentiation; integration; vectors

Paper 2

Pure: Probability; statistics; mechanics

Paper 3

Section A: Statistics

Distributions; interpretation; probability; statistical c

Statistics and probability

Quantities and units in mechanics; kinematics; forces and Newton's laws; moments

Which activities will I be engaged in during the course?

highly algebra-based; require

The use of technology permeates the study of A Level
compute summary statistics and access probabilities from standard statistical distributions.

The student is also required to draw inferences from

Examining and reflecting on effective learning strategies to be used in the course and to

Independently reading up on prior knowledge and new theories.

Self-evaluating your understanding and misconceptions within targeted discussions to address any
shortfall.

Thinking and communicating with clarity using subject specific vocabulary.

Constructing rigorous mathematical arguments (including proofs).