

## Why study A Level Mathematics?

It's an interesting and rewarding course that broadens the mathematical skills you learnt at GCSE. You'll be introduced to exciting new areas of pure mathematics and explore new applications of mathematics such as statistics and mechanics. The knowledge and skills you gain are transferable to other subjects and are valued in almost every employment sector. There is a national shortage of young people entering training and employment with mathematical qualifications.

## What will I study?

You will study three areas of maths:

**Pure Maths** has a real focus on developing your algebraic skills, using these specifically in the areas of coordinate geometry, trigonometry, differentiation, integration and vectors. This is two thirds of the course.

**Statistics** involves probability, bivariate data (taking scatter graphs further) and an introduction to the binomial and normal distributions. This is one sixth of the course.

**Mechanics** will see you apply some of the pure skills in problems involving motion of particles including projectiles, variable force and acceleration and momentum. This is one sixth of the course.

## Assessment

100% examined.

**Paper 1:** Written Exam 2 hours in length, testing any of the pure content.

**Paper 2:** Written exam 2 hours in length, testing any the pure content and all of the statistics.

**Paper 3:** Written exam 2 hours in length, testing any of the pure content and all of the mechanics.

## Study trips, visits and events

Students are encouraged to enter the UK senior maths challenge. There are 'training camps' run after school before the competition to help prepare! They are also encouraged to enter the national 'Ritangle' competition where they work together in groups to solve problems over several months..

There is a Maths Inspiration event where students can experience the UK's most inspiring maths speakers live in theatres, presenting mathematics in the context of exciting, real-world applications.

## Subject entry requirements

A grade 6 in mathematics at higher tier.



## Student Perspective

"Transitioning from GCSE to A Level maths may seem daunting, but in reality we both found it to really build on the foundations of GCSE's key concepts. This has set us up for a broad variety of career paths, as well as supplying us with a range of skills and abilities applicable for any industry. We have both found A Level maths to be extremely supportive of our other subjects and have really enjoyed the course so far."

Alex and Milly, A Level Mathematics students