

# Mathematics

## Subject content

The content of A Level Mathematics splits broadly into the two strands of Pure Maths and Applied Maths (Statistics and Mechanics). **Two-thirds:** Pure Maths extends work covered at GCSE on algebra, trigonometry and graphs, as well as introducing brand new topics such as logarithms, calculus and vectors. **One-sixth:** Statistics allows us to investigate real-world data. From this we are able to make predictions and assess the validity of certain statistical models used to analyse the ever-changing world around us. **One-sixth:** Mechanics describes the motion of objects and how they respond to forces, from cars in the street to satellites revolving around a planet. You can view EDEXCEL course specifications by clicking on the link below; Mathematics on EDEXCEL [<https://qualifications.pearson.com/content/dam/pdf/A%20Level/Mathematics/2017/specification-and-sample-assesment/a-level-l3-mathematics-specification.pdf>]

## Specific entry requirements

GCSE Grade 6 or above in Mathematics. Students will also need to pass an entrance test.

## Equipment

Students must have a minimum of Grade 6 in GCSE Maths (although Grade 7 or above is preferred). Students are also required to pass an entrance test before starting the course. Students will need to purchase the Casio Fx-991EX calculator for the course as well as a textbook.

## Learning methods

You will discover and explore maths by discussion and group work as well as independent research and practical work.

## Assessment

There will be regular homework and class tests to prepare for the final exams. Assessment is by examination at the end of the two years of study: Paper 1 and Paper 2 – Pure Maths Paper 3 – Statistics and Mechanics The content from both years of study are examined in these three papers.

## Progression opportunities

Mathematics is a versatile A Level choice and is highly regarded by Higher Education establishments. Maths is a key component of many degree courses, including computer science, engineering, natural sciences, economics, medicine, geography, architecture and, of course, mathematics itself. Graduates go on to have a wide range of careers in any job where logical thought and problem solving are required such as accountancy, computing, scientific research and medicine.

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