

Mathematics

Subject content

The content of A Level Mathematics splits broadly into the following two strands: 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. You will learn 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. This course is an award of EDEXCEL. Visit the EDEXCEL website to read the course specifications.

[<https://qualifications.pearson.com/content/dam/pdf/A%20Level/Mathematics/2017/specification-and-sample-assesment/a-level-l3-mathematics-specification-issue4.pdf>]

Specific entry requirements

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.

Equipment

You will need to purchase the Casio FX-991CW or 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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Want to apply?

Visit <https://www.barnsleysixthformcollege.co.uk/apply> to get started

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