

# A Level Maths



*"Life is good for only two things, discovering mathematics and teaching mathematics."* Simeon Poisson

Although Mathematics is defined as 'the study of magnitude', in reality it is the study which opens the door to an endless world of discovery and personal satisfaction, expanding your mind. Our results continue to be above national average, with students invariably going on to their first choice Post 18 provision.

You will gain confidence by developing your skills, together with the conventions of mathematical communication, to find and explain order and patterns, to model real life situations and to construct sound solutions. You will learn to think differently as your perspective of the world changes progressively. You will study three branches of Mathematics:

- Pure Mathematics: Functions and Algebra, Trigonometry, Calculus and Vector Geometry
- Statistics: Measures and Presentation, Probability, Distributions, Hypothesis Testing
- Mechanics: Kinematics, Forces, Newton's Laws of Motion

## How you will be assessed:

100% written examination at the end of the course, comprising three, two hour, papers, each worth 100 marks and one third of your total grade:

- Pure Maths 1
- Pure Maths 2
- Statistics and Mechanics

## What you need to get started:

- GCSE Mathematics grade 6
- Sound command of higher GCSE algebra skills
- Genuine enjoyment of the subject
- An inquisitive mind and a desire to know the truth
- Good organisation

## What our students say:

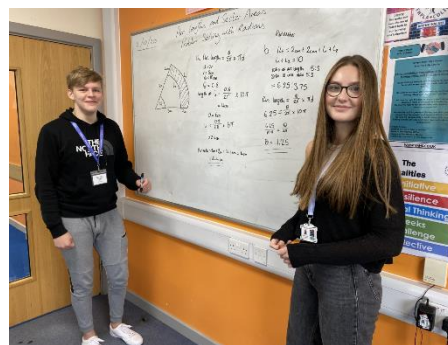
*I've always been a logical thinker and mathematics has allowed that skill to flourish. This A Level course has led me to contemplate a future in the field and opened a wide range of opportunities for me to choose from. The work itself provides a gratification unmatched by any other subject, as the achievement found within understanding motivates a further interest in the topic. The A Level course allows you to apply mathematics to the real world, permitting you to truly*

*acknowledge the importance of the subject. A favourite aspect of mine has to be the idea that the course shapes you into a more rational, logical and critical thinker, which is useful for any career.*

## Emma Chapman, Year 13

*"I have always enjoyed Maths, even from the start of primary school and it has always been the subject I have excelled most in. Maths is a key part of life and everyone takes experiences or lessons from using this skill. This is why I think maths is a great opportunity for someone like me who enjoys it and values everyday life skills. It has developed my learning abilities and problem-solving skills. By doing this, my general knowledge has improved, which will also provide guidance for me within my future. From the perspective of someone who believes they have a natural skill in Maths, I specifically enjoy the satisfaction that comes when finally getting the end answer I was pushing myself to achieve. By picking Maths, you open yourself up to loads of opportunities, which can be useful when deciding on future life changes. I definitely recommend it to anyone who enjoys maths or wants to develop their life skills through the art of mathematics."*

## Josh Webb, Year 13



## What next?

**Degree courses:** Mathematics, Engineering, Sciences, Computer Science, Aviation Technology with Pilot Studies, Medicine.

**Careers:** Mathematical/Scientific research, Engineering, Aviation, Medicine, Finance, Statistics, Law, Management and many more in which the skills of mathematicians are sought keenly.

... pursuing excellence