Study Programme
Mathematics (A Level)

Bishop Laney Sixth Form

QUALIFICATION

Edexcel GCE A Level Mathematics

WHY SHOULD I CHOOSE THIS STUDY PROGRAMME?

If you are still not sure how your life will map out after A Levels, that is OK – many people aren't! But if you are wondering why you should choose to study A Level Mathematics, remember that it is a great way to keep your options open.

Mathematics is known as a 'facilitating subject' by universities, meaning that it paves the way for a plethora of degree courses. And if you love mathematics but don't want to abandon your love of English or Music or History, there is no need – you can study Mathematics at many universities as a joint honours degree with whatever else takes your fancy. Whatever your future plans, studying A Level Mathematics will stretch your mind and endow you with abilities that stay with you for life. Whether you are interpreting statistics or managing a budget, your mathematical background will help you to think logically, analyse data and express yourself clearly. These are fantastically valuable, transferrable skills which are highly prized by employers across every field, as well as giving you a boost on a personal level.

Mathematics is good training for the mind, helping to develop logical thinking and problem-solving skills – the kind of analytical processes that have helped solve problems of all kinds for thousands of years.

WHAT WILL I STUDY?

The Pearson Edexcel Level 3 Advanced GCE in Mathematics consists of three externally-examined papers:

Paper 1 & 2: Pure Mathematics
Proof, Algebra and functions, Coordinate geometry in the (x, y) plane, Sequences and series, Trigonometry, Exponentials and logarithms, Differentiation, Integration, Numerical methods, Vectors.

Paper 3: Statistics & Mechanics
Section A: Statistics
Statistical sampling, Data presentation and interpretation, Probability, Statistical distributions, Statistical hypothesis testing

Section B: Mechanics
Quantities and units in mechanics, Kinematics, Forces and Newton's laws, Moments

Three overarching themes will be applied along with associated mathematical thinking and understanding.

- Mathematical argument, language and proof
- Mathematical problem solving
- Mathematical modelling

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WHAT COULD THIS QUALIFICATION LEAD TO?

Any maths qualification post-16 is a challenging but highly-valued qualification. It is difficult to think of a course or career that would not welcome it in combination with other subjects. Some students go on to study strongly-mathematical courses such as Mathematics, Physics, Computing, or Engineering. Others use the skills they have learnt by continuing on courses in Business Studies, Psychology, Economics, Business, Geography, Architecture or Law.

WHAT WILL BE EXPECTED OF ME?

You may be surprised to hear that this is by no means just about your GCSE grade. It is more important for you to reflect on the fact that you need to become fluent with algebra to be successful at A-level Maths.

In addition to your four hours' instruction per week, you will be expected to undertake a further four hours of independent study.

WHO WILL BE INVOLVED?

In addition to your Maths teacher, each student at Bishop Laney will be assigned a Business Mentor.

ENTRY REQUIREMENTS

At least 5 GCSE Grades 9 – 4 or equivalent to include English at Grade 4 or above and Maths at Grade 6 or above.

FURTHER INFORMATION

How will you be assessed?
The course is entirely assessed through examinations at the end of the 2 years. There are 3 Papers, each worth 100 marks and lasting 2 hours per paper.