

Mathematics

AS and A-Level Mathematics

Subject Mathematics

Exam Board Edexcel

Specification Numbers 9MA0

Teacher Responsible Mr Harman

Introduction To further develop and extend the skills acquired in GCSE Mathematics in order to complement and support other A-Levels. The study of Mechanics helps prepare students for study in the fields of Education, Engineering and Science.

Aims of the Course The aims and objectives of this qualification are to enable students to:

- understand mathematics and mathematical processes in a way that promotes confidence, fosters enjoyment and provides a strong foundation for progress to further study.
- extend their range of mathematical skills and techniques.
- understand coherence and progression in mathematics and how different areas of mathematics are connected.
- apply mathematics in other fields of study and be aware of the relevance of mathematics to the world of work and to situations in society in general.
- use their mathematical knowledge to make logical and reasoned decisions in solving problems both within pure mathematics and in a variety of contexts, and communicate the mathematical rationale for these decisions clearly.
- reason logically and recognise incorrect reasoning.
- construct mathematical proofs.
- use their mathematical skills and techniques to solve challenging problems that require them to decide on the solution strategy.
- recognise when mathematics can be used to analyse and solve a problem in context.
- represent situations mathematically and understand the relationship between problems in context and mathematical models that may be applied to solve them.
- draw diagrams and sketch graphs to help explore mathematical situations and interpret solutions.
- make deductions and inferences and draw conclusions by using mathematical reasoning.
- interpret solutions and communicate their interpretation effectively in the context of the problem.
- read and comprehend mathematical arguments, including justifications of methods and formulae, and communicate their understanding.

How You Are Assessed At the end of the second year, you will sit three examinations, each worth 33.33% of your overall grade. Each examination is 2 hours long.

Links to Future Careers A-Level Mathematics opens doors to further study and careers in Education, Banking, Economics, Accountancy, Actuary, Medicine and Computing.

Entry Requirement
Grade 7 in GCSE Maths