## Mathematics

## Staff Lead

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## Why Study MAthematics?

The A Level Mathematics assessments build further on the problem solving examined at GCSE.
The aims and objectives of this qualification are to enable students to:

- apply theory to solve mathematical problems in context
- understand coherence and progression in mathematics and how different areas in 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, and communicate the mathematical rationale for these decisions clearly
- reason logically and recognise incorrect reasoning
- construct mathematical proofs
- draw diagrams and sketch graphs to help explore mathematical situations and interpret solutions
- interpret solutions and communicate their interpretation effectively in the context of the problem
- use technology such as calculators and computers effectively and recognise when such use may be inappropriate
- take increasing responsibility for their own learning and the evaluation of their own mathematical development.


## Career Paths \& Degree Courses

A level Mathematics provides students with a thorough grounding in the mathematical tools and techniques often needed in the workplace. The logic and reasoning skills developed by studying A level Mathematics ensures the qualification is widely respected even in non-mathematical arenas. Mathematics is a much sought after qualification for entry to a wide variety of full-time courses in higher education. There are also many areas of employment that see Mathematics A level as an important qualification. Higher Education courses or careers that either require A level Mathematics or are strongly related include economics, medicine, architecture, engineering, accountancy, teaching, psychology, physics, computing and information and communication technology.

## Requirements

At least five 9-4 grades at GCSE, with a minimum average grade score of 4.5. At least a grade 6 in Mathematics GCSE.

Recommended - A grade 7 or above in Mathematics.

[^0]Each examination is 2 hours long and worth one third of the qualification


[^0]:    A Level

    Mathematics (3 external examinations)
    Paper 1: Pure Mathematics
    Paper 2: Pure Mathematics and Mechanics
    Paper 3: Pure Mathematics and Statistics

