## Maths - A Level

## Contact Person: Mrs R Coates

## **Course Outline**

A-level Mathematics is a fascinating journey through the realm of Pure Mathematics, Statistics, and Mechanics. Pure Mathematics lays the foundation for all mathematical thinking, offering a constellation of concepts to challenge the mind. From the elegance of calculus to the intricacies of algebra and geometry, Pure Mathematics is the intellectual core enriching our understanding of the mathematical universe. Statistics injects a dose of real-world relevance into the mix, equipping students with the tools to analyse data, make informed decisions, and uncover meaningful patterns.

Mechanics moves your study of mathematics from the abstract to the tangible, grounding theory in the physical world. It allows us to predict the motion of objects, understand forces at play, and engineer solutions to real-world problems. The thrill of Mechanics lies in its ability to bridge the gap between theoretical elegance and practical application, empowering you to engineer the future.

In summary, A-level Mathematics is a twoyear journey that nurtures both a deep appreciation for the beauty of mathematics and the skills needed to apply it in a multitude of contexts.

Algebraic fluency is a priority, as are strong organisational and time management skills. Most importantly you must enjoy maths and the problem solving that comes with it!

You may be considered for this course if you consistently have been predicted a grade 7 or above throughout Year 11 and your algebraic manipulation is strong. All students will be expected to complete set work over the summer and will be given an induction test at the beginning of September to ensure that they start the course with a strong foundation.

## **Progression Post-18**

Maths is essential for many degree courses besides a Mathematics degree and is desirable for many more. These include Chemistry, Physics, Biology, Computer Science, Technology, Engineering, Geography, Economics, and Psychology.

Maths also supports many other courses and careers, for example accountancy, actuarial work, banking, computing, MORSE and management.

Whatever employment or further education is pursued, Maths AS/A2 is highly respected and research suggests that people with A-level Mathematics may earn up to a third more per annum than those who don't have it!

Qualification: A Level Examination: 100% Examination Board: Edexcel