

FURTHER MATHEMATICS

A bitesize overview of the curriculum.

YEAR 1

- Study Statistics and Mechanics.
- Model the world around us, the motion of objects and the forces acting on them.
- Learn how to reach conclusions from data and calculating the likelihood of an event occurring.
- Develop the art of using modelling assumptions to simplify the mathematical description of a real-life scenario.
- Complete the material for the A Level Mathematics course in Lower Sixth.

YEAR 2

- Study Complex Numbers, Matrices and Vectors, further your knowledge of proof and extend Calculus beyond the Mathematics A Level.
- Choose two optional modules from a choice of Pure, Statistics, Mechanics, and Decision Mathematics.
- See the links between algebra, geometry and Calculus via de Moivre's theorem.
- Model real-life scenarios through modelling with differential equations, vectors and complex numbers.
- Explore the link between circles, ellipses, parabolas and hyperbolas through the study of conic sections.

WHAT SUBJECTS COULD I STUDY AT UNIVERSITY?

- Mathematics
- Physics
- Engineering

WHAT CAREERS COULD THIS LEAD TO?

- Economist
- Cryptographer
- Engineer

ENRICHMENT OPPORTUNITIES

- Maths Challenge Club
- Preparation for MAT, STEP and University Interviews
- UKMT Individual and Team Challenges
- Lectures, Talks and Workshops
- 'It all adds up' Conference at University of Oxford