



# Mathematics A Level

## Features of the Course:

- Plan and interpret information from different sources
- Carry out multi-stage calculations and be able to form extended lines of reasoning
- Present findings, explain results and justify choice of methods
- Spiritual, moral, ethical social and cultural issues relating to mathematics

## A Level Content

### Pure

Proof, Algebra and Functions, Trigonometry, Transformations, Further Differentiation and Integration, Differential Equations, Series, Partial Fractions, Numerical Methods, Vectors in 3D.

### Statistics

Probability Distributions, Conditional Probability, Venn Diagrams, Normal Distribution, Confidence Intervals, Hypothesis Testing, Contingency Tables,

### Mechanics

Moments, Further Kinematics with Calculus, Motion in a Plane, Forces, Friction, Projectiles.

## Methods of Assessment:

A Level: There are three papers in total, two Pure Papers and a Statistics and Mechanics Paper. These main areas in mathematics are each assessed by a 2 hour written paper at the end of the course.