

### Course Content

Further Maths is designed for students with an enthusiasm and passion for mathematics. The qualification is both deeper and broader than A-Level Maths.

As well as building on algebra and calculus introduced in A-Level Maths, the A-Level Further Maths core content introduces complex numbers, matrices, conic sections, series expansions, polar co-ordinates, hyperbolic functions, further calculus and vectors. When these new ideas are introduced there is a greater focus on proof with students exploring the limitations of their models.

In addition to the Further Pure Mathematics content students study further applied units in mechanics and statistics.

Further Mechanics builds upon the mathematical modelling techniques students have previously learnt and considers concepts such as energy, collisions, circular motion, centres of mass and stability of systems of particles.

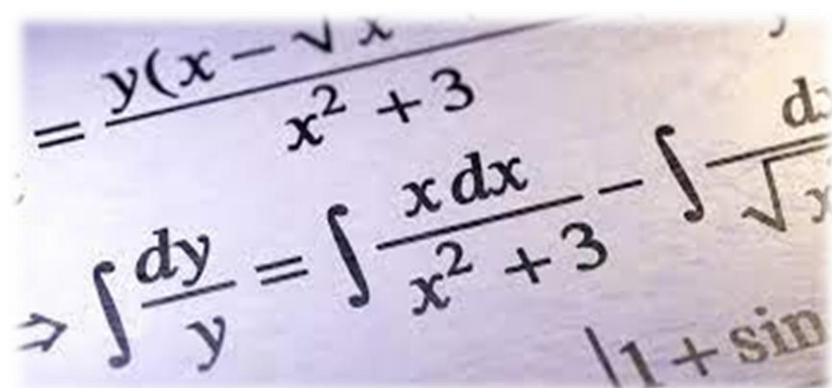
In Further Statistics students study in greater depth the properties of both discrete and continuous probability distributions. This knowledge is then applied studying further probability distributions such as Poisson, chi-squared, exponential and the t-distribution; using these for hypothesis testing.

### Further Studies and Career Opportunities

Students studying both Maths and Further Maths have an excellent choice of careers, many in well paid professions. Many students go on to degrees in maths, engineering, computing, the sciences and economics or higher-level apprenticeships in these areas. Further Maths is also highly regarded by many top universities and is requirement for a number of courses at Russell Group universities.

### Subject Entry Requirements

Grade 8



#### Subject Enhancement

Maths Challenge

#### How is this assessed?

##### Exam Board - AQA

Exams	✓
Coursework	
Other	