# FURTHER MATHEMATICS A-LEVEL

### EXAM BOARD: Edexcel

## **COURSE DESCRIPTION:**

Studying Further Mathematics allows you to access a much broader range of topics and techniques and these form a solid foundation for those students wishing to go on to study Maths, Physics or Engineering at a top university. It is studied in conjunction with A-Level Mathematics and students thinking of taking Further Maths must feel secure and confident with the algebraic skills learnt at GCSE as well as being genuinely enthusiastic about mathematics in order to be successful on this course.

## **COURSE CONTENT:**

The A-Level Further Mathematics course consists of a mix of pure and applied topics.

Typical topics from the course include:

- Further Pure Mathematics: Series; complex numbers; numerical solution of equations; Coordinate systems, matrix algebra, proof.
- Further Statistics: The Binomial and Poisson distributions; continuous random variables; continuous distributions; samples; hypothesis tests.
- Further Mechanics: Momentum and impulse, Collisions, Centres of mass, Work and energy, Elastic strings and springs.

#### **ASSESSMENT:**

The course is assessed by four 90 minute exams at the end of Year 13. Two exams are based on the core topics and there is a choice of topics for the other two exams.

#### **ENTRY REQUIREMENTS:**

Grade 7 at GCSE Mathematics with a recommendation from your GCSE teacher or a Grade 8+.

