



FURTHER MATHS

TOGETHER WE SUCCEED
ACHIEVEMENT ASPIRATION HIGH EXPECTATIONS COMMUNITY

A LEVEL FURTHER MATHS

Course Structure:

The course is split into 3 elements, Pure, Mechanics and Decision Maths.

The Pure element covers Complex Numbers, Argand Diagrams, Series, Roots of Polynomials, Volumes of Revolution, Matrices, Linear Transformations, Proof by Induction, Vectors, Methods in Calculus, Polar Coordinates, Hyperbolic Functions, Methods in Differential Equations and Modelling with Differential Equations.

The Mechanics element covers Momentum and Impulse, Work, Energy & Power, Elastic Strings and Springs, Elastic Collisions in one dimension and two dimensions.

The Decision element covers Algorithms, Graphs and Networks, Algorithms of Graphs, Route Inspection, The Travelling Salesman Problem, Linear Programming, The Simplex Algorithm and Critical Path Analysis.

There are 4 exams at the end of Year 13.

All exams are 1 hour and 30 minutes long.

Paper 1 – Core Pure 1 - 75 marks

Paper 2 – Core Pure 2 - 75 marks

Paper 3 – Further Mechanics 1 - 75 marks

Paper 4 – Decision 1 - 75 marks

Students may also sit the AS exam at the end of Year 12

All exams are 1 hour 40 minutes long.

Paper 1 – Core Pure 1 – 80 marks

Papers 2 & 3 sat together – Further Mechanics 1 & Decision 1 – 40 marks each

Throughout the two-year course you will complete class assessments and mock exams to monitor and support your progress. You will use a graphical calculator during the course.

Useful information:

We follow the Edexcel specification for the course.

In order to be successful on this course there needs to be a high level of dedication to complete practice in the form of text book exercises and exam questions.