

... Curriculum Road Map KS5 Further Maths

Your journey continues in to:

- University
- Apprentices
- Work

Tailored in-class revision and intervention

PPE 2

- Methods in Differential Equations
- Linear Programming
- Elastic Collisions in One Dimension

- Modelling with Differential Equations
- Simplex Algorithm
- Elastic Collisions in Two Dimensions



- Volumes of Revolution
- Polar Coordinates
- Hyperbolic Functions

PPE 1

- Complex Numbers
- Series
- Methods in Calculus



- Volumes of Revolution
- Critical Path Analysis
- Differentiation and Integration



- Algorithms on Graphs
- Route Inspection
- Momentum and Impulse

- Travelling Salesman
- Work, Energy and Power
- Elastic Strings and Springs



- Algorithms
- Graphs and Networks
- Projectiles, Forces, Moments

- Complex Numbers
- Argand Diagrams
- Series
- Roots of Polynomials



- Matrices
- Linear Transformations
- Proof by Induction
- Vectors

Year 12

Year 13

Careers – Architect – Geologist – Engineer – Accountant – Commodity Trader – Meteorologist – Investment Banker

Careers – Game Designer – Actuary – Medical Scientist – Mathematician – Teacher – Software Developer – GCHQ Analyst

Threshold Concepts

Algebraic manipulation

This concept involves recognising mathematical properties and relationships using symbolic representation

Number sense

This concept involves understanding the number system and how they are used in a wide variety of mathematical ways

Shape facts

This concept involves recognising the names and properties of geometry shapes and angles.

Multiplicative reasoning

This concept involves using ratio and proportion and understanding of reciprocals in real world applications

Representing and interpreting data

This concept involves interpreting, manipulating and presenting data in various ways.

Calculator skills

This concept involves fluent application of mathematical operations on a scientific calculator

Understanding and calculating risk

This concept involves knowing the rules of probability in the correct context