

Maths Department

KS5 Curriculum Overview

Year 12

Algebra:
Algebraic Expressions, Quadratics, Equations, Graphs.

Advanced Algebra:
Circles, Algebraic Methods, Binomial Expansion.

Trigonometry:
Trigonometric Ratios, Trigonometric identities and Equations.

Vectors:
i,j-Notation, Geometric Problems.

Differentiation and Integration:
Gradients, Differentiation, Modelling, Integrals, Definite Integration.

Exponentials and Logs:
Exponential Functions and Modelling, Logarithms, Equations, Applications.

Data:
Data, Measures of Location and Spread, Representations, Correlation.

Probability:
Probability, Distributions, Hypothesis Testing.

Mechanics:
Modelling, Constant Acceleration, Forces, Variable Acceleration.

Year 13

Algebra:
Proof, Algebraic Fractions, Functions, Sequences and Series, Binomial Expansion.

Trigonometry:
Radians, Trigonometric Functions, Modelling.

Parametric Equations:
Parametric Equations, Modelling.

Differentiation:
Differentiating Common Functions, Rules of Differentiation, Parametric Differentiation, Using Derivatives.

Numerical Methods:
Roots, Iteration, Newton-Raphson Method, Applications.

Integration:
Rules of Integration, Integrating Common Functions, Differential Equations.

Vectors:
3D Vectors, Geometric Problems.

Stats:
Regression, Conditional Probability, Normal Distribution.

Forces:
Moments, Friction, Applications of Forces.

Kinematics:
Projectiles, Vectors, Applying Calculus.

Online Resources

Click the apps to explore

