

# Key Stage 5 Curriculum Overview

## Subject: Mathematics

### Year 12

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	Assessment
<p><b><u>Pure Mathematics 1</u></b></p> <p>Vectors</p> <p>Coordinate Geometry</p> <p>Algebraic expressions</p> <p>Quadratics</p> <p><b><u>Statistics 1</u></b></p> <p>Data Collection</p> <p>Measures of location and spread</p> <p><b><u>Mechanics 1</u></b></p> <p>Modelling in mechanics</p> <p>Velocity Time Graphs</p>	<p><b><u>Pure Mathematics 1</u></b></p> <p>Equations and Inequalities</p> <p>Graphs and Transformations</p> <p>Trigonometric Ratios</p> <p>Trigonometric Identities and equations</p> <p><b><u>Statistics 1</u></b></p> <p>Representations of data</p> <p><b><u>Mechanics 1</u></b></p> <p>Constant Acceleration Formulae</p> <p>Vertical Motion under gravity</p>	<p><b><u>Pure Mathematics 1</u></b></p> <p>Differentiation</p> <p>Integration</p> <p><b><u>Statistics 1</u></b></p> <p>Correlation</p> <p>Probability</p> <p><b><u>Mechanics 1</u></b></p> <p>Forces</p>	<p><b><u>Pure Mathematics 1</u></b></p> <p>Algebraic Methods</p> <p>Circles</p> <p><b><u>Statistics 1</u></b></p> <p>Statistical Distributions</p> <p><b><u>Mechanics 1</u></b></p> <p>Connected Particles</p> <p>Pulleys</p>	<p><b><u>Pure Mathematics 1</u></b></p> <p>The Binomial expansion</p> <p>Exponentials and Logarithms</p> <p><b><u>Statistics 1</u></b></p> <p>Hypothesis Testing</p> <p><b><u>Mechanics 1</u></b></p> <p>Variable acceleration</p>	<p><b><u>Revision and End of Year Assessments</u></b></p> <p><b><u>Pure Mathematics 2</u></b></p> <p>Algebraic Methods</p> <p>Sequences and Series</p> <p><b><u>Statistics 2</u></b></p> <p>Probability</p> <p><b><u>Mechanics 2</u></b></p> <p>Moments</p>	<p>At the end of Year 12 students will have two internal school assessments testing knowledge of Pure Mathematics 1 as well as Statistics and Mechanics 1.</p> <p>See below for how students are assessed externally at the end of Year 13.</p>

# Key Stage 5 Curriculum Overview

**Subject: Mathematics**

**Year 13**

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	Assessment
<p><b><u>Pure Mathematics 2</u></b></p> <p>Functions and Graphs</p> <p>Radians</p> <p>Trigonometric Functions</p> <p>Trigonometry and Modelling</p> <p><b><u>Statistics 2</u></b></p> <p>Probability</p> <p><b><u>Mechanics 2</u></b></p> <p>Forces and Friction</p>	<p><b><u>Pure Mathematics 2</u></b></p> <p>Differentiation</p> <p>Binomial Expansion</p> <p>Parametric Equations</p> <p><b><u>Statistics 2</u></b></p> <p>The Normal Distribution</p> <p><b><u>Mechanics 2</u></b></p> <p>Projectiles</p> <p>Applications of forces</p>	<p><b><u>Pure Mathematics 2</u></b></p> <p>Integration</p> <p>Numerical Methods</p> <p>Vectors</p> <p><b><u>Statistics 2</u></b></p> <p>Regression, correlation and hypothesis testing</p> <p><b><u>Mechanics 2</u></b></p> <p>Further Kinematics</p>	<p><b><u>Pure Mathematics</u></b></p> <p>Revision</p> <p><b><u>Statistics</u></b></p> <p>Revision</p> <p><b><u>Mechanics</u></b></p> <p>Revision</p>	<p><b><u>Revision and examinations</u></b></p>	<p><b><u>Revision and examinations</u></b></p>	<p>All assessment is through examination. All students will be tested in three examinations at the end of Year 13.</p> <p>There will be two examinations on Pure Mathematics and one examination on Applied Mathematics (which is Statistics and Mechanics). Each examination is 2 hours in length and accounts for 100 marks.</p>