

Year 12		Year 13	
Pure	Stats/Mech	Pure	Stats/Mech
<ul style="list-style-type: none"> • Algebraic Indices • Quadratics • Equations and Inequalities • Graphs and Transformations • Straight Line Graphs • Circles • Algebraic Methods • The Binomial Expansion • Trigonometric Ratios • Trigonometric Identities and Equations • Vectors • Differentiation • Integration • Exponentials and Logarithms 	<ul style="list-style-type: none"> • Stats <ul style="list-style-type: none"> ○ Data Collection ○ Measures of Location and Spread ○ Representations of Data ○ Correlation ○ Probability ○ Statistical Distribution ○ Hypothesis Testing • Mech <ul style="list-style-type: none"> ○ Modelling in Mechanics ○ Constant Acceleration ○ Forces and Motion ○ Variable Acceleration 	<ul style="list-style-type: none"> • Algebraic Methods • Functions and Graphs • Sequences and Series • Binomial Expansion • Radians • Trigonometric Functions • Trigonometry and Modelling • Parametric Equations • Differentiation • Numerical Methods • Integration • Vectors 	<ul style="list-style-type: none"> • Stats <ul style="list-style-type: none"> ○ Regression, Correlation and Hypothesis Testing ○ Measuring Correlation ○ Hypothesis Testing for Zero Correlation • Mechanics <ul style="list-style-type: none"> ○ Moments ○ Forces and Friction ○ Projectiles ○ Applications of Force ○ Further Kinematics
<p>Assessments:</p> <ul style="list-style-type: none"> • Unit 1: Algebra and Functions • Unit 2: Coordinate geometry • Unit 3: Further Algebra • Unit 4: Trigonometry • Unit 5: Vectors • Unit 6: Differentiation • Unit 7: Integration • Unit 8: Exponentials and Logarithms 	<p>Assessments:</p> <ul style="list-style-type: none"> • Unit 1: Statistical Sampling • Unit 2: Data Presentation and Interpretation • Unit 3: Probability • Unit 4: Statistical Distribution • Unit 5: Statistical Hypothesis Testing • Unit 6: Quantities and units in mechanics • Unit 7: Kinematics 1 • Unit 8: Forces and Newton's Laws • Unit 9: Kinematics 2 	<p>Assessments:</p> <ul style="list-style-type: none"> • Unit 1: Proof • Unit 2: Algebraic and partial fractions • Unit 3: Functions and Modelling • Unit 4: Series and Sequences • Unit 5: The Binomial Theorem • Unit 6: Trigonometry • Unit 7: Parametric Equations • Unit 8: Differentiation • Unit 9: Numerical Methods • Unit 10: Integration 1 • Unit 11: Integration 2 • Unit 12: Vectors 3D 	<p>Assessments:</p> <ul style="list-style-type: none"> • Unit 1: Regression and correlation • Unit 2: Probability • Unit 3: The Normal Distribution • Unit 4: Moments • Unit 5: Forces at any angle • Unit 6: Applications of kinematics • Unit 7: Applications of forces • Unit 8: Further Kinematics