

Key Stage 5 Maths Curriculum Map

		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 12	Content	Chapter 1: Algebra 1 <ul style="list-style-type: none"> Argument and proof Index laws Surds Quadratic Functions Lines and Circles Simultaneous Equations Inequalities Chapter 2: Polynomials and the Binomial Theorem <ul style="list-style-type: none"> Expanding and Factorising Algebraic Division Chapter 9: Collecting, Representing and Interpreting Data <ul style="list-style-type: none"> Bivariate Data Sampling Central Tendency and Spread Single-Variable Data 	Chapter 3: Trigonometry <ul style="list-style-type: none"> Sine, Cosine and Tangent The sine and Cosine Rules Chapter 6: Vectors <ul style="list-style-type: none"> Definitions and Properties Components of a Vector Chapter 7: Units and Kinematics <ul style="list-style-type: none"> Standard Units and Basic Dimensions Motion in a Straight Line-Definitions and Graphs Equations of Motion for Constant Acceleration 	Chapter 4: Differentiation and Integration <ul style="list-style-type: none"> Differentiation from first principles Differentiating ax^n and Leibniz Notation Chapter 2: Polynomials and the Binomial Theorem <ul style="list-style-type: none"> The Binomial Theorem Curve Sketching Chapter 8: Forces and Newton's Laws <ul style="list-style-type: none"> Forces Dynamics Motion under Gravity Systems of Forces Chapter 10 Probability and Discrete Random Variables <ul style="list-style-type: none"> Probability Binomial Distribution 	Chapter 4: Differentiation and Integration <ul style="list-style-type: none"> Rates of Change Tangents and Normals Turning Points Integration Area Under a Curve Chapter 11: Hypothesis Testing <ul style="list-style-type: none"> Formulating a test The Critical Region 	Chapter 5: Exponentials and Logarithms <ul style="list-style-type: none"> The Laws of Logarithms Exponential Functions Exponential Processes Curve Fitting Chapter 7: Units and Kinematics <ul style="list-style-type: none"> Variable acceleration 	Chapter 12: Algebra 2 <ul style="list-style-type: none"> Further Mathematical Proof Functions Parametric Equations Algebraic Fractions Partial Fractions Vectors in 3D
	Content	Chapter 13: Sequences <ul style="list-style-type: none"> The Binomial Series Introduction to sequences Arithmetic Sequences Geometric Sequences Chapter 19: Forces <ul style="list-style-type: none"> Statics Dynamics 2 Moments Chapter 14: Trigonometric Identities <ul style="list-style-type: none"> Radians Reciprocal and Inverse Trigonometric Functions Compound Angles Equivalent Forms of $a \cos \theta + b \sin \theta$ 	Chapter 15: Differentiation 2 <ul style="list-style-type: none"> The shapes of functions Trigonometric Functions Exponential and Logarithmic Functions The Product and Quotient Rules The Chain Rule Inverse Functions Chapter 14: Trigonometric Identities <ul style="list-style-type: none"> Radians Reciprocal and Inverse Trigonometric Functions Compound Angles Equivalent Forms of $a \cos \theta + b \sin \theta$ 	Chapter 20: Probability and Continuous Random Variables <ul style="list-style-type: none"> Conditional Probability Modelling with Probability The Normal Distribution Using the Normal Distribution as an Approximation to the Binomial Chapter 16: Integration and Differential Equations <ul style="list-style-type: none"> Standard Integrals Integration by Substitution Integration by Parts Integrating Rational Functions Differential Equations 	Chapter 18: Motion in Two Dimensions <ul style="list-style-type: none"> Two-dimensional Motion with Constant Acceleration Two-dimensional Motion with Variable Acceleration Motion Under Gravity Motion Under Forces Chapter 15: Differentiation 2 <ul style="list-style-type: none"> Implicit Differentiation Parametric Functions 	Chapter 17 Numerical Methods <ul style="list-style-type: none"> Simple Root Finding Iterative Root Finding Newton-Raphson Root Finding Numerical Integration Distribution Chapter 21: Hypotheses Testing <ul style="list-style-type: none"> Testing Correlation Testing a Normal 	