

KS5 Curriculum Overview: **Double Maths** (A-Level Mathematics and A-Level Further Mathematics)



	Autumn Term	Spring Term	Summer Term
Year 12	<p>Curriculum and Skills: Pure: Surds and Indices (AS), Trigonometry (AS), Quadratic functions (AS), Coordinate Geometry, Equations and Inequalities, Exponentials and Logarithms (AS), Polynomials, Binomial Expansion, Graphs and Transformations, Sequences and Series, Calculus, Proof Mechanics: Kinematics (AS), Vectors, Forces and Newton's Laws, Variable acceleration Statistics: Data collection, Data PPI, Probability, Binomial Distribution</p>	<p>Curriculum and Skills: Pure: Functions, Trigonometry(A2), Differentiation (A2), Integration (A2) Further Algebra, Mechanics: Force and Motion, Friction, Moments, Projectiles Statistics: Probability, Probability Distributions, Hypothesis Testing</p>	<p>Curriculum and Skills: Pure: Numerical methods, Parametric Equations, Differential Equations, Complex Numbers (AS) Mechanics: Kinematics (A2), Dimensional Analysis Statistics: Poisson Distribution Discrete: Graphs, Linear programming</p> <p>Students now choose 2 FM applied options to continue studying. The choice is made from: Discrete, Mechanics, Statistics</p>
	<p>Assessment: Baseline assessment (First week of term) Progress check (First week after half-term)</p>	<p>Assessment: Year 12 Mocks (January)</p>	<p>Assessment: Year 12 End of Year Exams</p>
Year 13	<p>Curriculum and Skills: Pure: Matrices (AS), Further Algebra (AS), Proof, Calculus (AS), Polar Coordinates, Hyperbolic functions Mechanics: Momentum and Collisions, Work Energy and Power Statistics: DRVs, CRVS, Chi-Squared Distribution, Type I and Type II Errors Discrete: Networks, Network Flow, CPA</p>	<p>Curriculum and Skills: Pure: Vectors, Calculus (A2), Complex Numbers (A2), First and Second Order Differential Equations, Matrices (A2), Numerical Methods Mechanics: Circular Motion, Centres of Mass and Moments Statistics: Exponential Distribution, t-distribution, Confidence Intervals Discrete: Game Theory, Group Theory</p>	<p>Curriculum and Skills: Revision and consolidation across the syllabus</p>
	<p>Assessment: UCAS Grade review test (Third week of term) Progress Check (First week after half-term)</p>	<p>Assessment: Year 13 Mocks (March)</p>	<p>Assessment: AQA GCE A-level Mathematics AQA GCE A-level Further Mathematics</p>