All Saints' Academy Mathematics KS5 Curriculum
A' Level

Cycle	Year 12		Enrichment	Year 13		Enrichment
	Teacher A	Teacher B		Teacher A	Teacher B	
1	*Pure:* Algebraic Expressions, Quadratics and Graphs; *Statistics:* Data Collection, Representation, Location & Spread, Correlation, Probability	*Pure:* Inequalities, Circles; *Mechanics:* Modelling, Constant Acceleration, Forces	UKMT Senior Maths Challenge	*Pure:* Algebraic Methods, Functions, Numerical Methods; *Statistics:* Regression and Correlation, Hypothesis Testing, Probability, Normal Distribution	*Pure:* Sequences & Series, Binomial Expansion, Radians, Trigonometric Functions; *Mechanics:* Moments, Forces & Friction	UKMT Senior Maths Challenge
Careers	• **"Python for A' Level Maths & Beyond…" Online Workshop** • **What is a Climate Scientist?**		Careers	• **"Python for A' Level Maths & Beyond…" Online Workshop** • **What is an Actuary?**		
2	*Pure:* Algebraic Methods, Binomial Expansion, Trigonometry	*Pure:* Calculus, Exponentials & Logarithms	University Lecture	Parametric Equations, Differentiation, Integration	Vectors, Projectiles, Further Kinematics	University Lecture
Careers	**What is a Software Engineer?**		Careers	**Analysing Data in Digital Media**		
3	*Statistics:* Distributions, Hypothesis Testing; *Pure:* Algebraic Methods	*Mechanics:* Variable Acceleration; *Pure:* Functions		*Revision and Preparation for Final Exams*	*Revision and Preparation for Final Exams*	
Careers	**What is Location Planning?**		Careers	**Work in Orthotics and Prosthetics**		

Further Maths AS Level

Cycle	Year 12		Enrichment	Year 13		Enrichment
	Teacher A	Teacher B		Teacher A	Teacher B	
1	*Pure:* Complex Numbers, Argand Diagrams	*Pure:* Series Summation, Matrices	UKMT Senior Maths Challenge	*Pure:* Volumes of Revolution; *Decision:* Linear Programming	*Mechanics:* Momentum & Impulse, Work, Energy & Power	UKMT Senior Maths Challenge
2	Polynomial Roots, Proof by Induction	Linear Transformations, Vectors	University Lecture	Critical Path Analysis	Elastic Collisions	University Lecture

| 3 | *Decision:*
Graphs & Networks
Route Inspection | *Decision:*
Algorithms
Sorting & Packing | | *Revision and Preparation for Final Exams* | *Revision and Preparation for Final Exams* | |