

Mathematics KS5 Curriculum Map							
A. Formal Curriculum Key Stage 5							
Core Content & Skills		By the end of KS5, students of Mathematics should know how to construct and present mathematical arguments through appropriate use of diagrams, sketching graphs, logical deduction, and precise statements involving correct use of symbols and connecting language. They should also be able to recognise the underlying mathematical structure in a situation and simplify and abstract appropriately to enable problems to be solved.					
Prior Knowledge & Skills		In KS5, students of Mathematics will build on the following prior learning from GCSE: algebraic manipulation, number skills (including fractions and proportion), trigonometry, statistical representation and compound measures.					
Future knowledge		The curriculum in KS5 Mathematics will prepare students for a degree or apprenticeship in many STEM subjects and/or subjects that require students to be both numerate and to analyse or model situations in an abstract manner.					
Year 13	Key knowledge, skills and concepts TAUGHT, REVISED, REVISITED AND LEARNT	Term 1 Binomial Expansion Radians Regression Moments Forces & Friction	Term 2 Projectiles Trig Functions Differentiation Conditional Probability Application of Forces	Term 3 Further Kinematics Trig Modelling Integration Normal Distribution Parametric Equations Vectors Numerical Methods	Term 4 Vectors Numerical Methods Consolidation Revision	Term 5 Revision	Term 6 Revision
	Key assessment points	PY2 Chapter 1-4 Test		PY2 Chapter 5-8 Test AY2 Mechanics Test AY2 Statistics Test	Past Papers	Past Papers	Past Papers
Year 12	Key knowledge, skills and concepts TAUGHT, REVISED, REVISITED AND LEARNT	Term 1 Algebraic Expressions Quadratics Equations/Inequalities Transforming Graphs Straight Line Graphs Algebraic Methods	Term 2 Circles Binomial Expansion Trigonometric Ratios Trigonometric Identities Differentiation Integration	Term 3 Trigonometric Identities Integration Vectors Exponentials/Logs	Term 4 Data Collection Measures of Spread Data Representation Correlation Probability Modelling Constant Acceleration	Term 5 Statistical Distributions Hypothesis Testing Forces & Motion Variable Acceleration	Term 6 Algebraic Methods Functions & Graphs Sequences / Series
	Key assessment points	IST PY1 Chapter 1-4 Test	PY1 Chapter 5-10 Test	PY1 Chapter 11-14 Test			Y12 Internal Exams
B. Holistic development via Enrichment/Personal Development Curriculum/Digital Literacy							
<ul style="list-style-type: none"> - Students are encouraged to read around the subject (borrowing books from the small departmental library) and to watch relevant YouTube content. - UKMT events such as the Senior Maths Challenge. 							

