

Key Stage 5 Curriculum Map - Further Maths

The maths curriculum provides the most general A-level possible. The intention is to give students the best possible chances to progress to their chosen career or higher education path. Two thirds of the content is pure mathematics and the remaining content is equally divided between Statistics and Mechanics. This gives students a spring board for progressing in a variety of directions. Examinations have the same structure. Mechanics is useful if their interest is in the sciences or engineering. Statistics is useful if their interest is in social sciences. Data analytics is a growing area in the jobs market and we are starting to see some interest from some students in this direction. The further maths curriculum gives students a chance to study all these areas in much more depth and also optionally to study Decision mathematics. This is a collection of topics of mathematics that crop up in many sciences, social sciences and also in business management. The mapping below shows roughly when topics are taught and is subject to changes for each individual class progresses. Flexibility allows classes to progress at a suitable pace.

		AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
Year 12	Topic/themes/ skills covered	<ul style="list-style-type: none"> algorithms graphs and networks. 	<ul style="list-style-type: none"> route inspection. 	<ul style="list-style-type: none"> linear programming discrete random variables. 	<ul style="list-style-type: none"> poisson distributions hypothesis testing 	<ul style="list-style-type: none"> chi squared tests 	<ul style="list-style-type: none"> geometric/negative binomial distributions
	Assessment	Tasks 1A-1F 2A-2E 3A, 3B	Tasks 3C-3E, 4A-4C, 5A-5D	Tasks 6A-6D, 1A-1D	Tasks 2A-2G, 4A-4D	Tasks 6A-6F Trial exams	Tasks 3A-3D
		AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
Year 13	Topic/themes/ skills covered	<ul style="list-style-type: none"> the simplex algorithm critical path analysis 	<ul style="list-style-type: none"> central limit theorem probability generating functions 	<ul style="list-style-type: none"> quality of tests differential equations 	<ul style="list-style-type: none"> modelling 	<ul style="list-style-type: none"> revision 	
	Assessment	Tasks 7A-7E, 8A-8G	Tasks 8H, 5A, 5B, 7A-7D	Tasks 8A-8D, 7A-7C	Tasks 7D, 8A-8D	Exams	