

	MATHEMATICS	
	Qualification Level	A-level
	Exam Board/ Syllabus	MEI (OCR)
Contact(s)	Mrs Leeding	

A recommendation for the course is the purchase of a Graphical Calculator. Students without one will be highly disadvantaged in their examinations. Orders can be placed through school in September of year 12.

Why Study This Course?

School: A-Level Mathematics is strongly recommended if you are studying physics or computing. It is also useful if studying chemistry, biology, business, economics, geography and psychology. Students studying Mathematics will extend their range of mathematical skills and techniques and use them in more difficult, unstructured problems.

University: A Maths A-Level is an essential requirement for many degrees, including: physics, engineering, actuarial science, economics and, of course, maths, although you may need to study a further mathematics course as well to do this. Mathematics is seen as a “facilitating” subject and is recommended, or sometimes required, for other degrees such as computer science, accounting, chemistry, biology and life sciences, medicine / nursing, dentistry, business studies, management studies, finance, architecture, geology, psychology, surveying and even philosophy. This is due to the range of analytical skills developed throughout the course.

Mathematics is also recommended for studying advanced Apprenticeships in accountancy, technology and engineering subjects.

Course Content

Some of the areas covered include:

Calculus and algebraic manipulation, Coordinate Geometry, Further Trigonometry and Identities, Binomial expansion, Logarithms and Exponentials, Vectors, Data analysis, Probability distributions and statistical tests, Kinematics, Moments, Forces and Acceleration.

Course Assessment Pattern/ Structure

There is a large emphasis on algebraic manipulation and problem solving over the course so it is essential to be enthused by these aspects. Approximately two thirds of the course covers topics from Pure Mathematics with the other third being made up of topics from Statistics and Mechanics.

You will be assessed regularly with in-topic tests as well as independent homework tasks. This will include examples of exam style questions to help you prepare for your exams, as well as some real life applications.

Exam Structure

The course will be assessed via three examinations at the end of year 13.

Paper	Content	Duration	Weighting (rounded)
1	Pure and Mechanics	2 hours	36.4%
2	Pure and Statistics	2 hours	36.4%
3	Pure and Comprehension	2 hours	27.3%

Higher/Further Education & Career Links

An A-Level in mathematics is a valued qualification for many careers including accountancy, actuary, computing and Engineering. A good mathematical knowledge is also essential in any career linked to the sciences, medicine, programming and construction.

<i>Business & Innovation</i>	<i>English</i>	<i>Expressive Arts & Languages</i>	<i>Humanities</i>	<i>Mathematics</i>	<i>PE</i>	<i>Science</i>
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