Maths A level

Why take this subject?

Mathematics is a subject that gets more interesting the further you study it, and this certainly continues into A-Level and beyond. The A-Level course aims to develop your understanding of mathematics and mathematical processes in a way that promotes confidence and enjoyment. In particular, it develops your ability to reason logically, to generalise and to construct mathematical proofs. No one would say that A-Level mathematics is an easy option, but it is certainly worthwhile. As well as being enjoyable, it is also valued extremely highly by employers and universities.

What do I need to have studied in year 11?
- You must have at least 5 GCSES at grades 9-5 including English and Maths
- At least a Grade 6 in Maths, and a Grade 7 would be better

What will we study?

We follow the Edexcel specification, which offers a mixture of pure and applied mathematics. This allows students to explore a variety of mathematical concepts and techniques but also to see their applications in mechanics and statistics. Pure topics (roughly two thirds of the course) include advanced algebra and trigonometry, calculus, and mathematical proof. Statistics and mechanics topics (which make up the remaining third) include kinematics, forces, normal distribution, and statistical testing.

How will I be examined?

Unit	Assessment	Weighting
Pure	Two papers (100 marks each)	67%
Statistics	Half a paper (50 marks)	16.5%
Mechanics	Half a paper (50 marks)	16.5%

What super curricular opportunities will be available to me?

Starting this year we are planning trips to lectures. We are also planning to invite external speakers. Seminars on undergraduate level topics may also be available next year.

What can this subject lead to?

A-level Mathematics is listed as one of the Russell Group's facilitating subjects because so many university courses list it as being either essential or desirable. University courses that always list mathematics A Level as essential include:
- Mathematics
- Engineering (any type)
- Computer Science
- Physics
- Economics

There is also a huge list of subjects that list Mathematics A-level as desirable, ranging from Dentistry to Philosophy.

Subject Specification link:

https://qualifications.pearson.com/content/dam/pdf/A%20Level/Mathematics/2017/specification-and
-sample-assesment/a-level-l3-mathematics-specification-issue4.pdf