

Mathematics A Level

Exam Board: Edexcel

Entry Requirements: GCSE Grade 6 in maths.

Course Summary

This course very much carries on from where GCSE leaves off in terms of the algebra, trigonometry and graphs work. Some of the topics in the first year will be familiar to you. We will seek to deepen your understanding of these ideas as well as move on to new problems. This will include a methodical study of certain families of curves and developing strategies to solve harder equations. Rather than remembering a long list of different techniques for different problems the challenge is to get a sense of the big ideas that can be applied to numerous scenarios.

The course encourages you to develop your thinking and problem solving skills, look for connections between ideas and get to grips with some quite abstract concepts. In many ways Mathematics can be thought of as a life skill. By the end of the first year you will have met and used Calculus, the mathematics that Newton and Leibniz used to describe the motion of the planets and the world around us.

A Level Maths is an academic course that demands a lot of hard work. It is well respected and will give you the great satisfaction of dealing with some advanced concepts; it should not be undertaken unless you enjoy the subject.

What kind of topics will I be studying?

A Level Maths now incorporates concepts from pure mathematics, statistics and mechanics into one seamless whole. There is no longer a modular approach - the end of course exams will test you across these three disparate areas of maths.

What will my final qualification be?

You will achieve an A Level in Mathematics after two years of study. You will achieve an AS Level after one year, but this no longer forms part of the A Level.

Assessments

The course is assessed fully by terminal examination. This consists of three exam papers, which are 2 hours long each.

Fact File

Aimed at students who have enjoyed GCSE mathematics and who feel comfortable working with algebra and graphs. Course content is prescribed so that regardless of exam board, all A Level mathematics students study the same content. This is a course that provides plenty of challenge and rewards. You will need to have an organised approach and use the available support to clarify your understanding.

Progression/career opportunities

What other subjects combine well with this course?

Mathematics directly supports many subjects—the sciences, computer science, economics—and combines well with the social sciences, business studies and ICT. Maths also stands alone and many students take it as a contrast to Modern Foreign Languages, English and art. The analytical nature of the course means that it can be beneficial for all subjects.

Where might it lead?

Hopefully to a lifelong appreciation of how elegant and useful maths is. It is vital for maths, engineering, physics, computer science, some economics courses and an increasing number of medicine courses at university. It is also very useful for social sciences and all analytical subjects.

Will I need any specialist materials or equipment?

A scientific calculator will be required.

Further information:

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