

Advanced GCE in Mathematics

Board: Edexcel

Qualification: Advanced Level GCE in Mathematics

What is the course about?

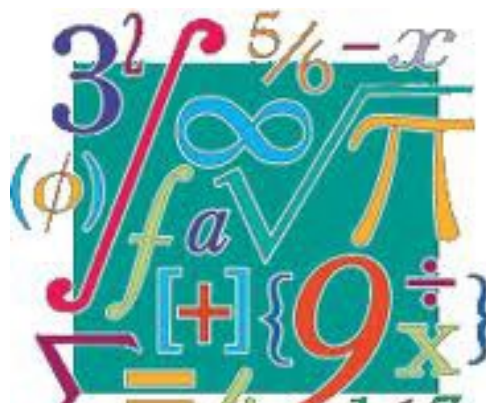
The Edexcel exam syllabus develops a full, deep understanding of a wide range of key Mathematical skills and will leave students fully competent in the underpinnings and the applications of some of the most fundamental Mathematics of the world.

Pure and applied modules are split via a 2:1 ratio respectively.

Pure Maths

The Pure Maths component of the A Level is focused on core Mathematical concepts. Pure Mathematics is the creation, development and exploration of the form and knowledge of Mathematics itself, paying considerable attention to the investigation and description of fundamental patterns and structure.

Pure Mathematics introduces the students to the methods of modern Mathematics, with its traditions of rigorous, logical argument and precise techniques of calculation. They also build a firm foundation in algebra and analysis and gain significant exposure to the major subdivisions of pure Mathematics.



Statistics

Statistics is the application of the skills acquired from GCSE Mathematics and A-Level Pure Maths to real-world problems. Students will learn how to calculate complex probabilities and make predictions, examine relationships between variables and construct highly accurate lines of best fit. After studying this module, students will have a knowledge of the techniques used in industry every day to monitor all aspects of the running of factories, businesses and financial institutions.

Mechanics

Mechanics is the study of particles and their motion. Primarily focused on the Newtonian laws of motion, this course investigates motion and energies of moving bodies under gravity. This module is a real insight into how and why things work and allows a look inside the Mathematics governing the world we live in. This overlaps with Physics.

How will I be assessed?

Level	Module Title	Marks Available	Method of Assessment
A Level	Pure Mathematics Examination 1	100 marks	2 hour examination
	Pure Mathematics Examination 2	100 marks	2 hour examination
	Statistics and Mechanics Examination	100 marks	2 hour examination

What skills will I develop?

A broad and in-depth Mathematical knowledge and a capacity to solve problems and apply your skills to a range of further avenues of study or career paths.

Why might this course be for me?

If you enjoy Maths, are good at it and consider studying Maths at degree level then this is an obvious choice. However, Maths is also a good grounding for a future in areas such as finance, sciences, teaching, engineering, ICT and medicine. Maths demonstrates an ability to think clearly and logically and is highly valued by employers. If you are studying A-level sciences, Maths is an ideal partner but will also compliment other A-Level subjects and provide you with a breadth of skills and make you attractive to future employers.