

A Level Mathematics

The Course

We take the mathematics learned at GCSE and build upon it. It is heavily reliant on the algebra, graph work and trigonometry skills from the GCSE course. Mathematics at A Level is very theoretical, with two thirds of the work studied having no relation to the real world. To do this subject you should want to learn mathematics for the beauty of the subject.

The Content

Very quickly you will develop your algebraic skills, taking the GCSE higher level algebra topics further. The pure content will also involve coordinate geometry, trigonometry, differentiation (finding the gradient of a curve at a point), integration (finding the area under a curve) and an introduction to vectors.

The applications studied are statistics and mechanics. The statistics involves probability, bivariate data (taking scatter graphs further), an introduction to the binomial and normal distributions and hypothesis testing. The mechanics will see you apply some of the pure skills in problems involving motion of particles.

Assessment

100% examined. There is no coursework.

The three exams at the end of year 13 cover Pure Maths, Statistics and Mechanics.

Subject entry requirements

GCSE Maths at grade 6 or above.

Pathways/Careers

Students go on to successfully study or work in many fields, including:

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| Accountancy | Aerospace and Defence | Biosciences | Business |
| Construction | Financial Services | Engineering | Education |
| Government | IT and Computing | Insurance | Healthcare |
| Manufacturing | Pharmaceuticals | Research | Science |