

Mathematics (Edexcel) - A Level

This course will extend the algebra and geometry knowledge gained at GCSE and allow you to solve more complex problems. It will provide you with an opportunity to think analytically, problem solve and apply mathematical reasoning to a variety of real-life problems.

Course Content & Assessment

A level Mathematics gives you the opportunity to study topics such as geometry, calculus and trigonometry (Pure Mathematics) and to use these ideas within the 'applied' topics such as Mechanics and Statistics. The course allows you to find solutions to real life problems through a variety of methods. Throughout the qualification you will study the following three areas of maths:

- **Pure:** Methods and techniques which underpin the study of all other areas of mathematics such as proof, algebra, trigonometry, calculus and vectors. These are the fundamentals to all applications of Mathematics.
- **Statistics:** Reaching conclusions from data and calculating the likelihood of an event occurring. This part of the course allows us to make sense of

the complex and variable world around us via analytical methods in order to draw reliable conclusions from sets of data. This is becoming an increasingly more important area of mathematics as the world becomes increasingly reliant on data.

- **Mechanics:** The modelling of the world around us, the motion of objects and the forces acting on them. This area is strongly linked with Physics and is an integral part of engineering.

Examinations: Year 13

- Paper 1: Pure 1 (2 hours, 100 marks)
- Paper 2: Pure 2 (2 hours, 100 marks)
- Paper 3: Statistics & Mechanics (2 hours, 100 marks)

Future opportunities

Mathematics A level is well respected by universities and employers due to its academic rigour. It provides excellent preparation for a wide range of university courses, especially those within the fields of science and technology. Mathematics is a facilitator subject for many degrees so it is worth researching whether it is an essential A level you need to pursue a particular university course. The course also allows you to develop an array of employability skills such as communication and logical reasoning, meaning many employers and apprenticeships also value A level maths.

Entry Requirements:	
GCSE	Minimum requirement grade 6 or above in mathematics
Contact Name	Miss Kinder: kinde01@brigshawtrust.com