Mathematics

A Level

What will I learn?

In Pure Mathematics you will extend your knowledge and skills in such topic areas as algebra and trigonometry. You will also be introduced to calculus, which is a very powerful mathematical tool. Many of these skills will be needed as you learn to apply mathematics in order to solve problems in the other branches of the subject.
In Mechanics, you will learn how to model real life problems involving the motion of objects and the effect of forces on stationary bodies. Mathematics can then be applied in order to analyse and solve problems. Mechanics has very strong links with some elements of Physics and is particularly relevant if you are considering a career in Engineering.
The start of the course concentrates on some important probability theories and models. You will also develop the skills to set up surveys to investigate theories, making decisions based on statistical analysis. This subject particularly complements work in Psychology, Economics, Business, Physics and Biology.

How will I learn?

Lessons work similarly to GCSE, where new techniques and skills will be modelled to you live, and the you have the opportunity to practise, with your teacher going through key misconceptions. A key difference is that a more significant amount of the independent practise will need to be completed as homework, in order for you to consolidate your understanding.

How will I be assessed?

There are three assessments: Paper 1: Pure Mathematics, Paper 2: Pure Mathematics, Paper 3: Statistics and Mechanics.

FAQs.

What equipment do I need?
You will need to purchase an Advanced Scientific calculator. We recommend the Casio fx cg100.
What kind of student is this course suitable for?
This course will appeal to students who:

- enjoy solving mathematical problems and applying their mathematical skills to solve real life problems;
- want a course that will compliment other A levels especially sciences with Maths and Mechanics
- want a course that will compliment other A levels especially Humanities and Social Sciences with Maths and statistics

Exam Board

Edexcel

Subject Specific Entry Requirements

Maths grade 6 or above

Skills Gained

Data Analysis
Question
Information
Problem Solving
Decision Making

Careers

Data Analyst
Data Processor
Sciences
Medicine
GP
Nurse
Project Management