

Use of Mathematics

AS Level

AQA

Structure & Specification

AS Level Use of Mathematics 5351

Syllabus details

One year AS Level.

What does the course include?

Year One- AS

This is a one year course leading to an AS qualification in mathematics.

Mathematics is used in many areas such as industry, business, economics, medicine, geography and engineering. This course is designed to give students a theoretical background in mathematics but also to apply this knowledge to the real world. Since it was introduced four years ago the course has been very well received academically. The course adopts a practical approach to apply mathematics to real world problems.

Three mandatory units are studied: -

Working with algebraic and graphical techniques. This unit develops techniques of algebra, functions and graphs, and their applications in many areas such as science, economics and business studies.

Using and applying statistics. This unit is designed to allow students the opportunity of developing their mathematical thinking, whilst learning about statistics. It concentrates on the use of statistical techniques and the critical analysis of data. Areas of interest could be in social science, business, economics, psychology, science and engineering.

Applying mathematics. This unit concentrates on the processes involved when mathematics is used to solve problems, and in developing clarity in the communication of mathematics. It will also involve mathematical modelling techniques.

How will I learn?

A variety of teaching methods will be used, involving investigative work as well as the study of the theory. Mathematics is an important tool for understanding the real world and connections with practical

How will my work be assessed?

Both the Algebra and Statistics modules are assessed by coursework and exam (50% each). For each module three pieces of work make up the coursework portfolio so you must be able to keep to deadlines in order to be successful. The third module (Applying mathematics) is assessed entirely by external exam.

What skills will I need to be successful in this subject?

There is a gap between GCSE and A level mathematics but essentially you will be building on the work you did at GCSE particularly by doing further algebra. You should also enjoy mathematics if you are to make significant progress with it.

What are the entry requirements?

As well as looking at their GCSE mathematics results, we may also test students before enrolling them. Students studying mathematics at A level should have a grade B or above at GCSE.

What are the opportunities after this course for further/higher education and employment?

This course is very useful for future study of a very wide range of subjects, including engineering, finance and economics, business, accountancy and many more.