

AQA Level 3 Mathematical Studies (Core Maths)

Overview

Only 20% of students in England study maths beyond GCSE – the lowest rate in leading developed countries in the world; in Japan, this figure is 85%. This puts young people in England at a major disadvantage in a global job market.

Many students arrive at university with unrealistic expectations of the mathematical and statistical demands of their subjects and have no idea how to use their mathematical skills when they get into the real world and move out of home.

This course has been introduced to address these issues but also give the opportunity for those who do not want to commit to A-Level Maths to study maths beyond GCSE. In Core Maths we will not be studying algebra or Pythagoras, instead, the course is developed to involve real world Mathematics that we come across every day as adults. In most lessons we look at the maths that is shown in news articles, twitter posts and on TV and see if what is said could be true.

What do you need to join us?

Entry criteria is a Grade 4 in Mathematics.

What will the course involve?

The qualification is a one-year course done in addition to your 3 A-Levels – because of the extra commitment this course has NO independent study expectations (no homework!). There are two 1.5 hour exams at the end of the first year. The course is equivalent to an AS Level and carries the same UCAS points as these.

There are two exams:

Paper 1	Paper 2
Analysis of data – How do companies find out information about their products? How do they go about surveying people? How would they then present this data to show others what they have found? Maths for personal finance – Do you know how your payslip should look? How to work out how much Tax or National insurance you should pay? What about how mortgages work or how to understand your student loans? Estimation – How can we use the information that we already have within our brains to try and work out the answers to “big” questions. For example, how many loaves of bread would you need to buy when catering for 100 people? How many times will someone blink in their lifetime? If someone smokes for 20 years – how much would it cost them?	Critical analysis of given data and models – graphs and mathematics are used all the time within the media – we will look at how realistic this information actually is. The normal distribution – used in everyday life – we look at how rare a natural phenomenon is based on mathematics. Probabilities and estimation – how likely is something to happen? Correlation and regression – looking at how two things may or may not be linked and measuring the correlation mathematically.

Why should I study core maths?

If you are studying Biology, Chemistry, Geography, Psychology, Business Studies, Accounting or Economics at A-Level then this course was made to help you with all of these. It covers a vast majority of the mathematical elements in all of these courses and will also help in university level study and maybe even entry into university. (Having a Maths qualification on your UCAS application looks VERY good!)

Even if you are not doing these courses Core Maths will be useful to you. We study a lot of real-life mathematical topics including budgeting, mortgages, students loans, taxes, how to read your payslip, the finances needed when running a business as well as how to analyse the false representations of graphs and mathematics given to us in the media.

For students studying core maths many universities will give LOWER offers. (eg. BBB rather than ABB)