



AQA Level 3 Core Maths

Why study CORE MATHS?

Core Maths is designed for students who want to continue developing their mathematics after GCSE without taking A level Mathematics. It focuses on using mathematical ideas confidently in realistic situations, including personal finance, data, estimation and information presented in tables, graphs and spreadsheets.

Studying AQA Level 3 Mathematical Studies will strengthen the numeracy, problem-solving and reasoning skills needed in further study, employment and everyday life. It is particularly useful alongside subjects that involve data or quantitative thinking, such as Biology, Chemistry, Geography, Psychology, Business, Economics and the social sciences. You will learn not only to calculate accurately, but also to judge whether an answer is sensible, explain assumptions and communicate conclusions clearly.

What is the course structure?

Exam Board: AQA

AQA Certificate Level 3 Mathematical Studies

This linear qualification is designed to be studied over two years. Students sit two papers. Each written examination lasts 1 hour 30 minutes, is worth 60 marks and contributes 50% of the qualification. A scientific or graphics calculator is allowed. Preliminary Material is issued in advance and a clean copy is provided in the examination room; formulae sheets are also provided.

It is equivalent to an AS Level qualification and can be used towards University applications as such. Many universities offer reduced offers for students who achieve a grade B or above in Core Maths.

Overview of course content:

Paper 1 - Compulsory content

Analysis of data; maths for personal finance; estimation.

Paper 2 – Statistical Techniques

Critical analysis of given data and models, including spreadsheets and tabular data, plus one of the following routes:

Paper 2A: Statistical Techniques

The normal distribution; probabilities and estimation; correlation and regression.

Students are expected to draw on the mathematical content of Paper 1 when answering Paper 2.

Which activities will I be engaged in during the course?

You will work with realistic information rather than only abstract exercises. Lessons may involve analysing data sets, comparing financial options, estimating and checking quantities, interpreting graphs and tables, and using spreadsheets or calculators to test models. You will often need to decide which mathematics is relevant, make reasonable assumptions, explain limitations and present a conclusion. You will also study statistical techniques, project planning and risk.

The kind of learning habits you will be asked to draw upon include:

- Organising your notes and learning key facts, terminology and procedures
- Reading contextual questions carefully and identifying the relevant information
- Using a calculator and spreadsheets accurately and recording your method clearly
- Revisiting GCSE skills in percentages, ratio, probability, graphs and algebra
- Checking units, rounding and whether an answer is reasonable
- Explaining assumptions, methods and limitations in full sentences
- Interpreting data critically and recognising misleading presentations
- Practising extended problem solving and exam questions independently

How can I prepare for the course?

A secure foundation in GCSE Mathematics is important. Revise percentages and percentage change, ratio and proportion, rates, averages and spread, probability, graphs, formulae, standard form, units, rounding and estimation. These skills are used in unfamiliar and real-life contexts throughout the course.

Build confidence using a scientific calculator and, where possible, a spreadsheet. Practise entering calculations accurately, using brackets, working with tables of data, creating graphs and checking that displayed answers have been rounded appropriately. Read charts and numerical claims in news reports or online and ask what the data really shows, what has been left out and whether the conclusion is justified.

Keep your GCSE knowledge active over the summer by completing any induction work you are given and by practising little and often. Looking at household bills, savings and loans, travel information, survey results or sports data can help you see how mathematics is used to make decisions. Bring curiosity, resilience and a willingness to explain your thinking.

Further information: Matthew Smith (Head of Mathematics)