



## Core Mathematics

Engage

Endeavour

Excel



**Entry Requirements:** GCSE Grade 4 or above

Core Maths is intended for students who have passed GCSE Mathematics at grade 4 or better, but who have not chosen to study AS or A-Level Mathematics. It can be studied in a single year and is taken alongside other A-Levels or other qualifications.

Studying Core Maths helps students be able to “access the mathematics required for the other A-Level options they have chosen.” It also helps to develop your quantitative and problem-solving skills.

Core Maths can also be very valuable in preparation for the quantitative skills you will need for many degree courses, particularly subjects such as Psychology, Business-related courses, Sports and Social Sciences, and Natural Science courses that do not require AS/A Mathematics.

Even subjects like History now recognise the importance of Statistics and so a Core Maths qualification will help you hit the ground running at university.

It is a Level 3 qualification, in terms of UCAS points is worth 40% of an A-level e.g. A grade A in Core Maths would be worth 20 UCAS points.



# Core Mathematics

## AQA Specification

### How do I know if Core Maths is for me?

If you are doing A-Levels and struggled with Maths at GCSE or have forgotten a lot of what you learnt then this is a subject which will help you learn the skills required for your selected A-levels.

The teaching of this topic is planned to support many of the Scientific, Business and Economics, and Social Science requirements and will be planned where possible to support what you require to know at the time you need to know it.

### All Core Maths qualifications include:

- Interpreting solutions in the context of the problem
- Understanding sources of error and bias when problem-solving
- Working with data
- Understanding risk and probability
- Understanding variation in statistics
- Using exponential functions to model growth and decay

### Most Core Maths qualifications also include:

- Percentage change
- Interpretation of graphs
- Financial maths
- Using standard units
- Fermi estimation
- The Normal distribution
- Correlation, knowing it does not imply causation
- Making and evaluating assumptions when modelling or problem solving

### A Level Core Maths (AQA Specification)

- 3.1 Analysis of data
- 3.2 Maths for personal finance
- 3.3 Estimation
- 3.4 Critical analysis of given data and models (including spreadsheets and tabular data)
- 3.5 The normal distribution
- 3.6 Probabilities and estimation
- 3.7 Correlation and regression
- 3.8 Critical path analysis
- 3.9 Expectation
- 3.10 Cost benefit analysis
- 3.11 Graphical methods
- 3.12 Rates of change
- 3.13 Exponential functions thinking

