



## AS LEVEL CORE MATHS

### What does the course involve?

Level 3 Core Maths is an accredited qualification designed for students with a grade 5 or above in GCSE Maths who want to take the subject further but aren't moving forward with another post-GCSE Maths course. The use of real-life scenarios will appeal to students who prefer a less academic approach and appreciate the value of everyday Maths and problem-solving skills. It is equivalent to an AS Level.

### Compulsory Content

There are three compulsory units:

- Analysis of data – appreciation of the different types of data and data sources; sampling techniques; representing data numerically; representing data diagrammatically.
- Maths for personal finance – numerical calculation techniques; working with percentages; interest rates; cost of credit; financial information represented graphically; taxation; solving financial problems including currency exchange and budgeting.
- Estimation – the modelling cycle; Fermi estimation.

### Further Content

We will be offering Statistical Techniques as the further content to complete this qualification. This will combine well with any other courses but particularly with Biology, Geography and Psychology courses. There are four units:

- Critical analysis of given data and models (including spreadsheets and tabular data) - Students will be expected to use the data and models they are given and to be mathematically critical of these.
- The Normal Distribution - Students should be able to recognise that many things closely follow a Normal Distribution, e.g. heights of people, size of things produced by machines, errors in measurements, blood pressure, marks on a test etc.
- Probabilities and Estimation - Students should be able to calculate means of samples and connect these to populations. They should be able to calculate confidence intervals.
- Correlation and Regression - Students should be able to evaluate correlation between two unknowns and to use a calculator to find the equation of a line of best fit.

### What exams and coursework are involved?

There is no coursework, just two written papers 1 hour 30 minutes each:

- **Paper 1** will assess the compulsory content (see above)
- **Paper 2** will assess the further content (see above)

**What are the entry qualifications?**

Grade 5 or above in GCSE Mathematics AND the recommendation of the GCSE Mathematics teacher. Students considering this course should discuss this with their class teachers and the sixth form team.

**What could I do after completing the course?**

This qualification will introduce students to new techniques and concepts that will prepare them for further study and future employment within a broad range of academic, professional and technical fields. It is a valuable addition to any student's personal learning plan.

**FOR FURTHER INFORMATION, PLEASE CONTACT MRS E. KEEN.**