

## **Core Mathematics**



Core Maths is an exciting and challenging course which offers an engaging contextual approach to studying mathematics. In Core Maths we focus on studying the real life application of key topics such as percentages, estimation, data analysis and interpretation putting a huge emphasis on the relevance of key mathematical questions and ideas in everyday life. Through studying Core Maths students can continue studying a subject they have a passion for beyond GCSE without having to commit to a full Maths A Level. The course increases employability skills such as problem-solving, logical reasoning, resilience and communication and develops a knowledge and awareness of a variety of mathematical techniques which provide a great foundation of knowledge for the maths needed in many jobs and courses in higher education.

## AS Level—1 Year Course



Specification:

**Exam board:** 

AQA Certificate Level 3 Mathematical Studies 1350

Click here for specification

## **Subject Specific Entry Requirements**

A minimum of a **Grade 4** in GCSE Mathematics

Content	Assessment	(Foundation or Higher) and a recommendation
Paper 1: Compulsory Content	Written exam:from your currentMaths teacher.1 hr 30 mins	
⇒ Analysis of data—exploring statistical techniques, interpreting data and drawing	All questions	Qualification
<ul> <li>conclusions in the solution of problems.</li> <li>⇒ Maths for personal finance— including</li> </ul>	completed	The qualification is equivalent to one AS level. It is taught over <b>one year</b> at Hanley Castle High School
working with percentages, interest rates (mortgages), credit and taxation.	50% of the AS Level	and aimed at Year 12 as a complimentary subject to 3 main A levels. We may also be able to
$\Rightarrow$ <b>Estimation</b> —the formulation of mathematical	60 marks	welcome Y13's onto the course depending on individual timetabling.
models including the use of fermi estimation to aid decision making.		Career and progression
⇒ Critical analysis of given data and models— presenting logical and reasoned arguments in context and developing mathematical approaches.		Core Maths helps students to develop their quantitative and problem-solving skills ensuring they have the necessary skills to access the mathematical content of other A Level courses such as: Biology and Environmental Science, Business and Economics, Fashion and Textiles, Geography, Psychology, Sociology, Sports Science
Paper 2: Statistical techniques	Written exam: 1 hr 30 mins	and Physical Education.
⇒ The normal distribution—recognising and investigating things that closely follow a Normal Distribution, e.g. heights of people, errors in measurements, blood pressure etc.	All questions completed	University Courses relating to these subjects expect mathematical competency that can be supported and evidenced by studying Core Maths. The desirability of the course has been expressed by Universities with some (e.g. Sheffield, York, Aston and Bath) offering reduced entry criteria for a range of degree courses for students with a Core Maths qualification.
⇒ <b>Probabilities and estimation</b> — looking at population and sampling, mean of a sample	50% of the AS Level	
and confidence intervals.	60 marks	
⇒ Correlation and regression—exploring correlation and outliers, the product moment correlation coefficient (pmcc) and regression lines.		Core Maths looks in depth at financial literacy which begins to develop an important lifelong relationship with money in the world of work, business and everyday life.