

Maths is a really exciting subject which opens many doors for progression; it is highly respected by employers and universities.

We emphasise the problem solving skills required for applying mathematics to the real world. You will be given the opportunity to take part in both individual and team mathematics competitions, competing against students from across the country. If you achieve a really high result you could even be invited to compete at the very prestigious British Mathematics Olympiad. Mathematics is an extremely rewarding subject and we will support you to achieve your potential at whichever level you are working. Our extensive range of workshops will provide you with the extra individual support required for you to achieve the highest grade possible.

Skills and Qualities

- Calm under pressure
- Professional and caring
- Communication
- Team working
- Decision making
- Problem solving
- Attention to detail
- Communication
- Accuracy
- Creative thinking

Career Paths

- Engineering
- Technician roles
- Construction
- Educators
- Retail
- Police

Labour Market Info

The Retail sector employs approximately 57,600 people and has an output of £1.6 billion in South Yorkshire.

The public sector makes up a large amount of the UK workforce and has a massive 5.4 million employees across the UK, which accounts for 17.1% of people in employment.



MATHS

MATHEMATICS

A LEVEL - 2 YEARS

Entry Requirements: 5 GCSEs at grade 4-9 including English plus a grade 6(B) in Maths

What will I study?

You will study pure mathematics which will extend your knowledge of topics such as algebra, coordinate geometry and trigonometry. You will also learn new concepts such as calculus. Alongside pure mathematics you will study mechanics and statistics. Statistics will build on and extend your data and probability knowledge, mechanics looks at the physics of motion and forces.

How will I be assessed?

Examinations at the end of the second year.

What can I do next?

A Level Maths is essential for Higher Education courses in computer science, engineering, physics or mathematics itself. It is also highly desirable for science and social sciences, any medically-related qualification, business and accounting.

"Getting the answer of a difficult question right in maths is like winning the lottery; the process finally clicks and you know what you need to do."

Shakirah - Hinde House School

FURTHER MATHEMATICS

A LEVEL - 2 YEARS

Entry Requirements: 5 GCSEs at grade 4-9 including English plus a grade 8(A) in Maths

What will I study?

You will study AS Level Further Mathematics in the first year whilst also studying A Level Mathematics alongside. In the second year you will complete the full A Level in Further Mathematics. As well as allowing you to study mathematics in more depth, Further Mathematics gives you a much broader mathematical background ensuring you are highly employable in all mathematical fields. In Pure you will extend your knowledge of topics such as algebra and calculus, you will also learn new concepts such as complex numbers, matrices and polar coordinates. Alongside Pure you will also be introduced to decision maths and delve further into mechanics or statistics.

How will I be assessed?

Examinations at the end of the first and second years.

What can I do next?

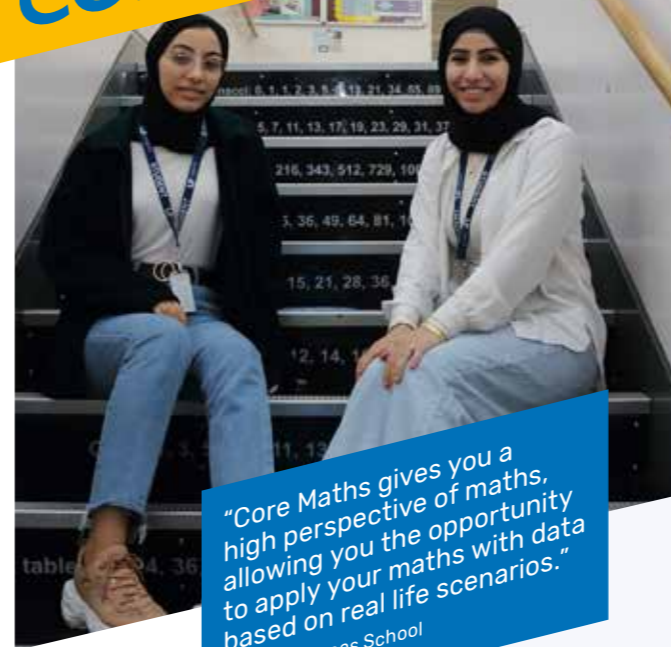
Further Mathematics students are particularly well prepared for degree level courses in mathematics, engineering, science, medicine, dentistry, computing, finance, economics and other mathematics based subjects.

"Further Maths is always challenging what you already know in maths by expanding on past ideas and creating new ones as well."

Ben - Yewlands Academy



CORE MATHS



"Core Maths gives you a high perspective of maths, allowing you the opportunity to apply your maths with data based on real life scenarios."
Osei - Overseas School

LEVEL 3 CERTIFICATE - 1 YEAR

Entry Requirements: 4 GCSEs at grade 4-9 including English and Maths

EQUIVALENT TO 1 AS LEVEL

Core Maths is a one year course, studied alongside a BTEC Level 3 Extended Diploma or 3 A Levels.

What will I study?

Core Maths qualifications enable learners to strengthen and develop the mathematical knowledge and skills they have learnt at GCSE. You will study maths topics, which will consolidate and extend the mathematics learnt to date and develop transferable problem solving skills. This includes, spreadsheets, modelling and estimation, statistical and financial problem solving, exponential growth, graphs and probability and risk.

How will I be assessed?

Examinations.

What can I do next?

The skills developed in the study of mathematics are increasingly important in the workplace and in higher education; studying Core Maths will help you keep up these essential skills. Most students who study maths after GCSE improve their career choices and increase their earning potential. The course also gives an examination subject at Level 3 that would strengthen a UCAS application.