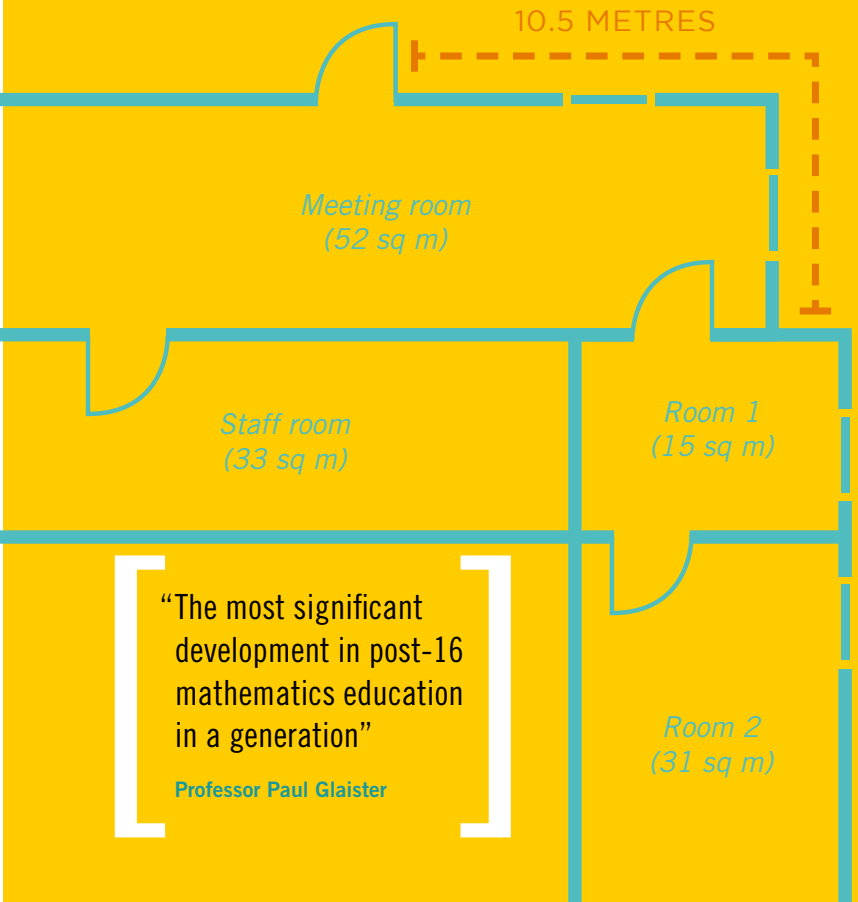
[core:maths]

A NEW QUALIFICATION FOR WORK, STUDY & LIFE

For schools and colleges



"The most significant development in post-16 mathematics education in a generation"

Professor Paul Glaister

WHAT IS CORE MATHS?

Core Maths is a new Level 3 course for students who have achieved a good pass at GCSE mathematics. It is designed to better prepare students for the mathematical demands of work, study and life.

It is a major part of the government's plan to increase participation and raise standards in mathematics – the ambition is for most students to continue studying mathematics to 18.

The course has been developed with employers, universities and professional bodies as valuable preparation for higher education and employment.

Only 20% of students in England study maths post-16 – the lowest rate in leading developed countries in the world; in Japan, this figure is 85%.

This puts young people in England at a major disadvantage in a global job market.

Many students arrive at university with unrealistic expectations of the mathematical and statistical demands of their subjects.

Core Maths has been introduced to address these issues and, importantly, counts towards the Level 3 Mathematics achievement measure in 2017 Performance Tables.

"Maths is a core aspect of most things. Core Maths has helped me with my physics and computing because you are relating it back to each subject and how maths links to most things"

Core Maths Student

WHO IS IT FOR?

Core Maths is for students who have passed GCSE Mathematics, but have decided not to study A Level Mathematics.

It builds upon and strengthens existing skills and focuses on using and applying mathematics to solve problems relevant to their everyday lives.

The qualification merits the same UCAS points tariff as an AS level.

How Is Core Maths Taught?

Core Maths builds on GCSE maths with a sharper focus on problem solving skills by considering and tackling mathematics in meaningful contexts. This includes financial applications of mathematics, as well as further statistical ideas that can support work in other subjects they will be studying such as psychology, health sciences, geography, sociology and even history.

Although the course is mainly led by mathematics teachers, the involvement of other subject specialists is welcomed to ensure students appreciate the applications of mathematics in different subjects.

Many Schools and Colleges are finding this approach beneficial not only to the students but also in supporting capacity challenges.

Who Is Teaching Core Maths?

Any post-16 provider in England can teach Core Maths, and hundreds are already doing so. Almost 150 started teaching Core Maths in 2014, with over 200 more starting in 2015. Approximately 3,000 students from 200 centres sat the first Core Maths exams in 2016. Today, there are over 500 schools and colleges teaching Core Maths to an estimated 15,000 students.

A selection of case studies and endorsements are available to view on the Core Maths website:

www.core-maths.org/why-core-maths

" The University of Bath welcomes the introduction of Core Maths qualifications to allow students the opportunity to develop their mathematical and statistical problem-solving, evaluation and data-analysis skills beyond GCSE. Many of the degree schemes at Bath value these skills, even where there is no formal requirement for attainment of a Mathematics qualification beyond GCSE level, and highlight this in their published selection criteria. Successful completion of a Core Maths qualification would therefore be appropriate evidence of mathematical skills and would contribute towards receipt of an offer for these courses."

University of Bath

WHAT'S THE DIFFERENCE?

Students who achieve a good pass in GCSE Mathematics at age 16 will need to decide "Which Level 3 Mathematics course should I do?"

The following guidance has been agreed by the Department for Education:

AS and A Level Mathematics

- Keeps options open for a wide range of university courses;
- Is essential for entry to many degree courses including most STEM and medicine, economics and architecture;
- Supports the mathematical elements of other A Level subjects;
- Introduces new ideas, applications and techniques such as – proof, calculus, modelling; and
- Offers more rapid progression for higher achieving students in mathematics.

AS and A Level Further Mathematics

- Introduces more sophisticated mathematical concepts and can boost students' marks in single A Level Mathematics;
- Makes the transition from sixth form to university courses which are mathematically rich much easier; and
- Enables students to distinguish themselves as able mathematicians in their applications for university and future employment.

Core Maths

- Helps students maintain and further develop valuable mathematical skills for university and employment;
- Helps with the mathematical elements of other Level 3 courses, including humanities and social sciences;
- Builds valuable skills through an emphasis on mathematical problem solving in real life Contexts; and
- Provides an option which is suitable for all students with a good pass at GCSE.

Students should ideally follow the course that has the most advanced mathematics they are capable of.

"The new Core Maths qualification is an excellent way to ensure British employers have a ready pipeline of young talent with the maths skills they need"

Dame Fiona Kendrick, Chairman and CEO of Nestlé UK

"Being able to develop my practice as a teacher, especially with regard to teaching problem solving, this is starting to change how I teach other maths classes."

Core Maths Teacher

THE BENEFITS

- Students currently studying Core Maths have found it gives them confidence to better understand the mathematical requirements in other courses both A Levels and BTEC courses such as economics, biology, forensics, business studies and music.
- More than twenty leading universities have endorsed the Core Maths qualification since it equips students with the mathematics skills that are required for many degree courses from: humanities to social sciences.
- School and College leavers who attain the Core Maths qualification will automatically be in a position to apply the enhanced practical maths skills they've learnt in an array of business and financial contexts.
- Core Maths has received wide endorsement and recognition from employers such as Nestlé, Barclays, CrossRail, McDonalds, the British Chambers of Commerce and many others.

A NEW APPROACH

What is The Core Maths Support Programme (CMSP)?

The CMSP is being run by Education Development Trust on behalf of the Department for Education (DfE). The Programme is being delivered through a sector-led model with regional networks providing peer to peer support.

The CMSP is strongly committed to a problem solving approach to maths teaching and learning and provides professional development to improve pedagogy in this area and to increase the capacity of teachers to teach mathematics.

Details of professional development and training programmes, together with over 250 teaching resources are available from: www.core-maths.org

"Good numeracy skills are important for all apprentices. The real life mathematics skills students learn on the new Core Maths qualification will benefit not only their future employers but give the students and apprentices confidence to tackle and solve problems in their everyday lives too."

Lindsay McCurdy, CEO, Apprenticeships4England

"Students are bringing their own real life problems to lessons, such as buying a car or converting currency for a sixth form trip."

Core Maths Teacher

[core:maths] support programme

WHAT TO DO NEXT

Get in touch and we will introduce you to a Core Maths Lead in your area, who will provide you and your teaching team with more detailed information and training to get you started.

There are other education establishments in your area already teaching Core Maths, so we can put you in touch with them to learn about their experiences too.

Visit our website to view case studies, over 250 freely available resources, plus teacher and student testimonials.

www.core-maths.org
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theCMSP
core-maths-support-programme

Education Development Trust

The following Awarding Organisations provide Core Maths courses:

edexcel AQA City & Guilds OCR eduqas