



Advanced Mathematics
Support Programme®



Core Maths
Why it matters to employers

What is Core Maths?

“Mathematical and quantitative skills will be increasingly required in the future, not just for traditional STEM routes but for a wide range of future careers.”

Government Careers Strategy

Core Maths is a level 3 qualification, intended for students who do well in GCSE Mathematics, but decide not to take A level Mathematics. Core Maths develops the quantitative and problem-solving skills so highly valued by employers.

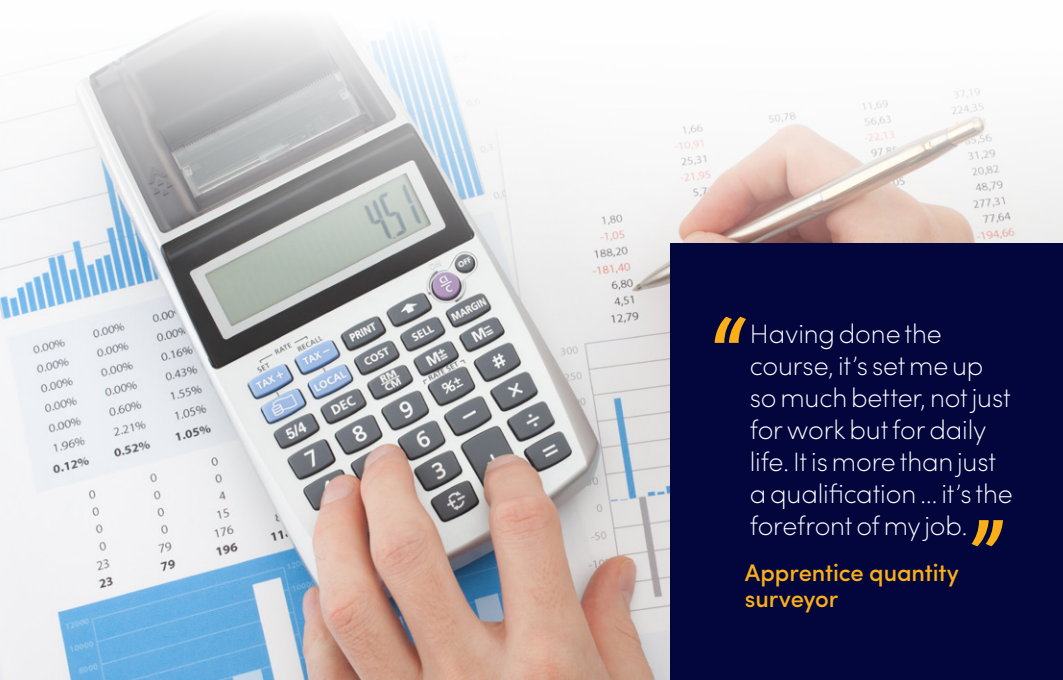
Studied alongside A levels or vocational qualifications

Equivalent in size to an AS level and graded A – E

For students with grade 4 or higher in GCSE Mathematics

Focused on problem solving in context

Designed in association with employers to increase employability skills

A hand is shown using a silver calculator on a document. The document features a bar chart on the left, a table of percentages in the middle, and a table of numbers on the right. The calculator's display shows '45.1'. The background is a collage of these elements, with a dark blue box containing a quote and a title in the bottom right corner.

“Having done the course, it’s set me up so much better, not just for work but for daily life. It is more than just a qualification ... it’s the forefront of my job.”

Apprentice quantity surveyor



“ It’s the skills more than the maths...problem solving, logical thinking...

I hated spreadsheets before, but I feel more comfortable using them now. ”

**Core Maths students,
Ivybridge Community
College**

What are the benefits for employers?

Students learn through using and applying maths to solve meaningful and real-life problems. Examples include:

Financial maths

Using interest rates, growth and depreciation; working with exchange rates, commission and buy/sell rates; taxation.

Data & critical analysis

Interpreting and presenting data; analysing and communicating risk; questioning the validity of information.

Modelling

Using spreadsheets; optimisation, including linear programming; cost-benefit analysis.

Estimation

Practical approximation from ‘back-of-the-envelope’ calculations using knowledge from everyday experiences.

Employees with a Core Maths qualification can apply the skills they’ve learnt to meet an array of business needs.

Let's work together

Core Maths was first examined in 2016. Numbers have grown steadily since; however, there is potential for further growth. We're working to improve students' understanding of the qualification and increase the number of schools and colleges that offer the opportunity to study it. Clear signals about the value of good mathematical and problem-solving skills will stimulate student and parental demand for Core Maths. Universities are starting to do this, and we'd like employers to do the same.

Here are some things you can do to encourage students to take Core Maths:

- Identify Core Maths as a desirable qualification for school and college leavers and apprentices.
- Pass on information about Core Maths to your HR department. Ask them to refer to Core Maths in recruiting materials, interview guides, and on your company website.

- If you offer a graduate recruitment scheme, adopt Core Maths as a desirable qualification and promote this within your graduate recruitment activities.
- Refer to the benefits of the Core Maths qualifications in relevant public speaking opportunities and conferences.
- Let your local schools and colleges know about your support for Core Maths.
- If your organisation is part of a wider network or representative body, use your contacts to raise awareness of Core Maths and its role in strengthening the future UK workforce.

Contact us at **careers@amsp.org.uk** if you would like to know more or be more actively involved in encouraging young people to take up the qualification. You can find more details about Core Maths, along with contact details of national and regional representatives, on our website: **amsp.org.uk**



Key facts about Core Maths

Why does Core Maths exist?



"Fewer than 25% of students who pass GCSE Mathematics continue to study maths after age 16"

Industrial Strategy, Nov 2017



Almost 30% of skill shortage vacancies in 2015 were linked to a lack of complex numerical / statistical skills

- Employer skills survey 2017



"The majority of private sector organisations believe the use of data analytics will be the most important factor in increasing growth in UK businesses"

Report of Professor Sir Adrian Smith's review of post-16 mathematics, 2017

What is Core Maths and who is it for?



Core Maths is studied alongside A levels or vocational qualifications and is worth the same UCAS points as an AS level. It focuses on solving real world maths problems



Designed for students who have achieved a grade 4 (C) or above in GCSE Mathematics



Each year around **270,000** students decide not to study for an A level in Mathematics but may go on to future studies or employment that rely on good quantitative skills - *Report of Professor Sir Adrian Smith's review of post-16 mathematics, 2017*

What topics are studied in Core Maths?



Financial Maths

Taxation and real exchange, commission and buy/sell rates from real banks



Critical Analysis

Using data to support or question an argument



Modelling

Using spreadsheets, optimisation, cost-benefit analysis



Statistics & Probability

Interpretation and presentation of data; analysis and communication of risk



Estimation

Practical approximation. 'Back-of-the-envelope' calculations

What skills are gained from studying Core Maths?



Problem solving



Critical thinking



Analysing and interpreting data



Communication

“ The 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,
former Chairman and CEO
of Nestlé UK and Ireland



About the AMSP

The **Advanced Mathematics Support Programme (AMSP)** is a government-funded initiative that aims to increase participation and improve the teaching of 11-16 maths, Core Maths, AS/A level Mathematics and AS/A level Further Mathematics.

As well as supporting schools and colleges, we also provide information for employers to help you to understand what students study when they take advanced maths qualifications.



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Support Programme®

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The AMSP website offers everything from classroom resources to curriculum guidance. If you'd like to be kept in the loop, make sure you subscribe to our **Stay Informed** mailing list to receive regular updates on the AMSP's activities.