

Further Mathematics

Method of Assessment

AQA Level 2 Certificate in Further Mathematics is a GCSE-level course that is designed to be taken in parallel with the normal GCSE Maths course, and although uses common understanding and skills, is completely independent of it.

The Further Mathematics course is an un-tiered Level 2 linear qualification for learners who either:

- are expected to achieve, grades A/A* (Level 7-9 on the new scale) in GCSE mathematics, or
- are likely to progress to A-Level study in mathematics and possibly further mathematics.

The course is examined in the summer of Year 11 through two exam papers. There is no coursework.

Paper 1 - Written paper (Non-calculator), 40%

Paper 2 - Written paper (Calculator), 60%

Course Content

This qualification fills the gap for high achieving students by assessing their higher order mathematical skills, particularly in algebraic reasoning, in greater depth without infringing upon AS Level mathematics, thus preparing them fully to maximise their potential in at A Level. It offers the opportunity for stretch and challenge that builds on the Key Stage 4 curriculum and is intended as an additional qualification to the GCSE Mathematics, rather than as a replacement.

The qualification places an emphasis on higher order technical proficiency, rigorous argument and problem solving skills. It also gives an introduction to calculus and matrices and develops further skills in trigonometry, functions and graphs.

The specification content is set out in six distinct topic areas although questions will be asked that range across these topics.

- Number
- Algebra
- Co-ordinate Geometry (2 dimensions only)
- Calculus
- Matrix Transformations
- Geometry

Learners that embark on this course are encouraged to see algebra as a natural tool for communicating mathematically and for solving a range of problems. They will begin to appreciate how situations can be represented by mathematical models, see mathematics as a coherent subject and understand how different areas of the subject link together. They will be encouraged to appreciate the elegance and beauty of mathematics for its own sake as well as beginning to realise its fundamental importance in understanding and shaping our world.

Success Criteria

- Success in Further Mathematics is maximised by discovering the learning for themselves, interactivity and practising skills so they become second nature.
- Students should avoid using a calculator for any calculation, if it can be done manually, in preparation for the non-calculator paper.

Leading to:-

Mathematics is one of the most prized qualifications by universities and employers alike which makes having a Further Mathematics qualification even more so, and success in the subject can give you an advantage in a wide range of career paths.

Careers such as Computer Programming; Engineering (Mechanical, Electrical, and Construction); Architecture; Finance; Insurance; Medicine; Research, to name but a few.