Mathematics (Further)

Qualifications

Exam board: OCR Further Mathematics B (MEI) H645 (full A level) (two year course)

Year 13 - A2 Level

Entry Requirements

A minimum of 5 passes at grade 5 or grade C (including English and Maths). A minimum of a Maths grade 7 at GCSE and also be studying A Level Maths.

Skills Required

Strong candidates will have a range of skills, for example good study skills, an enquiring mind, problem solving skills, mathematical ability and the ability to relate to abstract concepts. Good algebra skills are essential for this course. Students will be expected to do a substantial amount of work outside of lesson time in order to fully develop their skills and knowledge, so good organisation and the ability to meet deadlines are essential for examination success in this subject.

Course Outline

Further Mathematics enables you to study mathematics at a greater depth and breadth. You will study a range of topics that complement those in A Level Mathematics, including more on new number systems, calculus, numerical methods and complex numbers. In Mechanics, you will learn to use moments, study work, energy and power, find centres of mass and study circular motion and Hooke's Law. In Modelling with Algorithms, you will further your knowledge of algorithms, networks and linear programming.

Student Testimony

"Further Mathematics at Hele's saw us constantly striving to improve ourselves. The challenging Mathematics kept every lesson interesting and full of information. The teacher was always enthusiastic and encouraging, helping to boost our confidence even when we didn't think we understood it."

Career Paths & Degree Courses

Further Mathematics is particularly useful for students who are looking to study Mathematics at university, or other courses with a large mathematical element, such as many engineering courses. Mathematics is very useful in biological subjects, geography, management studies, accountancy, research, financial management and education. Graduates of mathematical based courses can go on to highly paid careers, in some cases substantially higher than other disciplines. Employers believe that Mathematics teaches people how to think carefully and regard numerate people highly.

Year 12 and Year 13

The full A level course is examined by a 2 hour and 40 minutes examination on Core Pure Mathematics, a 2 hour and 15 minutes examination on Mechanics and a 1 hour and 15 minutes examination on Modelling with Algorithms.