

Further Mathematics

Examination Board: OCR MEI (B)

Staff Lead

K Marshall, BSc (Hons), PGCE
K Spreadborough LLB (Hons), PGCE, PGDip

Why Study Further Mathematics?

The aims and objectives of this qualification are the same as for A Level Mathematics but to additionally enable students to:

- Understand mathematics and mathematical processes in ways that promote confidence and provide a strong foundation for progress to further study
- Extend their range of mathematical skills and techniques and further develop their problem solving skills
- Use their mathematical skills and techniques to solve challenging problems which require them to decide on the solution strategy
- Recognise when mathematics can be used to analyse and solve a problem in context
- Represent situations mathematically and understand the relationship between problems in context and mathematical models that may be applied to solve them
- Make deductions and inferences and draw conclusions by using mathematical reasoning
- Generalise mathematically and construct proofs
- Take increasing responsibility for their own learning and the evaluation of their own mathematical development.

Career Paths & Degree Courses

Studying Further Mathematics is excellent preparation for university, especially if you wish to study any Mathematics-

related subject such as Engineering, Science, Computing or Technology, as well as Mathematics itself. Many universities now encourage students to take Further Mathematics qualifications to improve their mathematical preparation for degree courses. Further mathematics is also listed as useful for degree courses/careers in Medicine, Veterinary Science and Dentistry.

Requirements

At least five 9-4 grades at GCSE, with a minimum average grade score of 4.5. Grade 7 or above in GCSE Mathematics, but an 8 or 9 is preferred. You must also have enjoyed the mathematics you have studied so far.

Further Mathematics can only be taken if a student is studying A level Mathematics. It can be taken as a fourth A level or as one of your three subjects.

A Level	
Further Mathematics (3 external examinations)	
Paper 1: Core Pure Mathematics	Core Pure is 2 hours 40 minutes long and is worth 50%.
Paper 2 and 3: Either: Mechanics major & Statistics minor OR Statistics major & Mechanics minor	Each major paper is 2 hours 15 minutes long and worth $33\frac{1}{3}\%$ Each minor paper is 1 hour 15 minutes long and worth $16\frac{2}{3}\%$