

Further Mathematics

What is Further Mathematics?

Mathematics is a vast subject studying numbers, quantities, shape, space, their relationships, and a lot more. Further Mathematics, in turn, describes a course studied in addition to the standard A Level Mathematics. It provides deeper grounding in, and greater conceptual understanding of, both Pure and Applied Mathematics by introducing students to such topics as complex numbers, matrix algebra, differential equations, Taylor series, and others. All these ideas are extremely important for the establishment of many scientific concepts present today and, for those passionate about Mathematics, are very interesting to learn in their own right. By the end of the course you will have taken your mathematical aptitude to a higher level and developed further your logical, numerical and problem-solving skills.

Students will study two compulsory Further Pure modules, and another two from a range of choices. The optional modules being offered usually range from Additional Further Pure, Mechanics, Statistics and Decision modules, some of which introduce entirely new maths, and some build on A Level maths content.

What are the entry requirements?

In addition to the college's standard requirement of six passes (grades 9-4) or more at GCSE, you will need to have obtained at least a grade 7 in GCSE Mathematics.

How is the course assessed?

For an AS Further Mathematics (1 year) qualification, you will be assessed by two 1 hour 40 minute exams in May/June - 1 paper will consist of core pure (compulsory) content and the remaining one shall be optional* content.

For an A-Level Further Mathematics (2 year) qualification, you will be assessed by four 1 hour 30 minute exams in May/June of your 2nd year - 2 papers will consist of the core pure (compulsory) content, and the remaining two shall be optional* content.

*Optional content: Two units will be chosen from Further Pure 1/2, Further Statistics 1&2, Further Mechanics 1/2, Decision 1/2

Which subjects combine well with Further Mathematics?

Further Mathematics combines well with most other subjects, particularly those with a significant mathematical content such as Physics, Chemistry, Economics, Accounting and I.T. In a broader sense, the subject reinforces one's logical thinking skills and ability to correctly manipulate, synthesize and interpret numerical data, which is of great use in almost any area of rigorous study.

What careers can Further Mathematics lead to?

A Mathematics degree, to which it usually leads, is highly valued by employers due to the skills in analysis, problem-solving and, of course, numeracy, that it develops. Many graduates have chosen to use their mathematical skills in careers in the City of London, such as trading and risk analysis; in banking, insurance and other financial services; and in scientific research, IT and industry. However, this is not an exhaustive list as the transferable skills gained through study of Mathematics are, in general, of wide applicability

