St Benedict's Sixth Form

A Level Further Maths

Course Description

Further Mathematics is an extension of the A-Level Maths course and covers several of the Maths topics in more depth, as well as introducing brand new concepts. In Year 12, students will study one compulsory core pure unit containing topics such as complex numbers, matrices and finding roots of equations using numerical methods. They will also study two units of applied maths consisting of a choice of two of the following: mechanics, statistics or decision maths. In Year 13, students will study another core pure unit looking at differential equations, further matrices, further complex numbers and polar coordinates. They will also study two units from a choice of pure maths, mechanics, statistics or decision maths. Please note that A-Level Maths must be taken in order to do Further Maths. It is possible to do Further Maths as a third or a fourth A-Level, or as an AS at the end of Y12 for those who wish to supplement their maths and science learning but are unsure if they wish to do it as a full fourth A-Level.

Skills Attained

The Further Maths course further develops students' analytical and problem solving skills. They will be expected to apply their knowledge to a variety of more complex problems. The applied units will develop an awareness of the relevance of maths to the world of work and to situations in society in general. The further pure units will improve students' algebra skills and more specifically the skills of algebraic proof which are crucial for the study of mathematics at a higher level.

Assessment

The course is assessed by external examination only with papers taken in the four A level units being sat in the summer of Year 13. **There is the option of taking the AS in the summer of Year 12.** Internal assessments to monitor the progress of students over the course of Years 12 and 13 are regular and homework tasks are given out on a weekly basis.



Progression

Further Maths is an excellent A-Level to have for students considering a maths-related degree at university. Since Further Maths is not compulsory to study a Maths degree, the first year of most maths degree courses contain modules which cover topics studied in a further maths A-Level. This gives those who have studied further maths a significant advantage when beginning a maths degree. Further Maths is also very useful for students studying science-based or finance-based courses at university.

Over the last few years students who have studied Further Maths have gone on to study a variety of subjects at university including maths, physics, microbiology and accountancy and finance.

Further Maths is essential for Oxbridge courses such as Maths, Engineering and Physics.

Entry Requirements

Grade 8 in GCSE Maths; By agreement with Lead Teacher of Mathematics

Exam Board: Edexcel

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