## MATHS

## **Course Details**

An A Level in Further Maths is an additional qualification which must be studied alongside A Level Mathematics. These qualifications will impress both prospective employers and university admission tutors and is desirable or essential for some university courses. It shows you can think logically, accurately process information, and skilfully manipulate numbers and have challenged yourself to take this at a higher level. During the course of your studies you will discover complex numbers and learn to harness the power of matrices. You will also study two applied modules -Mechanics and Decision Maths. A Level Maths is so well regarded that academics from the University of Nottingham found that pupils who take maths at A level receive an 11 per cent premium on their salary by the time they are 34 years and that no other A-level subject attracted a wage premium in the same way. The government's 2019 report on earning outcomes of all level 3 qualifications found that it was A Level Further Maths students who achieved the highest average salary six years on!

**Entry Requirements** 

**Grade 8 in GCSE Mathematics** 

Further Maths is timetabled separately but MUST be taken with A Level Maths.

## **Progression**

Mathematics is a versatile qualification, well respected by employers and a 'facilitating' subject for entry to higher education. Careers for those with good mathematical skills are not only well paid, but are interesting and rewarding. People who studied Maths are in the fortunate position to have an excellent choice of career. A-level Further Mathematics is one of the most widely accepted and respected subject choices by universities and is likely to enhance your options rather than close them down potentially reducing grade offer at some universities.

Paper I: Core Pure Mathematics I	25% of the course - 1hr 30 mins - 75 marks
Paper 2: Core Pure Mathematics 2	25% of the course - 1hr 30 mins - 75 marks
Content for Core Pure Mathematics	Complex numbers, matrices, further algebra, further calculus, proof, further vectors, polar coordinates, hyperbolic functions, differential equations.
Paper 3c: Further Mechanics I	25% of the course - Ihr 30 mins - 75 marks
Content for Further Mechanics	Momentum and impulse, work, energy and power, elastic strings and springs, elastic collisions.
Paper 3d: Decision Mathematics I	25% of the course - 1hr 30 mins - 75 marks
Content for Decision Mathematics	Graph theory, algorithms on graphs, critical path analysis, linear programming



**Further Information** 

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**Examination board:** Edexcel www.qualifications.pearson.com