

MATHEMATICS AT SSFC

Why study Mathematics?

Mathematics is the most fundamental way we make sense of the world and understanding Mathematics satisfies our human desire for logical reason, allowing us to better understand the world around us. A level Maths is all about problem solving and proving. You will use key skills of logic, analysis, construction and generality, alongside a great deal of algebra!

A Level Mathematics allows you to explore properties, patterns and relationships in a wide range of topics such as trigonometry, co-ordinate geometry, logarithms, functions, calculus and vectors, as well as seeing their application within the fields of statistics and mechanics.

Course Overview

This course is a linear two-year programme following the AQA syllabus (7357)

You will sit three 2-hour examinations at the end of the two-year linear course.

Paper 1: Core (any content from)

Algebra and Functions, Co-ordinate Geometry, Sequences & Series, Trigonometry, Exponentials & Logarithms, Differentiation, Integration, Numerical Methods.

Paper 2: Core & Mechanics (any content from Paper 1 plus)

Vectors, Quantities & Units in Mechanics, Kinematics, Forces & Newton's Laws

Paper 3: Core & Statistics (any content from Paper 1 plus)

Statistical Sampling, Data Presentations and Interpretation, Probability, Statistical Distributions, Statistical Hypothesis Testing.

Careers

Studying Mathematics at A Level is a preferred subject for many degree courses, such as Mathematics, Engineering, Computing, Medicine, Chemistry, Physics, Natural Sciences, Economics, Business and Accounting. It is respected by a vast array of employers globally and is generally regarded as essential for many jobs across all industries.

What subjects go well with Mathematics?

Here at SSFC, students typically study a combination of three subjects. Mathematics can be combined with a wide range of subjects depending on your chosen progression route. It combines well with Biology and Chemistry for careers in Medicine; Physics and Engineering for a career in engineering; or any combination of science including Computer Science, opening up opportunities for multiple careers within STEM. Students looking towards a career in Business or Finance often combine with Business and Economics, whilst being able to work with statistics extends more broadly to complement subjects such as Geography and Psychology. Whichever combination you choose, you can be sure that you will develop skills such as being able to think logically and solve problems, which will be sought after by any employer.

Entry requirements

A Level Mathematics builds on existing knowledge from GCSE Mathematics, and therefore to be successful, it is essential you have a good foundation of knowledge. Standard entry requirements are grade 6 in GCSE Mathematics. If you fall short of this, come and speak to us, we may consider cases on an individual basis.