

Why Study A Level Further Maths?

Course Introduction

Take your mathematical thinking further by exploring more advanced concepts, challenging problems and finding new ways to understand the world. A-level Further Mathematics builds on the foundations of A-level Mathematics, developing deeper analytical skills and a greater appreciation of the power, beauty and applications of mathematics.

Entry Requirements

5 GCSEs with a minimum Grade 6
Minimum Grade 7 in GCSE Maths

Course Content

A-level Further Mathematics extends your mathematical knowledge and introduces advanced techniques used across science and engineering.

- Core Pure Mathematics: Explore complex numbers, matrices, proof, further calculus, vectors and differential equations.
- Further Statistics: Explore advanced probability, statistical distributions and hypothesis testing to analyse data and draw informed conclusions.
- Advanced problem-solving: Apply mathematical methods to unfamiliar problems, developing deeper reasoning and mathematical modelling skills.

Skills Developed

Strengthen your ability to reason logically, construct mathematical proofs and solve complex, multi-step problems. You'll develop greater precision, resilience and confidence when working with abstract concepts, while learning to connect different mathematical ideas and apply them in unfamiliar situations.

Career Opportunities

A-level Further Mathematics is particularly valuable for degrees in mathematics, engineering, physics, computer science and economics. It can support future careers in data science, quantitative finance, research, technology and engineering, where advanced mathematical reasoning and problem-solving are highly valued.

Course Assessment

Assessment is through four written examinations covering core pure mathematics, further statistics & decision maths.

- Paper 1: Core Pure Mathematics 1: 1 hour 30 minutes (25%).
- Paper 2: Core Pure Mathematics 2: 1 hour 30 minutes (25%).
- Paper 3: Further Statistics: 1 hour 30 minutes (25%).
- Paper 4: Decision Maths: 1 hour 30 minutes (25%).

