FURTHER MATHEMATICS

Offered as a fourth A-Level only, to be taken alongside Mathematics.

EXAM BOARD: EDEXCEL

Exams x 3 Papers 100%

Why study Further Mathematics?
Mathematics touches more aspects of modern living than ever before – communications, media, and financial management as well as computer and physical sciences, engineering, technology and business related subjects.

Mathematics gives future employers, universities and colleges clear evidence of highly valued numeracy and problem-solving skills irrespective of the actual role/course being considered.

Here at Stratford upon Avon school, we have a diverse collection of staff, from all different backgrounds. Some studied maths or related subjects at degree level, bringing that passion for the subject straight into the classroom. Some have many years experience in a variety of industrial, commercial and public sector organisations. What we have in common is a strong desire to support all our students.

We run a trip to Warwick university for a maths event each year, have high proportions of students who choose the enter the UKMT Senior Maths challenge, and offer well-attended extra support sessions for our KS5 students.

For further maths, class sizes are generally single figures, so students are almost getting a tutoring experience with a lot of individual support.

An A-Level in Further Mathematics demonstrates mathematical reasoning of the highest order and is very highly regarded by employers and universities.

Subject Specification Outline:

Core Pure Mathematics (Papers 1 & 2)

Core Pure Mathematics 1 and 2: intended to develop mathematical argument, language and proof in the context of problem solving and mathematical modelling. Content will include proof, complex numbers, matrices, further algebra and functions, further calculus, further vectors, polar coordinates, hyperbolic functions and differential equations.

+ **two** options from the following eight:

- 3A: Further Pure Mathematics 1
- 3B: Further Statistics 1
- 3C: Further Mechanics 1
- 3D: Decision Mathematics 1
- 4A: Further Pure Mathematics 2
- 4B: Further Statistics 2
- 4C: Further Mechanics 2
- 4D: Decision Mathematics 2

A pair of options are chosen, either:
- any two Option 1 papers, or
- a matching pair of Option 1 & Option 2 papers

Due to our small class sizes, we choose the extra year 13 module to suit our cohort each year.

Progress Assessment:

- ongoing half-termly assessment
- end of Year 12 examination
- full mocks in December of Year 13
- regular in-class exam questions with teacher feedback

Final Exam Format: Four equally weighted written papers each of 90 minutes.

Self-Study Requirements: Each taught hour will require a minimum of an additional one hour of self-study.

Progression Pathways: A-Level Further Mathematics supports a wide range of university level Mathematics courses and also supports an even wider range of science, engineering, economics, business studies, computer science courses (and indeed may be an essential requirement for certain courses/universities).

We provide individual support for university maths entrance exams upon request.

Our students beyond Stratford:
Yaroslav (2025 Further Mathematics) Mathematics with Business Management, University of Birmingham