Further Mathematics A Level (Edexcel)

Why study this subject?

Further Mathematics is an excellent and rigorous extension of Mathematics A-Level. It is a separate course to Mathematics A-Level but will build on some of the content covered, as well as develop mathematical skills in many new concepts. This course is particularly suited to students who have been very successful at GCSE Mathematics and go above and beyond learning Mathematics at school. Students thinking about taking this subject should regularly read around the subject, watch mathematics-specific programmes, listen to podcasts, and be willing to immerse themselves in the subject, particularly as the majority of their timetable will be Mathematics. It is highly recommended for any student who may wish to study Mathematics or a related subject at University. We are excited to be one of the few schools who provide Further Mathematics students the opportunity to study, and take the exams of, the Mathematics A level in Year 12, and then the Further Mathematics A level in Year 13. We feel this provides students the best route to success in Further Mathematics.

Entry Requirements

Please see the entry requirements page on the school website.

Content

The A Level course will consist of Core Pure and Applied Mathematics content to give students the opportunity to broaden their knowledge of Mathematics and its applications.

Core Pure Mathematics: The study of algebra and functions, matrices, complex numbers, proof, vectors and calculus. This will help to develop their algebraic and manipulative skills even further.

Applied Mathematics: We currently teach the Decision Mathematics option, involving algorithms, critical path analysis, linear programming and game theory.

Assessment

All units are assessed by external examination at the end of the course. There are four exams (all calculator): 2 Core Pure Mathematics, 2 Decision Mathematics

Future courses and possible careers

Whilst being highly advised for those looking at studying Mathematics or Engineering at University, strong advanced levels in Mathematics and Further Mathematics will enhance any university application prospects considerably. Some university courses favour students that have studied topics such as complex numbers and matrices in Further Mathematics.