Further Mathematics A-level

Exam Board: Pearson Edexcel

Where do I start?

You will have to meet the minimum entry requirements for Wootton Park VI. You will also have to obtain a **Grade 8 at GCSE Mathematics** to enter this course.

Further Mathematics – about the subject:

Further Mathematics is a separate qualification that can be taken alongside A-level Mathematics. Pure Mathematics will explore rigorous mathematical arguments and proof, building on topics studied in A-level Mathematics such as calculus and trigonometry while introducing new areas such as complex numbers, matrices and hyperbolic functions. Further Mechanics will delve deeper into the world of forces and motion exploring topics such as elasticity and circular motion. Further statistics allows learners to develop their understanding of probability and statistical testing as ways of analysing sets of data, making and testing hypotheses. Decision mathematics uses techniques from the world of discrete mathematics to solve real life problems in many different areas such as finding the shortest route in a journey from A to B.

What type of learner chooses Further Mathematics?

The A-level Further Mathematics Course provides an excellent preparation for further study whilst supporting the learning of A-level Mathematics for those who are keen to take on the challenge. Further Mathematics is a highly desirable qualification that helps learners achieve their aspirations for further study and their future career. Further Mathematics combines well with the Sciences, particularly physics as the option is there to study Further Mechanics. However as Mathematics has many transferable skills, this subject will complement the majority of courses on the curriculum.

How will I be assessed throughout the course?

All learners choosing Further Mathematics will study A-Level Mathematics in year 12, this will be accompanied by termly assessments and an end of year exam consisting of 3 A-Level Mathematics papers. In year 13 Leaners will study the Further Mathematics content and which will also be accompanied by termly assessments. The formal assessment that takes place at the end of year 13 consists of four papers in total. Each paper will be a 1 hour 30-minute paper, all of equal weighting of 25% each. Two papers will be based on the Core Pure Mathematics elements, whilst the third and fourth paper will assess one of their option units, further pure mathematics, further statistics, further mechanics or decision mathematics.

What are the career/higher education prospects?

Studying A level Further Mathematics is excellent preparation for a degree in Mathematics. Many university maths departments encourage learners to take Further Mathematics at A level as it introduces a wider range of pure and applied content, such as matrices and complex numbers. Learners who have studied Further Mathematics often find the transition to university far more straightforward. Around a third of Mathematics degree courses mention Further Mathematics in their entry requirements, including it in their A level offers or encouraging learners to take it if possible. For the Russell Group universities, this proportion is much higher. Further Mathematics supports many different career choices, whilst providing the knowledge needed to fall in to a purely mathematical career. Studying Further Mathematics can support the following career choices: Software Engineering, Operational Research, Engineering, Architecture, Physics, Statistic, Accountancy and Finance, Education.