FURTHER MATHEMATICS **A Level**



Why Study this course?

- You are currently working at a Band 7-9 at GCSE and you would enjoy to study the most challenging A Level available.
- You want to be challenged and stretched by studying more difficult topics than those found at A Level Mathematics.
- You are planning to study either Mathematics or a related degree at University.



Career Progression

- Mathematics is a versatile qualification that is well-respected by employers and facilitates entry for higher education.
- Careers for those proficient in mathematical skills are not only well paid, but they are also interesting and rewarding.
- Employers highly value thinking logically and analytically, and resilience developed through problem solving.
- Previous students have achieved top grades and gone on to study a wide range of courses including Medicine, Accountancy, Engineering, Zoology, Natural Sciences and Astrophysics.

What You'll Study

Year 1:

Core Pure Mathematics 1 Proof, Complex Numbers, Matrices, Further Algebra and Functions, Further Calculus and Further Vectors.

Further Mechanics 1 Impulse and Momentum, Work Energy and Power, Elastic Collision in one dimension, Motion in a circle, Centres of pass of plane figures and Further Kinematics.

Further Statistics 1 Discrete Probability Distributions, Poisson and Binomial Distributions and Chi Squared Tests.

Year 2:

(Papers 1 & 2) Core Pure Mathematics Proof, Complex Numbers, Matrices, Further Algebra and Functions, Further Calculus, Further Vectors, Polar Coordinates, Hyperbolic Functions and Differential equations.

(Paper 3) Further Mechanics 1 Impulse and Momentum, Work Energy and Power, Elastic Collision in one-dimension, Elastic Collision in two dimensions, Motion in a circle, Centres of pass of plane figures, Further centres of mass, Further Dynamics and Further Kinematics.

(Paper 4) Further Statistics 1 Discrete Probability Distributions, Poisson and Binomial Distributions, Geometric and negative binomial distributions, Hypothesis Testing, Central Limit Theorem, Chi Squared Tests, Probability generating functions and Quality of tests.



To find out more you can visit our website: www.parrswood.manchester.sch.uk/sixthform

Why I chose Further Mathematics

"Having Further Maths A-level really distinguishes you from other students in a lot of ways, and is a real asset if you're thinking of applying to Oxbridge/ Imperial. In general you'll be able to handle other aspects of Maths much better if you have the firm grounding Further Maths gives you." - Lydia

If you like this subject, you may also like:

Maths, Physics, Computer Science, Business

Why Parrs Wood?

Our students regularly compete in the UKMT Senior Individual and Senior Team challenges. Students can attend a UKMT club where they are trained to apply their AS/A2 knowledge to questions asked in different contexts. We have had pupils achieve very high results and being invited to sit the Senior Kangaroo, invite only, Maths Challenge. We also offer a trip to the annual North West Maths Inspiration Lectures held at the RNCM. For those students who are aiming at achieving the highest grades we offer extra support to prepare them for the STEP examinations (required by some universities) and for Maths interviews at universities.

PARRS WOOD SIXTH FORM

Wilmslow Road, East Didsbury Manchester, M20 5PG t: 0161 446 8648 e: m.tracy@parrswood.manchester.sch.uk

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