



Further Maths A Level

Prepared by: S Routhorn

 **Exam Board: Pearson Edexcel**

 **Course Specification**
Please scan QR Code

 **Course Text Books**

- AS and A level Mathematics Pure Mathematics Year 1/AS Textbook ISBN: 978-1292183398
- A level Mathematics Pure Mathematics Year 2 Textbook ISBN: 978-1292183404
- AS and A level Mathematics Statistics & Mechanics Year 1/AS Textbook ISBN: 978-1292232539
- A level Mathematics Statistics & Mechanics Year 2 Textbook ISBN: 978-1446944073
- Pearson Edexcel AS and A level Further Mathematics Core Pure Mathematics Book ISBN: 978-1292183336
- Pearson Edexcel A level Further Mathematics Core Pure Mathematics Book 2 Textbook ISBN: 978-1292183343
- Pearson Edexcel AS and A level Further Mathematics Further Mechanics 1 Textbook ISBN: 978-1292183312
- Pearson Edexcel AS and A level Further Mathematics Further Statistics 1 Textbook ISBN: 978-12921833

 **Course Revision Guides**

- A-Level Maths Edexcel Complete Revision & Practice ISBN: 978-1782948087
- A-Level Maths Edexcel Exam Practice Workbook ISBN 978-1782947400
- A-Level Maths Edexcel Practice Papers ISBN: 978-1789080636
- AS & A-Level Further Maths for Edexcel: Complete Revision & Practice ISBN: 978-1782948698

 **Examinations**

Summer Year 13		
Paper 1 Pure Maths	2hrs	33.3%
Paper 2 Pure Maths	2hrs	33.3%
Paper 3 Statistics and Mechanics	2hrs	33.3%

Curriculum



Year 12

Term 1	Pure Book 1 Graphs and transformations; Straight line graphs; Circles; Algebraic method; The Binomial expansion Stats + Mechs Book 1 Data collection - Measures of location and spread; Representations of data; Correlation; Probability; Statistical distributions; Hypothesis testing	ALT Report October
Term 2	Pure Book1 Trigonometric ratios; Trigonometric identities and equations; Vectors; Differentiation; Integration; Exponentials and logarithms Stats + Mech Book 1 Modelling in Mechanics; Constant acceleration; Forces and motion; Variable acceleration	Progress 1 Report November
Term 3	Pure book 2 Algebraic methods; Functions and graphs; Sequences and series; Binomial expansion; Radians; Trigonometric functions Stats+Mech Book 2 Moments; Forces and friction – Projectiles; Applications of forces; Further kinematics	In Class Assessment January Progress 2 Report January
Term 4	Pure Book 2 Trigonometry and modelling; Parametric equations Differentiation; Numerical methods; Integration; Vectors Stats+Mech Book 2 Regression, correlation, and Hypothesis testing; Conditional probability; Normal distribution	
Term 5	Exam Practice	External Examinations Progress 3 Report May
Term 6	Start the further maths course by beginning Decision Maths 1 Book Algorithms; Graphs and networks; Algorithms on graphs; Route inspection; Travelling salesman	

Year 13

Term1	Pure Book 1 Complex numbers; Argand diagrams; Series; Roots of polynomials; Volumes of revolution Decision Maths 1 Book Linear programming; Simplex algorithm; Critical path analysis	ATL Report October
Term 2	Pure Book1 Matrices; Linear transformations; Proof by induction; Vectors; EITHER Further Mechanics 1 Book Momentum and Impulse; Work, energy, and power; Elastic strings and springs OR Further Pure 1 Book Vectors; Conic sections 1; Conic sections 2	Progress 1 Report November
Term 3	Pure Book 2 Complex numbers; Series; Methods in calculus; Volumes of revolution EITHER Further Mechanics 1 Book Elastic collisions in 1D; Elastic collisions in 2D OR Further Pure 1 Book Inequalities; The t formula; Taylor series	Mock Exams January Progress 2 Report January
Term 4	Pure Book 2 Polar Coordinates; Hyperbolic functions; Methods in differential equations; Modelling with differential equations EITHER Further Mechanics 1 Book OR Further Pure 1 Book Methods in calculus; Numerical methods; Reducible differential equations	
Term 5	Examinations	Examinations
Term 6	Examinations	Examinations