

Further Maths: Year 12 Curriculum Overview

Autumn Half Term 1

- Complex numbers: Introduction
- Argand diagram: Complex numbers
- Matrices: Introduction
- Linear transformation by using matrices

Autumn Half Term 2

ASSESSMENT 1 (All topics prior)

- Teaching prerequisites
- Series
- Roots of polynomials
- Proof by induction

Spring Half Term 1

- Teaching prerequisites
- Volume of revolution
- Vectors
- FM1: Momentum and impulse
- FM1: Work, power and energy
- D1: Algorithms
- D1: Graphs and network

Spring Half Term 2

- FM1: Work, power and energy continued
- FM1: Elastic strings and springs
- D1: Algorithms on graphs
- D1: Root inspection

ASSESSMENT 2 (All topics prior except integration)

Summer Half Term 1

- FM1: Elastic collision in one dimension
- FM1: Elastic collision in two dimensions
- D1: Linear programming
- D1: The simplex algorithm

Summer Half Term 2

- FM1: Elastic collision in two dimensions (continued)
- D1: Critical path analysis
- Revision for mock exam

YEAR 12 MOCKS (Full AS course)

- **Introducing Core 2**

Further Maths: Year 13 Curriculum Overview

Autumn Half Term 1

- Teaching prerequisites (Trigonometry)
- Complex numbers: Exponential form
- Polar coordinates

ASSESSMENT 1 (UCAS)

- Series
- Hyperbolic functions

Autumn Half Term 2

- Teaching prerequisites (calculus)
- Methods in calculus
- Hyperbolic functions (continued)

ASSESSMENT 2 (Pre-Mocks - UCAS)

- Differential equations

Spring Half Term 1

YEAR 13 MOCKS

- Teaching prerequisites (calculus)
- Volume of revolution
- Differential equations (continued)

Spring Half Term 2

- Volume of revolution (continued)
- Modelling with differential equations
- Review: Core 1

Summer Half Term 1

- Revision for final exams – Core 1, 2, D1 and FM1: topics will depend on needs of cohort and will differ from year to year.

Summer Half Term 2

- Revision for final exams – topics will depend on needs of cohort and will differ from year to year.