



FURTHER MATHEMATICS

This qualification was new in 2017. It is linear which means that students sit all their exams at the end of the course.

A-Level specifications in further mathematics require students to demonstrate the overarching knowledge and skills contained in sections OT1, OT2 and OT3. These must be applied along with associated mathematical thinking and understanding across the whole of the detailed content.

Overarching Themes

OT1: Mathematical argument, language and proof

OT2: Mathematical problem solving

OT3: Mathematical modelling

Qualification

A-Level

Start Date

September 2020

Finish Date

June 2022

How will I be assessed?

You will be assessed by three examinations at A-Level in Summer 2020:

- Paper 1: Further Pure Maths only (2 hours, 100 marks)
- Paper 2: Further Pure Maths only (2 hours, 100 marks)
- Paper 3: Further Mechanics and Statistics (2 hours, 100 marks)

What will I learn at A-Level?

Paper 1: Further Pure Maths only

Proof, Complex numbers, Matrices, Further Algebra and Functions, Calculus, Vectors, Polar coordinates, Hyperbolic functions, Differential equations, Trigonometry and Coordinate Geometry.

Paper 2: Further Pure Maths only

Proof, Complex numbers, Matrices, Further Algebra and functions, Calculus, Vectors, Polar coordinates, Hyperbolic functions, Differential equations, Trigonometry, Coordinate geometry.

Paper 3: Further Mechanics and Statistics

Dimensional analysis, Momentum and collisions, Work, Energy and Power, Circular motion and Centres of mass and moments.

Discrete random variables and Expectation, Poisson Distribution, Type I and Type II errors, Continuous random variables, Chi tests for Association, Exponential Distribution and Inference – one sample t-distribution.

Entry Requirements

Grade 7 in GCSE Maths