

Further Mathematics

A brief list of the course content is as follows:

YEAR 12

Core Pure Mathematics Book 1

Complex numbers
Argand diagrams
Series
Roots of polynomials
Volumes of revolution
Matrices
Linear transformations
Proof
Vectors

Decision Book 1

Algorithms
Graphs and networks
Algorithms on graphs
Route inspection
Travelling salesman problem
Linear programming
Simplex algorithm
Critical path analysis

YEAR 13

Core Pure Mathematics Book 2

Additional complex numbers
Additional series
Calculus
Polar coordinates
Hyperbolic functions
Differential equations
Modelling with differential equations

Decision Book 2

Transportation problems
Allocation problems
Flows in networks
Dynamic programming
Game theory
Recurrence relations
Decision analysis