

A Level Further Mathematics in Year 12

In year 12 students will study the following areas of mathematics:

- Further pure mathematics
- Decision mathematics

Pure Mathematics

Content Overview

- Proof
- Complex Numbers
- Matrices
- Further algebra and functions
- Further calculus
- Further vectors

Decision Mathematics

Content Overview

- Algorithms and graph theory: Bin packing, bubble sort, quick sort. Eulerian and semi eulerian graphs
- Algorithms on graphs: Prims and Kruskal's algorithms. Dijkstra's algorithm. Route inspection algorithm.
- Critical Path Analysis
- Linear Programming
- Allocation (assignment) problems
- Flows in networks
- Game theory
- Recurrence relations

Year 12 Internal UCAS Exam Week

There will be two papers each are:

- 1 hour 40 minutes in length
- 80 marks
- 50% of the overall assessment.

Specification and Examination Board:

Further Mathematics: 9FM0

Examination Board: Edexcel

<https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/mathematics-2017.html>