Further Mathematics

Course Requirements
Sixth Form Entry Requirement
plus
GCSE Mathematics - Grade 8

Syllabus
AQA

Who to Contact
Miss E Hirst
Course Leader

Overview

The course aims to develop a student's skills beyond A-level Mathematics.

- Students will reason, interpret and communicate mathematically.
- They will solve problems within mathematics and in other contexts to broaden their mathematical experience.
- A-level Further Mathematics content contains a core compulsory element (two thirds of the assessment) and a proportion of optional content allowing students to study statistics and mechanics in more depth

Students will take three linear exams, each of 2 hours, which are assessed at the end of the course on:

Papers 1 and 2 -
proof, complex numbers, matrices, further algebra and functions, further calculus, further vectors, polar coordinates, hyperbolic functions, differential equations and numerical methods.

Paper 3 -
Mechanics and Statistics Mechanics - dimensional analysis, momentum and collisions, work, energy and power, circular motion, centres of mass and moments.
Statistics – discrete random variables, Poisson distribution, Type I and II errors, continuous random variables, Chi tests, exponential distribution, inference and confidence intervals.

Students taking A Level Further Mathematics must also take A Level Mathematics.

You

Students need to be confident mathematically and have good algebra skills.

If you enjoy mathematics and you think you may wish to take a degree at a leading university in Mathematics, Physics, Engineering or Computer Science, you should consider taking A Level Further Mathematics.

Year 11 pupils should ask their Mathematics teacher to see if he/she thinks you are suited to the course.