



# AS Level Further Mathematics

**Key contacts:** Mrs Davies (Head of Department)  
and Mr Keogh (KS5 Co-ordinator)

**Exam Board:** Pearson Edexcel

## Overview of the course:

AS Further Mathematics enables you to study Mathematics to a greater breadth and depth. You will study a range of topics that complement those of Mathematics, including matrices, decision mathematics and complex numbers. If you enjoy Mathematics, the challenge of complex problems and exploring more sophisticated concepts of mathematics then Further Mathematics is for you.

You may already be thinking beyond A Level, to a Mathematics based or related subject or you may just enjoy Mathematics, in which case A Level Mathematics or Further Mathematics, would be an ideal option for you.

For information on reasons for choosing Mathematics and/or Further Mathematics please go to <https://amsp.org.uk/> and browse the Student Area.

## What will you study?

AS Further Mathematics builds on the skills, knowledge and understanding covered at GCSE and AS Level Maths. This includes a Core Pure module which develops the algebraic content along with introducing new concepts such as complex numbers and matrices.

Two additional modules will also be covered: Modelling with Algorithms and Statistics minor. These explore new areas of Mathematics and extend the statistics content covered in AS Mathematics.

As with A Level Mathematics; problem solving, proof and mathematical modelling will be assessed in the context of the specification.

If you would like any further information about the A Level courses available in Further Mathematics, please discuss it with your teacher or the KS5 Coordinator.

## Assessment

AS Level Further Mathematics is a one year course with terminal examinations at the end of Year 12. There will be regular internal assessments to help judge your progress throughout the course.

## Possible career path?

Mathematics at Advanced Level opens doorways to many potential careers. It is fundamental to the further study of mathematical based subjects, science subjects, and all kinds of engineering and technology. It is very useful in biological subjects, in geography and economics, in business and management studies, accountancy, operational research, banking, and education, to name a few.

Graduates of mathematical based courses can go on to highly paid careers, in some cases substantially higher than other disciplines. Employers believe that mathematics teaches people how to think and regard numerate people highly.

## Entry Requirements

Further Mathematics will be offered as an AS level for students wishing to take a fourth subject in Year 12. Students in Year 13 may be able to enrol in the course as well.

If you are considering studying Further Mathematics as an AS Level subject you will need to:

- have attained at a Grade 8 or above in GCSE Mathematics;
- have attained five GCSEs Grade 9-5, including English; and
- have enjoyed most of the Mathematics you have studied so far.
- Students with a Grade 7 may be considered on an individual basis.

It is strongly advised that students have a Casio CG 50 for the course. These can be purchased from the department in September.