



# Further Mathematics

## What will you study in Year 12?

The Further Maths group have a bespoke programme to allow you to accelerate the topics in the Mathematics A level. This will make the Further Mathematics course accessible more quickly. Further Mathematics lessons facilitate the completion of the content of the mathematics A level before the end of Year 12 so they have all the skills required for the Further Mathematics content in Year 13.

## What will you study in Year 13?

In Pure Mathematics (CP1 and CP2), you will learn about mathematical proof, matrices, complex numbers, vectors and first order differential equations. CP2 includes Complex numbers, Further algebra and functions, Further calculus, Polar coordinates, Hyperbolic Functions and Differential equations. These are compulsory modules.

There are a number of optional courses in addition to the CP1 and CP2. Two of FP1 (more Pure Mathematics), Statistics (FS1), Mechanics (FM1), Decision (FD1). The department specialises in teaching FS1 and FP1 but opportunities are given to students to study alternative modules.

## How will you be assessed during the course?

There will be an initial baseline test on entry to Year 12 and regular Target Assessment tests approximately every half term. In June of Year 12, there will be a transition examination, consisting of three papers to simulate the A level examinations in Year 13. The content will cover the whole of the A level course.

There will be four examinations of equal weighting: CP1, CP2 and the two optional modules. All of these will be examined at the end of Year 13.

## Where will this course lead?

If you are thinking about studying Mathematics, Engineering or Physics at university, you are advised to take Further Mathematics at A level. It will assist your study in any of the science subjects and is essential if you are considering a career in Physics or Engineering. Some universities give lower offers for Mathematics based degrees if Further Mathematics is included.

## Further information

This is the website for our examination board, Pearson Edexcel <https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/mathematics-2017.html>

We usually run a trip to see lectures and workshops annually. We participate in various competitions throughout the year.

Students have opportunities to be Maths Captains and mentors supporting the department and other students.

The department run regular help sessions including a weekly Maths Clinic.