

## A LEVEL MATHEMATICS PROSPECTUS

Qualifications:

- AS Mathematics (Syllabus 8371)
- A2 Mathematics (Syllabus 9371)
- AS Further Mathematics (Syllabus 8372)
- A2 Further Mathematics (Syllabus 9372)

The Mathematics faculty at Hayesfield are pleased to offer AS and A2 Level in **Mathematics** and **Further Mathematics**.

We are a thriving faculty and our courses are extremely popular. Currently we have two classes in Lower 6th studying for an AS in Mathematics. We use the EDEXCEL exam board and all our teaching materials are produced by them.

**Entry Requirements** To access the course, we ask that pupils should have achieved a minimum of a Grade B at GCSE.

**Assessment and Examinations (AS)** – To achieve an AS level in Mathematics; candidates need to sit **three** examinations. There is **no coursework**. All candidates must take the Core 1 and 2 Examinations (**C1 and C2**). The other examination is an application. At Hayesfield, we offer the Statistics 1 course (**S1**) as this application paper.

**Assessment and Examinations (A2)** – To achieve an A Level in Mathematics, candidates must sit a further three examinations. All candidates must take the Core 3 and 4 Examinations (**C3 and C4**). The other examination is an application. At Hayesfield, we offer the Statistics 2 course (**S2**) as this application paper.

**Further Mathematics** – To achieve an AS in Further Mathematics candidates must take a further 3 examinations. At Hayesfield we offer Further Pure 1 (FP1), Mechanics 1 (M1) and Decision Mathematics 1 (D1). To achieve an A level in Further Mathematics we offer we offer Further Pure 2 (FP2), Mechanics 2 (M2) and Decision Mathematics 2 (D2).

**Breakdown of the Modules** – The Core modules are predominantly based on algebra but include some shape work and numerical methods. Core 1 refreshes students with Higher GCSE algebra skills and develops them further. Statistics involves handling data. It develops work at GCSE, including averages, spread, correlation and probability. Mechanics goes hand in hand with Physics. It looks at forces and loads and is a must for engineers. Decision Mathematics involves applications in business and computation.

**What can I do with a Maths ALevel?**

Mathematical ability is very highly regarded by both universities and employers. An A Level in Mathematics is essential for many degree courses (such as physics, engineering and, of course, Mathematics itself!), and is highly desirable in a wide range of subjects such as chemistry, natural sciences, architecture, computing, accounting etc. There is a national shortage of mathematicians, and employment prospects are good. To get some idea of careers open to those studying maths at ALevel and beyond, take a look at the careers section at [www.plus.maths.org](http://www.plus.maths.org) .