

# Mathematics

$$\int_1^{\infty} \frac{\ln x}{x^2} dx = 1$$

**Exam Board**

OCR

**Qualification**

AS and A2-Level in Mathematics

**Entry Requirements**

Ideally A\* and A grade candidates but will consider candidates with a minimum of a grade B for GCSE Mathematics

**Content (Outline of Course)**

AS-Level Mathematics is studied in Year 12 and A2-Level is studied in Year 13. Both courses are made up of three equally weighted units: C1, C2 and S1 in Year 12 and C3, C4 and M1 in Year 13. C1, C2, C3 and C4 are the 'Core Mathematics' units, S1 is 'Statistics' and M1 is 'Mechanics'.

**Assessment**

Each unit is assessed via a 1½ hour examination – there is no coursework component.

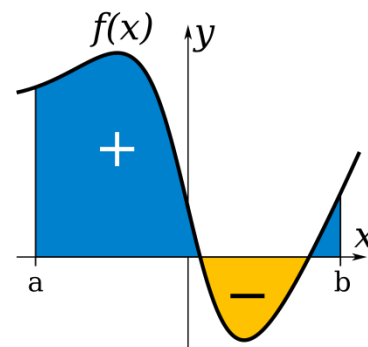
**Careers Guidance**

Taking Mathematics will help you with other subjects; all of the sciences use mathematical techniques so doing maths will give you a head start. A lot of other subjects use statistics, so again, doing maths will give you an advantage. Even in essay-based subjects like History, maths can be useful. It teaches you to think in a logical way, something which is vital when putting across a coherent logical argument. Careers which lead on from mathematics are often well paid and they are also often very interesting. People who have studied mathematics are in a fortunate position because they will have a good choice of career opportunities. Finance, computing, engineering, statistics, business and teaching are only a sample of possible careers. The main message is that you can do anything with maths.

# Further Mathematics

**Exam Board**

OCR



**Qualification**

AS and A2-Level in Further Mathematics

**Entry Requirements**

We are looking for A\* and A grade candidates. Further Mathematics is recommended for students who are considering studying a Mathematics-related degree at university and students would have to have achieved at least an A in GCSE Mathematics. You cannot study Further Mathematics without Mathematics.

**Content (Outline of Course)**

In Year 12 the modules that make up the Mathematics A-Level are studied; C1, C2, C3, C4, S1 and M1. C1, C2, C3 and C4 are the 'Core Mathematics' units, S1 is 'Statistics' and M1 is 'Mechanics'. In Year 13 the modules that make up the Further Mathematics A-Level are studied; FP1, FP3, D1, D2, S2 and M2. FP1 and FP3 are the 'Further Pure' units, D1 and D2 is 'Decision Maths', M2 is 'Mechanics' and S2 is 'Statistics'.

**Assessment**

Each unit is assessed via a 1½ hour examination – there is no coursework component.

**Careers Guidance**

Further Mathematics qualifications are highly regarded and are warmly welcomed by universities. Students who take Further Mathematics are really demonstrating a strong commitment to their studies, as well as learning concepts that are very useful for any mathematically rich degree. Some prestigious university courses require you to have a Further Mathematics qualification and others may adjust their grade requirements more favourably to students if they have studied the course. If you are not planning to study for mathematically rich degrees but are keen on the subject, you will find Further Mathematics a very enjoyable course and gaining the qualification identifies you as having excellent analytical skills, whatever area you are considering for a career.