



## Mathematics Level 3: AS / A2

Edexcel

### PROGRAMME AIM

The course builds on the GCSE Mathematics Curriculum. Some familiar topics are covered in much more detail but then many new topics are introduced such as Calculus, Statistics or Mechanics.

### ENTRY REQUIREMENTS / SUITABILITY:

A / A\* preferred, dedicated and enthusiastic B grade students welcome. Students need to be able to think logically and analytically to solve complex problems. A Level Mathematics is challenging, but rewarding and best suits students who enjoy algebra.

### CONTENT:

#### AS Course

##### Core Mathematics 1 & 2

Algebra & functions; coordinate geometry; sequences and series; differentiation and integration; trigonometry; exponentials and logarithms.

##### Statistics 1

Mathematical models in probability and statistics; representation and summary of data; probability; correlation and regression; discrete random variables; discrete distributions; Normal distribution.

#### A2 Course

##### Core Mathematics 3 & 4

Algebra & functions; sequences and series; trigonometry; exponentials and logarithms; differentiation; integration; vectors; numerical methods. Plus an additional application of either Statistics 2, Decision or Mechanics

### LEADS TO:

A Level Mathematics supports many careers including Medicine, Architecture, Engineering, Accountancy, Psychology, Environmental Studies, Computing and ICT. Statistics support careers in Medical Sciences, Management and Analysis in Research.

### ASSESSED / EXAMINED:

Each module is examined in a 90 minute exam at the end of the year.

In total there are 3 exams in Year 12 (May / June) and 3 exams in Year 13 (May / June).