

# Further Mathematics

## EDEXCEL Specification



### General information:

This course is suitable only for those who are also taking A level Mathematics, and may be selected as a fourth A level subject. Further Mathematics is a popular course for able mathematicians in the Sixth Form with typically over 30 students choosing to study it as a fourth A level. It has strong links to many other subjects and is sometimes asked for by universities for subjects such as engineering and physics.

For those pursuing Further Maths as a fourth A Level, a decision can be made in Year 12 as to whether to continue with the linear course into Year 13 for the full A Level, or to finish Further Maths studies at the end of Year 12 after taking an AS Level.

### Course content:

The Edexcel A level Further Mathematics course is 50% prescribed, with this compulsory Pure Maths content identical across all exam boards. The remaining 50% of the course is made up with selecting 2 options which are both studied over the two year course.

We have elected to take Mechanics and Further Pure as our two options. This is because a large proportion of our Further Mathematicians go on to study in the field of Engineering, Physics or Mathematics so these options are ideal for this.

Further Maths Pure content contains more abstract topics than are found in the Maths A level courses, such as Complex Numbers and Matrices and involves more formal ideas of proof, including the method of mathematical induction.

The Mechanics option will build further on those topics studied during A level Mathematics, and covers topics such as Momentum and Impulse and Work, Energy and Power.

### How is the course taught and assessed?

Students will be taught by 2 specialist mathematics teachers with one teacher covering the pure maths content, and the other will teach Mechanics. Students will be expected to undertake homework and independent study work outside of the classroom.

The A level is fully examined at the end of the two year course via the sitting of 4 x 1 h30min papers (2 pure and 2 options) which cover topics studied over the two years of the course.

Entry requirements:	Results information:	Top destinations for students:
<p><b>Grade 8 or above in GCSE Maths</b> is a minimum requirement.</p> <p>Further Maths students will spend half of their teaching time in maths lessons, so an enthusiasm for the subject is essential!</p>	<p>The maths department has a strong track record of excellent results at A level with over 90% achieving a Grade B or above in summer 2019.</p>	<p>Oxford / Cambridge to study mathematics, computing, engineering and physics.</p> <p>LSE to study economics.</p>

### Beyond the curriculum:

Students have the opportunity to take part in the Maths Challenges organised by the United Kingdom Mathematics Trust, UKMT. The Senior Maths Challenge takes place in November and we also take a team of four Year 12 and 13 students to the Senior Team Challenge, and have been successful on a number of occasions in getting through to the National Finals in London.