

# Mathematics

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## Awarding Body: OCR (Specification A)

Course Content and Examination Requirements

The available courses are:

<b>AS Mathematics</b>	3 units
<b>AS Further Mathematics</b>	3 units
<b>Advanced Mathematics</b>	3 units in addition to AS Mathematics
<b>Advanced Further Mathematics</b>	3 units in addition to AS Further Mathematics

The Courses	What are the different Modules about?
<b>AS Level Mathematics</b>	<b>Core Mathematics</b>
This is made up of 3 units: Core 1, Core 2 and Decision Maths 1. Students usually study AS Maths in Year 12 and then continue through to A2 in Year 13. However, many choose only to study AS before concentrating on their other subjects in their second year. We are more than pleased to accommodate the students wishes.	A continuation of the geometry, trigonometry and algebra of GCSE with some new topics especially the integration and differentiation techniques of calculus. This is often referred to as Pure Maths.
<b>A2 Level Mathematics</b>	<b>Statistics</b>
This is made up of 3 Units: Core 3, Core 4 and Statistics 1. Further Maths students will study Decision 2 Maths.	The study of the world about us by the collection and analysis of data and modelling with probability. The course starts with a recap of averages and statistical diagrams such as histograms and scatter graphs. This supports subjects such as Psychology, Biology, Geography, Chemistry & Business.
<b>AS Level Further Mathematics</b>	<b>Mechanics</b>
Year 12 students who enjoy Mathematics may consider taking an additional AS in Further Maths. This is made up of the units Further Pure Maths 1, Statistics 1 and Decision 2 in Year 12. This cannot be taken without the student also studying AS Maths.	The Study of the world about us by the application of Newton's Laws of Motion. This supports the Physics course very well.
<b>A2 Level Further Mathematics</b>	<b>Decision Maths</b>
Those wishing to study A level Further Maths can follow a mixture of Pure, Statistics and Mechanics in Year 13.	A very modern area of Mathematics which is rapidly expanding with the rise of the computer. Problems studied include the famous 'Travelling Salesperson' and the 'Chinese Postman'.
<b>Entry Requirements</b>	
<b>AS Level Maths</b> GCSE Grade B from Higher Examination and 5 good GCSE (Grade B+) including English Language. A Grade A or A* would be highly recommended in Maths.	<b>AS Level Further Maths</b> GCSE Grade B from Higher Examination and 5 good GCSE (Grade B+) including English Language. Also a love of Mathematics and a willingness to work hard.
<b>A2 Level Maths</b> AS Level Grade E or better required with at least grade E in both Modules C1 and C2 highly recommended.	<b>A2 Level Further Maths</b> AS Further Maths Grade E or better required with at least grade E in Further Pure 1.

Students are welcome to seek further advice at the Sixth Form Open Night or directly from the subject leader.

**Further Information: Mr M. McDonagh**