

Exam Board: Edexcel
Qualification: 9FMO
Assessment Information: 4 exams, each 1hr 30 minutes
[Link to official specification](#)

Department Information:
A level Further Maths is taught in parallel with A level Maths. Students have nine lessons each fortnight which are taught by two subject specialists. In addition to the compulsory Core Pure units, students study Further Statistics and Further Mechanics. Many of our Further Mathematicians go on to study Maths or Maths related courses at university.

ACHIEVE in the curriculum:
*Students are encouraged to work **collaboratively** on problems, to show **ambition** through the resources they opt to work on, to show **endurance** to master concepts and to demonstrate **integrity** in their personalised home learning. We strive for students to share in our love of maths and ultimately be **happy** in their lessons.*

Curriculum Aims & Intent:
Our curriculum is designed to extend students' mathematical knowledge, skills and understanding set out in the A level Maths qualification. Students will be able to make logical and reasoned decisions when solving problems in a variety of contexts and make connections between different aspects of maths and their application in other subjects and the real world. We aim to foster enjoyment and provide a strong foundation for progress to further study.

Resources:
<https://www.pearsonactivelearn.com/app/home> - online textbooks (login as a student with school email and password: FurzePlatt1).
<https://integralmaths.org/> - username and password 178AL-firstinitialsurname
<https://login.mymaths.co.uk/login> (School username: furze password: reflect. Students are given their own portal login details in September)
https://ukmt.org.uk/senior-challenges/senior-mathematical-challenge-UKMT_papers.
<https://www.mathsgenie.co.uk/newalevel.html> - Revision resources and past papers
<https://www.physicsandmathstutor.com/maths-revision/>
<https://www.revisely.com/alevel/maths/edexcel/>
<https://www.savemyexams.com/a-level/maths/edexcel/>

Students should bring to all Maths lessons: Scientific Calculator (we recommend the Casio fx-CG50) and laptops.

How we keep parents informed:
Progress reports are published 4 times per year, in October, November and February, with a face-to-face parents' evening in December.

How parents can help their child:
Please check that students are completing home learning which is set every lesson on ClassCharts. Encourage students to seek help when needed and attend Maths workshop every Tuesday in M7/8.

What we study and when:					
Term	Unit, Topic Or Summary Of Work Covered	Knowledge, Understanding & Skills Developed	ACHIEVE / Personal Development Focus	How The Work Is Assessed	Careers Links
1	Core Pure Maths	<i>Complex Numbers - Series</i>	All lessons offer opportunities for students to demonstrate our ACHIEVE values	Resit AS PPE (optional) in September. Written assessments throughout the year. PPE in January to cover Y2 content. A level exam in May/June.	Maths in Action conference (November) Engineer – Statistician – Data Analyst – Actuary – Air traffic controller- Architect – Forecaster
	Further Mechanics	<i>Momentum as a vector – Elastic springs and strings – Elastic collisions in 2D</i>			
2	Core Pure Maths	<i>Polar coordinates – Calculus</i>			
	Further Statistics	<i>Geometric and negative binomial distributions – Hypothesis testing</i>			
3	Core Pure Maths	<i>Hyperbolic functions – Differential equations</i>			
	Further Statistics	<i>Central limit theorem</i>			
4	Core Pure Maths	<i>Volumes of revolution</i>			
	Further Statistics	<i>Probability generating functions – Quality of tests</i>			
5	Core Pure Maths	<i>Volumes of revolution</i>			
	Revision	<i>All content</i>			