A Level Further Mathematics

# Course Overview

* **Exam Board** – Edexcel
* **Usual Age Range** – 16-18
* **Qualification** – 1 A-Level
* **Curriculum Time** – 3x 50 minute lessons per week, one 2-hour lecture at Newcastle University plus one 2-hour supported study session at Newcastle University.
* **Assessment** –4x 90 minute exam papers.
* **Grading** – A\*, A, B, C, D, E, U
* **Full specification** - https://qualifications.pearson.com/content/dam/pdf/A%20Level/Mathematics/2017/specification-and-sample-assesment/a-level-l3-further-mathematics-specification.pdf

# Curriculum Intent

A level Further Mathematics is a second A level in Mathematics, taken alongside, and designed to broaden and deepen the content covered in A level Mathematics.

The **intent** of the Further Mathematics curriculum is to offer a broader, deeper and more challenging experience to complement that of A-Level Mathematics. The intent is to ensure students are fully prepared to study Mathematics or closely related subjects at university, including Physics, Engineering and Computer Science.

Students will meet important topics that are not covered in the A-Level Mathematics curriculum. These include Matrices, Complex Numbers and Hyperbolic Functions. As with A-Level Mathematics, the overarching themes of the course are Proof, Problem Solving and Modelling and the Use of Technology is pervasive throughout.

Related **careers** include mathematical and scientific research, engineering and teaching.

# Study Tips

Students will have full access to, and are encouraged to make regular use of the **Integral Mathematics Resources** website ([integralmaths.org](https://integralmaths.org/)). They will also have access to a text book and lecture notes provided by the university. Other useful websites include:

* Advanced Maths Support Program ([amsp.org.uk](https://amsp.org.uk/)), includes lots of great advice regarding further study and careers.
* Mr Barton Maths ([www.mrbartonmaths.com](http://www.mrbartonmaths.com/index.html)), includes sections on Further Maths
* MyMaths ([www.mymaths.co.uk](https://www.mymaths.co.uk/)), includes sections on Further Maths with interactive lessons.
* Physics and Maths Tutor ([www.physicsandmathstutor.com](https://www.physicsandmathstutor.com/)), a “one-stop-shop” for past paper materials!

# Curriculum Overview

The learning in A Level Further Mathematics is structured as follows:

**Year 12:**

**Year 13:**