

WHGS Sixth Form



William Hulme's Grammar School
The best in everyone™
Part of United Learning

Further Mathematics

Engage

Endeavour

Excel



Entry Requirements: GCSE Grade 7 or above

Pass Rate:

The pass rate in 2020 was 100% A*-C

See below for the average for the last eight years:

Average (since 2013)

A*-A	45%
A*-B	57%
A*-C	79%
A*-D	91%
A*-E	100%

Student Voice: "Maths and further maths were by far the most useful subjects I studied at WHGS. The support and the atmosphere here were superb."

Exam Board: Edexcel

Trips & Events:

- Modelling Days at The University of Manchester
- Problem Solving Sessions at Xaverian College
- UKMT Senior Team Maths Challenge
- UKMT Maths Challenge



A Level Further Mathematics Edexcel Specification

Year 12

How do I know if further maths is for me?

It is hard to tell. Ideally you should be on target for an eight or nine at GCSE (but a 7 is enough to get on the course). However, not all the students who have gone on to do Further Maths at WHGS were in their school's top set. We have had students who did not get A* at GCSE who have gone on to get A grades at Further Maths and similarly some students who did get an A* who have found it really difficult.

Have a go, there is no down side

If you are not sure about Further Maths, start off by doing our in-house accelerated learning program which will cover a lot of the pure content and some of the key applied topics for Years 12 and 13 whilst you are in Year 12. After completing the accelerated learning program, those who want to go on and study Further Maths will begin the Further Pure syllabus (those who decide it is not for them will not have lost anything as everything they will have learnt will be required for single Maths).

Further Maths Content

Just like single Maths, Further Maths is split into pure and applied. Within Pure Maths we look at matrix calculations and how can we simplify processes used on whole arrays of numbers rather than just one value

AS-Level Assessment

One pure exam and two minor applied papers at the end of Year 13.

A-Level Assessment

One pure exam and one major applied paper and one minor applied paper at the end of Year 13 or One pure exam and three minor applied papers at the end of Year 13.

Beyond A-Levels: Future Career Aspirations

Degree Courses where A-Level Further Maths is stated as useful:

Actuarial Science, Aeronautical Engineering, Bio Chemistry, Biomedical Sciences (including medical sciences), Chemical Engineering, Chemistry, Civil Engineering, Computer Science, Dentistry, Electronic / Electrical Engineering, Engineering General, Law – facilitating subjects at A-Level are useful when applying for Law, Material Science (Including Bio Medical Science), Mathematics, Mechanical Engineering, Medicine, Optometry (Ophthalmic Optics), Physics, Veterinary Science.

variables. Complex numbers allow us to find solutions to equations that cannot be solved with real numbers. We will look at induction, a powerful method of proving mathematical relationships. We will extend the single Maths work on polynomials and will also look at how to combine vector quantities.

There is an option of different applied modules for Further Maths. Our most popular choice Mechanics major and Statistics minor, however it is possible to select three minors (Mechanics, Statistics and Modelling with Algorithms) or Statistics major and Mechanics minor. Which applied options would be best for you would depend on what you want to after A-Levels (Mechanics for Engineering or Physics, Algorithms (and Statistics) for Business, Economics and Computing, and Statistics for the Biological Sciences). We would start the applied options in the Spring to give students time to consider which is best for them and so that they would already have done a lot of the applied work from single Maths.

Some students will decide that an AS in Further Maths is sufficient for their requirements and others will go on to do the full A-Level. Either way, you would do the exam at the end of Year 13.

