



## **Sandwell Academy**

# **Advanced General Certificate of Education FURTHER MATHEMATICS**

### **WHY MATHEMATICS?**

Further Mathematics A Level challenges students beyond the level of Mathematics A Level, providing students the opportunity to study the subject to a higher level. Students aspiring to study Mathematics at degree level should be seriously considering Further Mathematics as an option as the course incorporates a significant portion of the degree content. Furthermore, students who enjoy Mathematics in its purest and most abstract forms gain a much greater sense of satisfaction from the course than Mathematics A Level.

### **WHERE WILL IT LEAD?**

Further Mathematics students at Sandwell Academy will be preparing to move into Higher Education courses and careers in the same fields as students studying Mathematics and will also significantly enhance their chance of being accepted to:

Mathematical courses at Oxbridge institutions  
Medicine and Dentistry courses at Oxbridge institutions

The Further Mathematics AGCE course offered at Sandwell Academy is designed to provide academic and vocational experiences. It will prepare students for their choice in both the world of work and Higher Education. Furthermore, it acts as a facilitating subject which considerably enhances a student's application for courses at the highest ranked universities.

### **SPECIFIC ENTRY REQUIREMENTS**

- Grade 8 in GCSE Mathematics
- Must have picked to study A level Mathematics

## COURSE DETAILS

### Mathematics Edexcel Syllabus: 9FM0

Students will undertake this two-year course studying a combination of Pure Mathematics, with one of several other options incorporating different combinations of Pure Mathematics, Mechanics, Statistics and Decision Mathematics.

### Subject Content include:

- A: Proof
- B: Complex Numbers
- C: Matrices
- D: Further Algebra and Functions
- E: Further Calculus
- F: Further Vectors
- G: Polar Coordinates
- H: Hyperbolic Functions
- I: Differential Equations

Plus content from a variety of options (to be discussed with the course leader)

### Examination Details:

	Paper 1	Paper 2	Paper 3	Paper 4
Content	Topics from A to I	Topics from A to I	Optional Module	Optional Module
Time	1 hour 30 minutes	1 hour 30 minutes	1 hour 30 minutes	1 hour 30 minutes
Total Marks	75	75	75	75
Weight	25% of A-level	25% of A-level	25% of A-level	25% of A-level

