

AS Level and A Level Mathematics and Further Mathematics



Entry Requirements: Grade 6 GCSE for AS and A Level Maths courses. Grade 7 GCSE for Further Mathematics courses. **An E grade is needed in the AS Level to progress to the A Level.**

Exam Board: OCR **Teacher:** I Ayomidele, J Baldwin, P Leon, R Gilbertson, P Webb, S Wilks, S Soteriades, M Bragg.

Timetable Organisation: AS/A Level – 5 lessons per week with 2 different teachers. In addition, one tutorial lesson in Y12.
Further Mathematics 9 lessons per week with 3 different teachers.

Main Syllabus Area

AS Mathematics: Students will study 3 components: Pure Mathematics, Statistics and Mechanics.

A Level Mathematics: Students will complete further study of the 3 components of two modules of Pure Mathematics, Statistics and Mechanics.

AS Further Mathematics: Students will study a core component of Pure Maths alongside 2 optional components from Statistics, Mechanics, Discrete Maths and Additional Pure Maths.

A Level Further Mathematics: Students will complete further study of the 3 components of AS Further Mathematics.

Method of Assessment

AS Mathematics will comprise of 2 assessed papers – Pure & Statistics, Pure & Mechanics. This will be assessed in June of Y12.

A Level Mathematics will assess the whole 2 year course and will comprise of 3 papers – Pure Maths, Pure & Statistics, Pure & Mechanics. This will be assessed in June of Y13.

For AS and A2 Further Mathematics modules will be assessed in June of Y12 and Y13.

AS Maths and AS Further Maths are certificated at the end of Y12. A Level Maths and A Level Further Maths at the end of Y13.

Further Mathematics is equivalent to taking 2 A Levels. Students completing this course will be awarded A Levels in Mathematics and Further Mathematics.

Qualities Required

Students should have a keen interest in Mathematics and a possible desire to study Mathematics at University though this is not essential. All courses require a commitment to hard work outside the classroom, at least as many hours private study as you have lessons, and willingness to talk to your teachers and seek help when you know you need it.

“Maths is a highly enjoyable and rewarding subject. It is very demanding but there is a high sense of achievement when it comes to problem solving. All the teachers are very approachable about anything and are always willing to help.”

Links with other subjects

Core and Statistics – Geography, Economics, Biology, Sports Studies, Psychology, Sociology.

Core and Mechanics – Physics, Chemistry, Technology.

Core and Discrete – Computer Studies.

Further Mathematics – This course links with all of the above.

Career Prospects

Career prospects are infinite. Mathematics opens up the possibility of careers in medicine, banking and insurance, commerce, marketing, accountancy, engineering, research and design, education, government and public services, research statisticians, managers, administrators, manufacturing, industry and the armed forces to name but a few. Naturally, A Level Mathematics is a very highly valued subject in the eyes of universities and other institutes of Higher Education.

Extension and Enrichment Opportunities

University Master classes

National Maths Challenges

Sheffield University Y12 and Y13 Advanced Problem Solving and pre-STEP tuition.