

Mathematics

Awarding body: Edexcel

Course entry requirement: GCSE grade 7

Course description: Mathematics in the sixth form at St Thomas More Catholic School is offered at a variety of levels. This enables students to choose the course or level of qualification which best accompanies their other subject choices. Students can choose from; Further Mathematics, A Level Mathematics and A/S Mathematics

So why should you choose an AS or A- level in Mathematics? Well despite the obvious enjoyment and challenge it will provide, a qualification at this level in Mathematics is a true access tool for so many areas in both higher education and also in the real world of work.

An A-Level in Mathematics is an obvious requirement for any degree course involving mathematics and many Universities also require an A-Level in Further Mathematics. Mathematics is seen as being highly desirable in many other areas. Cambridge University recommends that any 16 year old who is unsure of their future direction should definitely consider Mathematics as one of their options as it opens access perhaps surprisingly to the Humanities and Social Sciences and also the more probable areas of Medicine, Science and Engineering.

The Casio FX-991EX ClassWiz Advanced Scientific Calculator is required for this course and will be available from the school for £20

Qualification: AS

Method of assessment: Examination

Duration: 1 year course

Specification and units of study:

Specification no.: 8MA0

Paper 1: Pure Mathematics

Written examination: 2 hours, 62.5% of the qualification, 100 marks

Paper 2: Statistics and Mechanics

Written examination: 1 hour 15 minutes, 37.5% of the qualification, 60 marks

Qualification: A-Level

Method of assessment: Examination

Duration: 2 year course

Specification and units of study:

Specification no.: 9MA0

Paper 1: Pure Mathematics 1

Written examination: 2 hours, 33.33% of the qualification, 100 marks

Paper 2: Pure Mathematics 2

Written examination: 2 hours, 33.33% of the qualification, 100 marks

Paper 3: Statistics and Mechanics

Written examination: 2 hours, 33.33% of the qualification, 100 marks

Opportunities for progression and career prospects:

This course is usually taken in preparation for further study in Higher Education. Pure Mathematics is seen by some mathematicians as being the poetry of mathematics. These modules concentrate on the study of a variety of techniques and the acquisition of skills, many of which have important applications in other fields. There are key links with the algebra and shape and Space work covered at GCSE Higher Level and these modules allow a deeper understanding of some abstract concepts to grow. Mechanics and Statistics are more practical mathematics and are known as Applied Mathematics. They provide the essential tools for much scientific work, and is also important in such varied fields as computing, business, economics, biology and psychology. In addition, Mechanics is an excellent unit that helps to develop problem solving skills and is particularly useful for those studying physics. Statistical skills are increasingly becoming necessary in most fields of study, including all the social sciences, any business-related courses and in medicine or the pure sciences. Hence a mathematics qualification is also useful if you intend to go straight into employment after college.