

Key Stage 5 Curriculum and Structure of the Course(s)

Why choose Maths?

The most fundamental skill that mathematics will equip you with is to be able to learn—to be able to build up an understanding from basic principles, to build upon existing knowledge to develop general concepts and then to apply this general concept to specific examples. You will learn to think logically, to ask questions, and to do thorough and rigorous investigations to answer them.

As well as teaching you problem-solving and data-handling skills, mathematics is the language of most of the lab sciences and many of the quantitative parts of social sciences. It therefore enables you to communicate complicated concepts. These are more general skills that will be useful, no matter what you want to do in the future. But in addition to these general skills, you will need maths to study a wide range of subjects—from engineering to economics, medicine to archaeology.

What will I study?

Exam syllabus OCR.

You will study 3 units in Year 12: AS Mathematics – Core 1 & 2, Statistics 1
and 3 units in Year 13: A Level Mathematics – Core 3 & 4, and Mechanics 1

How will I be taught?

You will have 5 lessons per week with 2 different teachers. You will be given homework by both staff. There will be regular tests after topics.

You will take an exam for each unit. Each exam is 90 minutes long and is worth 72 marks.

You are not allowed a calculator in the Core 1 exam.

What do I need to have at GCSE?

You need to have studied Higher level at GCSE and we would prefer you to have at least a grade A. If your target grade is below a grade A, you need to speak to your subject teacher as to whether they feel the course would be suitable. Those students not expected to get a grade A, will be expected to complete some extra work during the summer holidays before they start the Sixth Form in order to be ready for the first unit of work in September.

What use is maths in getting a job?

Look closer at the job ads and at the kinds of skills employers are looking for: problem solving skills, conceptual and analytical ability, data handling and communication skills. These are transferable skills that are useful in any job, and you can get all of them from studying mathematics. As well as problem solving and logical thinking, maths enables you to communicate complicated ideas in a clear and unambiguous way. Maths is the language used in science, business and many other areas to express complex situations, from analysing costs versus profits to pulling together all the factors affecting whether a structure will stay up. Maths teaches you to handle and interpret data, and ultimately teaches you how research—how to do a thorough investigation.

So should I give it a go?

If you enjoy GCSE maths and are hard-working, then you are suited to this course. But, be warned, you will need to keep up to date with all of your homework as Maths is a 'building blocks' subject – each lesson builds into the next, so once you fall behind, it is difficult to catch up.