Core Subject: Mathematics

Mathematics underpins every one of our lives. In order to use the skills well, we need to practise and become confident in selecting and applying the appropriate operations. This can range from measuring and calculating the size of carpet needed for a room, checking the percentage of tax and National Insurance in a pay slip, and even as far as appreciating the beauty in classical architecture, which is reliant on aesthetically pleasing ratios. Mathematics is often considered as a science, but has also been linked to an art in its beauty and purpose throughout nature. All students will be required to undertake Mathematics at GCSE level, at a tier suitable to their ability. We aim to develop students into capable Mathematicians, giving them the problem-solving skills they require in the world of work.

Do I need to have certain qualities/skills to do this subject?

- To use all opportunities given to enquire and extend mathematical knowledge
- To be able to work in groups or pairs to discuss and solve a problem
- To be able to link differing elements of Mathematics together to solve more complex problems
- To be aware of own strengths and particularly weaknesses, and to be willing to use many of the resources available to independently address these areas

What will I learn?

- Further develop abilities to calculate; to reason logically, algebraically, and geometrically; to solve problems and to handle data
- All students are encouraged to build on prior learning and to develop strong numeracy skills
- When solving problems, students will develop skills in setting out a rational argument
- To approach problems systematically, choosing appropriate techniques for their solution
- To understand the mathematics likely to be encountered in daily adult life
- To experience satisfaction in and enjoyment of his/her mathematical achievement

Does this lead to a qualification?

Yes, this is a single GCSE award and will be required for further education courses, accredited by the Examination Board OCR at both Higher and Foundation tiers.

How is this qualification assessed?

Students will sit 3 exams in total (2 calculator and 1 non-calculator exams). The specification demands a high level of mathematics and will be graded using the grading system (9-1).

Depending on ability, students will be examined at:

- Foundation Tier – Grades 1 - 5
- Higher Tier – Grades 4 - 9

What can I do with my qualification?

Further studies at Sixth Form: AS & A2 Mathematics, AS & A2 Further Mathematics, International Baccalaureate Mathematics Studies, International Baccalaureate Mathematics HL.
Careers: Statistics, Transport, Engineering, Media, Food, Technology, Graphics, IT, Computer Games, Environment, Medicine, Science, Teaching, Finance … (and much, much more!)