

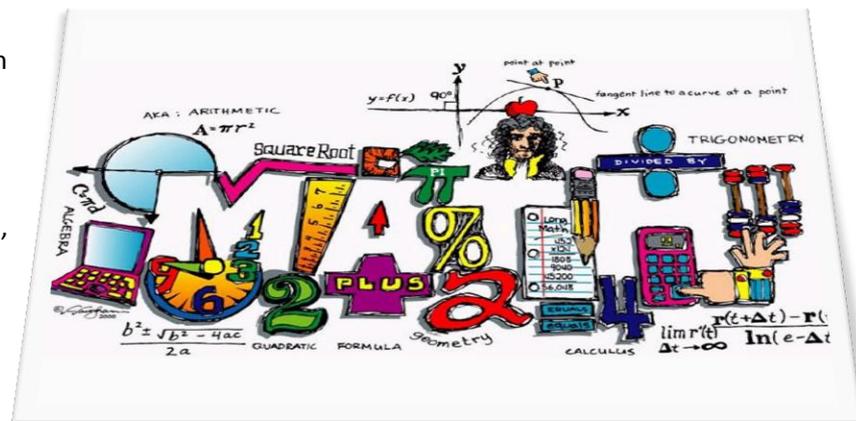
What will I learn?

The course is designed around developing your mathematical skills of analysis, proof, algebra and number. The main elements which you will carry through from GCSE include work on Surds, Trigonometry and Quadratic Equations & Graphs. These will be extended and expanded upon, linked to real life topics such as Optimisation of Resources. You will investigate the mathematics of the forces of nature such as Friction, Gravity and Mechanics, as well as investigate many ideas of efficiency.

How is the course structured?

Students will study four 'Core' modules across the two years. These initially build upon elements of GCSE, with the focus being to extend and re-contextualising them. These areas include linear graphs, quadratic equations, trigonometry, index notation, completing the square, transformations of graphs, simultaneous equations and surds. Students are introduced to the equation of a circle, to differentiation and integration, quadratic inequalities, the discriminant, trigonometric identities, binomial distribution, sequences and series notation and the logarithmic scale.

In addition to these four modules, the students will study two of three 'additional' modules. For most students this will be 'Decision' and 'Statistics' which look at project planning, logical thinking and algorithms, as well as probability, data handling and statistical analysis respectively. We will however look at the previous areas of interest and study for the cohort to determine whether the unit 'Mechanics' is a more appropriate fit,



How will I study?

Activities will include group work, discussion, investigation and private study. It is suggested that for every lesson completed, an hour is spent reviewing the work and finishing exercises is completed at home.

How will I be assessed?

You will have 6 official exams, of which the cumulative score defines the grade given. Students will undertake these examinations at the end of Year 13 unless they have shown a significant understanding and we believe that they are able to pass adequately at the end of Year 12. To this end, students should work towards a target of sitting at least 1, and at most 3 exams in Year 12. The final decision for when the students sit the examinations will be made by the school.

