

## HOLLAND PARK SCHOOL SIXTH FORM | MATHS

Examination Board
Edexcel
Topics/ Texts Studied
<p>Year 12: Further Algebra; Differentiation; Integration; 2D Vectors; Coordinate geometry; Trigonometry; Exponentials and logarithms; Mechanics; Statistics.</p> <p>Year 13: Differentiation; Integration; Proof; Functions; Sequences and series; Binomial expansion; Trigonometry. Numerical methods; Parametric equations; 3D vectors; Mechanics; Statistics.</p>
Coursework and Practical Elements
No coursework.
Recommended Pre-reading
<p>Paul Glendinning 'Maths in Minutes: 200 Key Concepts Explained in an Instant', Martin Gardner 'Entertaining Mathematical Puzzles', Simon Singh 'Fermat's Last Theorem', Max Tegmark 'Our Mathematical Universe'</p>
Where will this course take me?
<p>Economics, Engineering, Computer Science, PPE, Statistician, Teaching, Research, Accountancy, Insurance, Risk Management</p>
Why should you study this course?
<p>A Level Mathematics is about challenge. First and foremost, the escalation in challenge between the A Level and the GCSE is significant, but beyond that, the course challenges logic, it challenges problem solving, and challenges students to think creatively and analytically in the manipulation of the subject. A Level Mathematics also challenges students' resilience as they come to terms with writing structured solutions, proofs and</p>

justification of results to formulate reasoned arguments. the benefits of this rigour are immense however, not only in honing one's numeracy and ability to process and interpret data, but also in offering a gateway to fascinating and challenging careers.

### **What are the entry requirements?**

In addition to the general entry requirements, you will need a grade 7 or above in GCSE Mathematics to study this course.