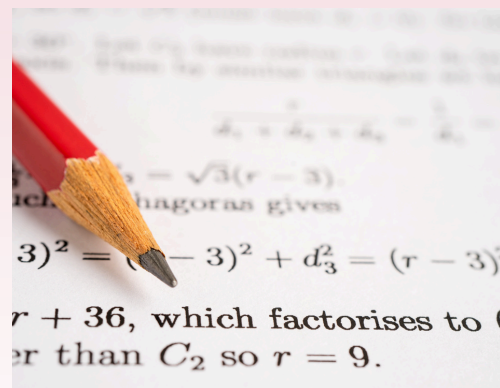


# Mathematics

Mathematics has practical applications in many fields and can be found employed, in some form or another, in most walks of life. The study of Mathematics encourages creative and problem-solving skills as well as discipline, logic and rigorous thought processes. For this reason, it is one of the most desirable A Level qualifications, allowing entry to a wide range of degrees and careers.

Throughout the course, students' concept of Mathematics and its application in the real world is constantly challenged.



## COURSE CONTENT

The course is structured around the following modules:

### Pure Mathematics (two modules):

- Proof
- Algebra and Functions
- Co-ordinate Geometry in the (x, y) Plane
- Sequences and Series
- Trigonometry
- Exponentials and Logarithms
- Differentiation
- Integration
- Numerical Methods
- Vectors

### Applied Mathematics – Statistics and Mechanics (one module):

- Probability
- Measures of Spread and Central Tendency
- Hypothesis Testing
- Normal Distribution
- Regression and Correlation
- Kinematics
- Projectiles
- Forces and Friction
- Moments
- Applications of Forces



## ASSESSMENT

All course content is examined at the end of the two-year course. The assessment consists of three externally examined papers. Calculators can be used.

### Paper 1:

Written exam. Any topics from Pure Mathematics content. 2 hours. 33.33% of final marks.

### Paper 2:

Written exam. Any topics from Pure Mathematics content. 2 hours. 33.33% of final marks.

### Paper 3:

Statistics & Mechanics. 2 hours. 33.33% of final marks.



## ENRICHMENT

Sixth Form mathematicians can attend MathsFest lectures to explore real-world applications of maths. A MathsArt club launches this September, blending creativity with mathematical thinking. For aspiring Oxbridge or Russell Group applicants, our STEP Club offers tailored support beyond A-Level.

## FUTURE PATHWAYS

Mathematics at A Level is essential for degree courses in Maths, Engineering and many of the sciences. It is also valuable for Economics, Computer Science and Business Management. Transferable skills such as problem solving, numeracy and logical thinking are critical for many employers today.



## EXAM BOARD

EDEXCEL 9MA0



## SKILLS REQUIRED

GCSE Grade 8 or above is required in Maths. Due to the rigours of the A Level Mathematics course, all students will be expected to complete an A Level preparation booklet submitted upon return after the summer break.

Students will also be assessed with a 'Bridging the Gap' test within the first two weeks of term to ascertain their suitability for the course. There are plenty of good reasons to study Mathematics but one of the most important is that you enjoy it.



Hear from our Students

Scan to listen

