

MATHS

Course

A level Maths

Exam Board

AQA - Linear course

Entry requirements

Grade 7 or higher at GCSE Maths with acceptance on the course for students who achieve a grade 6 at the discretion of the Head of Maths.

Why study Mathematics?

A level Maths is an interesting and challenging course which builds upon the methods you learned at GCSE. As well as being a fascinating subject in itself, Maths A Level will help you to unlock the mysteries of science. technology and statistics, Studying Maths offers higher earning potential, exciting career opportunities and a grounding in important life skills.

A mathematical background will help you to think logically, analyse data and express yourself clearly.

Course content

A level Mathematics is comprised of studies within the 3 compulsory fields of pure maths, mechanics and statistics. Students will make in-depth studies into the following areas:

- Proof
- · Algebra and functions
- Coordinate geometry
- · Sequences and series
- Trigonometry
- · Exponentials and logarithms
- Differentiation & Integration
- Numerical methods
- Vectors
- · Quantities and units in mechanics
- Kinematics
- · Forces and Newton's Laws
- Moments
- Statistical sampling
- · Data presentation and interpretation
- Probability

- · Statistical Distributions
- · Statistical hypothesis testing

There is no coursework component which allows students more time to concentrate on practising their techniques.

Assessment

The A level Maths Course is examined with 3 written papers each lasting 2 hours and each paper worth 33.3% of the A level Qualification. Both papers have a maximum of 100 Marks. All questions are compulsory. A scientific or graphics calculator is an essential requirement of the course.

Progression after Sixth Form

Many courses at university will accept students who offer A level Mathematics as they will have shown that they can develop reasoned arguments as well as having the ability to interpret, analyse and solve problems by applying a correct mathematical model.

Since Mathematics is a neutral subject it is easily combined with other courses to form Joint Honours degrees such as Mathematics & History, Mathematics & English, Mathematics & Business or Mathematics & Music etc.

Career opportunities

Mathematical competence is a vital component in the physical sciences and in the fields of technology and business. It is an essential tool for all engineers and is of growing importance in the disciplines of both Medicine and Law.

For more information contact Head of Department:

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