



# **Mathematics A Level**

"Maths is the Gateway to reality and the imagination. The essence of mathematics is not to make simple things complicated, but to make complicated things simple. We are constantly discovering new approaches to problems and have the opportunity to test our use of logic."

#### **Course Content**

The Pure units are predominantly based on algebra but include some shape work and numerical methods. Pure 1 refreshes students with Higher GCSE algebra skills and develops them further.

In Pure 2 we now take a look at using advanced functions in algebra and develop towards further trigonometry.

Statistics involves handling data. It develops work at GCSE, including averages, spread, correlation and probability.

Mechanics is concerned with the mathematical models used to describe real world physical systems.

#### How will I learn?

We focus on developing students as independent learners; working on their ability to analyse and solve problems. They use these skills to evaluate and model solutions for situations in the real world. Throughout the course we give students the opportunity to explore the best use of their logic and create their own personalised approach when answering a question.

#### **Minimum Course Requirement**

GCSE Mathematics Grade 7

#### How will I be assessed?

For those doing single Mathematics, across the two years, students will have three exam papers: Pure Mathematics 1, Pure Mathematics 2 and Statistics & Mechanics.

## Which awarding body is the course validated by? Edexcel

### What qualification will I receive?

A level Mathematics

# What can I do with this qualification?

Careers for mathematicians

Studying maths helps you develop skills in logical thinking. problem-solving and decision-making, which are valued by employers across many job sectors.

- Actuarial analyst
- Actuary
- Chartered accountant
- Chartered certified accountant
- Data analyst
- Investment analyst
- Research scientist (maths)
- Secondary school teacher
- Statistician
- Systems developer
- Civil Service fast streamer
- Financial manager
- Financial trader
- Meteorologist
- Operational researcher
- Quantity surveyor
- Software tester

