## About the course:

### Content overview:

### **Pure Mathematics**

- Topic 1 Proof
- Topic 2 Algebra and functions
- Topic 3 Coordinate geometry in the (x, y) plane
- Topic 4 Sequences and series
- Topic 5 Trigonometry
- Topic 6 Exponentials and logarithms
- Topic 7 Differentiation
- Topic 8 Integration
- Topic 9 Numerical methods
- Topic 10 Vectors

### Section A: Statistics

- Topic 1 Statistical sampling
- Topic 2 Data presentation and interpretation
- Topic 3 Probability
- Topic 4 Statistical distributions
- Topic 5 Statistical hypothesis testing

### Section B: Mechanics

- Topic 6 Quantities and units in mechanics
- Topic 7 Kinematics
- Topic 8 Forces and Newton's laws
- Topic 9 Moments

## How will it be assessed:

The Pearson Edexcel Level 3 Advanced GCE in Mathematics consists of three externally-examined papers.

Students will complete all assessment in May/June in Year 13.

Paper 1: Pure Mathematics 1 (\*Paper code: 9MA0/01)

Paper 2: Pure Mathematics 2 (\*Paper code: 9MA0/02)

Paper 3: Statistics and Mechanics (\*Paper code: 9MA0/03)

Each paper is: 2 hours written examination 33.33% of the qualification 100 marks



# What is expected of you:

We have the following expectations to help you achieve the best possible grade and to make teaching and learning enjoyable.

We expect you to continue your studies outside of lesson time. You should put in at least **30 minutes extra** per 50 minutes lesson of study. This *excludes* time spend on completing homework. You must do this to strengthen your understanding.

You must complete assigned homework. It is essential to independently assess your own work and understanding. If you are struggling or cannot answer certain questions you **must seek help**.

You must have at least 90+% attendance. If you are absent you must speak to your teacher and ensure you catch up on your work.

### What it prepares you for:

It is a universally highly regarded course, although some employers require or expect other specific qualifications. Others departments will often like to see additional qualifications which balance the skills developed in mathematics.

### **Future Careers**

Actuary, Accountant, Architect, Engineer, Research and Development, Stock Broker, Merchant Banker, Teacher, Pilot, Armed Forces, Statistician, Health Worker, Pharmacist...

Qualification details: The Pearson Edexcel Level 3 Advanced GCE in Mathematics

Paper 1: Pure Mathematics 1 (\*Paper code: 9MA0/01)

Paper 2: Pure Mathematics 2 (\*Paper code: 9MA0/02)

Paper 3: Statistics and Mechanics (\*Paper code: 9MA0/03)

# **Entry requirements:**

A minimum of a Level 7 in 9-1 GCSE Mathematics

For more information:

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