

# Ernest Bevin College

## **COURSE TITLE: A2 Pure Mathematics & Statistics & Mechanics** **Examination Board: Edexcel**

### **Course content / description**

The Pearson Edexcel Level 3 Advanced Subsidiary GCE in Mathematics consists of three externally-examined papers. Students must complete all assessment in May/June in any single year.

#### **Objectives**

To build on and develop the techniques students have learned at AS so that they acquire the fluency required for advanced work.

### **Assessment Examination**

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

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

Each paper is:

2-hour written examination

33.33% of the qualification

100 marks

Content overview: Proof, Algebra and functions, Coordinate geometry in the (x, y) plane, Sequences and series  
Trigonometry, Exponentials and logarithms, Differentiation, Integration, Numerical methods, Vectors

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

2-hour written examination

33.33% of the qualification

100 marks

Content overview

Section A: Statistics – Statistical sampling, Data presentation and interpretation, Probability, Statistical distributions, Statistical hypothesis testing

Section B: Mechanics – Quantities and units in mechanics, Kinematics, Forces and Newton's laws, Moments

Paper 1 and Paper 2 may contain questions on any topics from the Pure Mathematics

Content. Paper 3 will contain questions on topics from the Statistics content in Section A and Mechanics content in Section B.

### **Entry Requirements / Group organisation / Setting**

#### **Assumed Knowledge**

Candidates are expected to know the content of AS topics covered in the previous year.

Exercises from the textbook are suggestions only. These will usually be started in class and students expected to finish them at home. Lessons should start with reference to the last exercise.

### **Books / other materials / visits / field courses etc.**

#### **Calculators**

Calculator is allowed in the examination for this module.

### **How you can help**

- 1) Check planner regularly and ensure that all homework is completed on time.
- 2) Contact Maths teacher if there are problems before they get out of hand
- 3) Encourage/monitor revision of past work and especially for mock and final exams
- 4) Ensure your son is always equipped for lessons and exams with appropriate materials (a scientific calculator, geometry set, revision notes etc.)

### **Why Study / Where it leads**

Studying mathematics provides you with a broad range of skills in later life. You can study internet security, financial mathematics, engineering, medicine and a wide range of inexhaustive career options including teaching. The skillsets and knowledge acquired from studying Mathematics are in great demand across all sectors and industry.

