

A LEVEL

Exam board OCR

MATHEMATICS

SPECIFIC ENTRY REQUIREMENTS

Most of our successful students score a grade 7 or better at GCSE mathematics, although a 6 is the minimum requirement. We will give all students a baseline test at the start of Year 12 to check that they have completed the required skills practice over the summer, and students who come with a grade 6 should be aware that this period is an important one.

COURSE CONTENT

All students will be assessed on a knowledge of pure mathematics, some statistics, and some mechanics.

EXAMINATIONS AND ASSESSMENTS

Assessment is drawn from the pure mathematics syllabus, a statistics syllabus and a mechanics syllabus, with calculators being required for all assessment.

The A Level course is assessed by three examination papers, each lasting two hours and providing one third of the total marks, and consisting of a range of problems from multiple choice and single step to multi-step problems.

Paper 1 covers the pure mathematics topics: proof, algebra and functions, co-ordinate geometry, sequences and series, trigonometry, exponentials and logarithms, differentiation, integration and numerical methods.

Paper 2 can assess any of the Paper 1 content, but will also include questions on vectors, quantities and units in mechanics, kinematics, forces, Newton's laws and moments.

Paper 3 can also assess any of the Paper 1 content, but will also include questions on statistical sampling, data presentation and interpretation, probability, statistical distributions and hypothesis testing.

SKILLS, LINKS AND PROGRESSION

Mathematics qualifications at advanced level are highly regarded for entry to higher education and by employers in all walks of life. Mathematics can be studied alongside a range of other subjects. The mechanics components support physics and also provide a sound base for engineering degree courses, whereas the statistics components are excellent support for all of the social and physical sciences.

CONTACT

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