Mathematics

Exam Board: Edexcel
Entry Requirements: Students must achieve Grade 6 in GCSE Mathematics. Students choosing this course need strong mathematical ability.

COURSE SUMMARY

Mechanics is the branch of Mathematics that models the motion of bodies. Statistics is the branch of Mathematics that studies the collection, analysis, interpretation, presentation and organisation of data. A-Level Mathematics is recommended if you are planning on a career in Engineering, Investment Banking, Medicine, Actuarial Sciences, Marketing or Psychology and complements the A LevelPhysics, Biology Psychology and Economics courses.

COURSE STRUCTURE

All students will study a combination of Pure and Applied mathematics. The Applied aspect of the course consists of both Statistics and Mechanics in equal measure.

Pure Mathematics

Proof; Algebra and Functions; Coordinate Geometry in the(x,y) plane; Sequences and Series; Trigonometry; Exponentials and Logarithms; Differentiation; Integration; Vectors; Numerical Methods.

Applied Mathematics

Mechanics Quantities and Units in Mechanics; Kinematics; Forces and Newton's laws; Non-Uniform Acceleration. Statistics Statistical Sampling; Data Presentation and Interpretation; Probability; Statistical Distributions; Statistical hypothesis testing.

SPECIFICATION

A level Mathematics (pearson.com)

CAREER CHOICES

A-Level Mathematics is useful for university courses with a high mathematical and engineering content. These include Mathematics, Architecture, Computer Science, Engineering and Physics. Additionally, careers in industry, management, healthcare, accountancy, finance, economics, insurance, medicine, law, socialwork, communications, veterinary science and engineering.