MATHEMATICS

WHY CHOOSE MATHEMATICS?

This subject is not for the faint-hearted. Can you deal with abstract ideas and then relate them to real life situations? Do you like solving problems? Do you have the intellectual stamina to produce a solution to a multi-stage problem? Do you want to learn how to think logically, approach tasks systematically and cast a critical eye over the figures quoted in the media? Do you want to gain a better understanding of the world (both natural and man-made) around you?

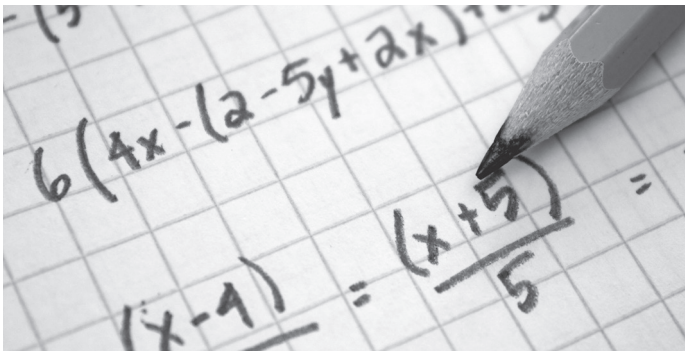
COURSE DETAILS

The Mathematics A Level is made up of Pure Mathematics (two thirds of the course), Mechanics (one sixth) and Statistics (one sixth).

Pure Mathematics includes extensive algebraic techniques, calculus, trigonometry, coordinate geometry and sequences.

Mechanics includes the study of the equations of motion, Newton's laws, moments, forces and momentum.

Statistics includes data handling graphs, summary measure of data sets, regression, lines of best fit and correlation, the Normal distribution and probability.

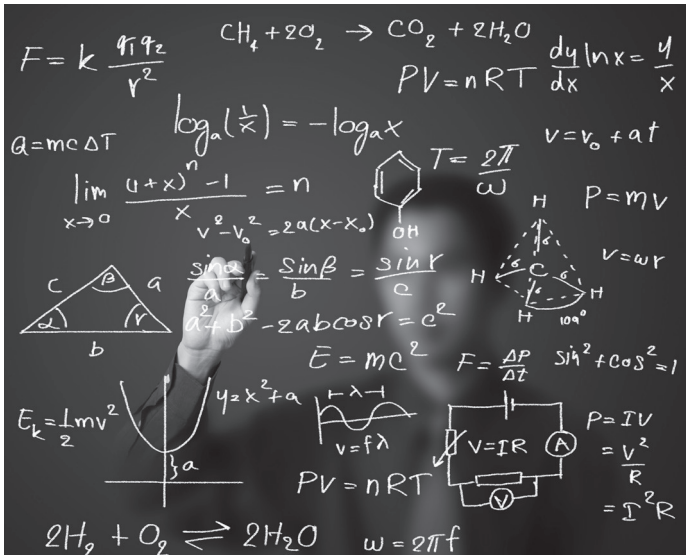


RELATED SUBJECTS

Mathematics can be studied alongside any other discipline; perhaps the most significant syllabus overlap is with Physics or Economics. Mathematics is an essential supporting subject for those who wish to study Economics, Engineering or Physics at university. It is also very useful if you are studying Biology, Geography, Chemistry, Business Studies and Architecture.

FURTHER INFORMATION

Mathematics and Further Mathematics are subjects which require hard work and determination, and as a consequence are very rewarding. It is a requirement that candidates have a calculator with the ability to compute summary statistics, access standard statistical distributions and perform iterations. More information will be given on request about the types that are recommended.



COURSE REQUIREMENTS

A minimum of Grade 6 GCSE is an essential baseline requirement for studying Mathematics at A Level, and preferably a 7. As algebra is such an essential tool at advanced level, a clear and consolidated understanding of algebraic techniques studied at GCSE is vital.

RELATED CAREERS

Economics, medicine, archaeology, banking and finance, teaching, business, IT, natural sciences, computer science and all engineering disciplines.

HIGHER EDUCATION AND CAREERS OPTIONS

A Mathematics degree provides excellent training of the mind for a variety of careers. It is still seen as a rigorous academic subject and as such is a highly desirable attribute for a potential employer. Obvious career paths are the actuarial profession, accountancy, finance, computer programming, logistics, engineering and of course academia; but mathematicians may end up doing anything from law or weather forecasting right through to journalism.

For considering a career/university degree in engineering, studying Further Mathematics as well as Mathematics is highly recommend.

HEAD OF DEPARTMENT - MRS G MCCONNON

EXAM BOARD - EDEXCEL