

Mathematics and Further Mathematics

Examination board: Edexcel

Content

Both A Level Mathematics and A Level Further Mathematics are offered in the Sixth Form.

Mathematics in the Sixth Form consists of Pure Mathematics, Mechanics and Statistics. The combination and proportions of each of these three subdisciplines depends on whether a pupil is studying Mathematics or Further Mathematics.

Pure Mathematics

This is the core course: it involves further study of algebra, trigonometry and vectors, all of which were encountered in the Lower School. Other topics introduced include the mathematical modelling of real situations. The techniques and methods learned in Pure provide an essential foundation for the solving of problems in Mechanics and Statistical.

Mechanics

Mechanics analyses simplified models of the physical world, particularly those associated with movement. The forces causing and affecting motion are considered and predictions about subsequent actions can be made.

Statistics

Statistics studies methods of collecting, displaying and analysing data about the physical world. Skills acquired at GCSE are extended to deal with more complex problems.

Further Mathematics

Further Mathematics is studied with Mathematics as a

two-year course and involves studying Pure Mathematics, Mechanics, and Statistics to a higher level, dealing with more demanding situations. Methods are studied more rigorously and a greater number of techniques are taught.

Subject combinations

Mathematics combines well with both Arts and Science subjects. A combination of Maths and Arts subjects is ideal preparation for university study in many areas: Financial Management, Business Studies, Law, Architecture. etc. On the Science side, Medicine, Natural Sciences, Computing, Engineering and Mathematics are all areas of further study which have significant mathematical content.

Although pupils who wish to study Mathematics at University are encouraged to take both Mathematics and Further Mathematics, there are now few universities that require pupils to have studied both.

Assessment

The final assessment for A Level Mathematics consists of three papers, each lasting two hours. Two of the papers test Pure Mathematics; the third paper is an applied paper of Mechanics and Statistics.

For more information, please consult the specification: [A Level Mathematics \(pearson.com\)](https://www.pearson.com/UKHigherEducation/catalogue/9780273752819)
The final assessment for A Level Further Mathematics consists of four papers lasting 90 minutes each. Two of the papers test Pure Mathematics; one is a Statistics paper and the final paper tests Mechanics.

For more information, please consult the specification: [A Level Further Mathematics specification](https://www.pearson.com/UKHigherEducation/catalogue/9780273752819)