Mathematics

Examination board – Edexcel

Edexcel A Level 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 amount of each of the three subjects depends on the course being followed.

Pure Mathematics
This is considered as the core course. It involves a further study of algebra, trigonometry and vectors started in the lower school. Other topics such as the mathematical modelling of real situations are introduced. The techniques and methods learned in this part of the course are needed for the solution of Mechanics and Statistical problems.

Mechanics
Mechanics analyses simplified models of the physical world, particularly those associates 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. The skills learned complement Arts subjects when leading to degree courses in, for example, Financial Management, Business Studies, Law or Architecture. On the Science side, Medicine, Natural Sciences, Computing, Engineering and Mathematics are all areas of further study which have significant mathematical content.

Although girls who wish to study Mathematics at University are encouraged to take both Mathematics and Further Mathematics, there are now few Universities that demand that both subjects have been taken at A Level.

Assessment
The final assessment for A Level Mathematics consists of three papers each lasting two hours. Two of the papers examine Pure Mathematics and the third paper is an applied paper of Mechanics and Statistics. A link to the syllabus is given below:

https://qualifications.pearson.com/content/dam/pdf/A%20Level/Mathematics/2017/specification-and-sample-assessments/a-level-l3-mathematics-specification.pdf

The final assessment for A Level Further Mathematics consists of four papers lasting 90 minutes each. Two of the papers examine Pure Mathematics, one is a Statistics paper and the final paper is Mechanics. A link to the syllabus is given below:

https://qualifications.pearson.com/content/dam/pdf/A%20Level/Mathematics/2017/specification-and-sample-assessment/a-level-l3-further-mathematics-specification.pdf

GCSE Entry Requirements
GCSE Higher Level Mathematics should have been studied and a Grade 8 or 9 obtained.