

Further Mathematics



Exam Board:



Components:

1. Core Pure

Mathematics 1

2. Core Pure

Mathematics 2

3. Further Statistics 1

4. Further Mechanics 1

Assessment:

Core Pure Mathematics

1:

- 1 hour 30 mins
- 80 Marks
- 25% of A-Level

Core Pure Mathematics 2

- 1 hour 30 mins
- 80 Marks
- 25% of A-Level

Further Statistics 1

- 1 hour 30 mins
- 80 Marks
- 25% of A-Level

Further Mechanics 1

- 1 hour 30 mins
- 80 Marks
- 25% of A-Level

Differentiate yourself

Summary

The study of Mathematics helps students to develop an understanding of the inner workings of the world around us. In further mathematics you will build upon the ideas presented in Mathematics to increase your understanding of difficult Mathematical techniques

In Core Pure Mathematics you will learn to use complex numbers to solve more difficult problems than can be tackled using a traditional numbering system and use matrices to represent transformations in both 2 dimensions and 3. Other topics studied include

- Series and roots of polynomials
- Volumes of revolution and proof by induction
- Polar co-ordinates

In Further Statistics 1 and Further Mechanics 1 you will again build on the ideas taught in Mathematics A-Level topics covered include

- Discrete random variables and probability generating functions
- Poisson distributions and chi squared tests
- Momentum and Impulse
- Elastic Collisions in one and two dimensions

Looking Ahead

Students studying Further Mathematics at A-Level have gone on to careers in an extensive and varied field of careers. Many have gone on to university and have studied subjects ranging from Mathematics and Computing to Engineering and Physics. Several students have also gone on to complete higher level apprenticeships, gaining qualifications in subjects such as accounting and engineering. For those wanting to study Mathematics at University, it is advised to study Further Mathematics at A Level.

Link Subjects

Further Mathematics, Physics, Chemistry, Business Studies, Sociology, Computing

Key Skills Developed

- Problem solving
- Modelling
- Statistical analysis

Student View

"I enjoy further maths as it is challenging when you start it but you quickly learn that it is nothing you haven't done before and you can give all the questions a go"

Contact Information:

Mr I Lewis (ilewis@saintben.derby.sch.uk)
Mr A Buxton
(abuxton@saintben.derby.sch.uk)