## **Further Mathematics**

### A Level

#### What will I learn?

As well as learning new areas of pure mathematics you will study further applications of mathematics in mechanics, statistics and decision mathematics. Studying Further Mathematics consolidates and reinforces your standard A level Mathematics work, helping you to achieve your best possible grades. Further Mathematics introduces new topics such as matrices and complex numbers that are vital in many STEM degrees. Students who have studied Further Mathematics find the transition to such degrees far more straightforward.

#### How will I learn?

As for A-Level Mathematics, the lessons work similarly to GCSE, where new techniques and skills will be modelled to you live, and the you have the opportunity to practise, with your teacher going through key misconceptions. A key difference is that a more significant amount of the independent practise will need to be completed as homework, in order for you to consolidate your understanding. This is even more pronounced for Further Mathematics, as many of the skills you be learning build on skills you will cover in the Mathematics A-Level course, so being organised and keeping yourself up-to-date is vital.

#### How will I be assessed?

You will be assessed by sitting 4 exams at the end of Year 13, Core Pure 1, Core Pure 2, Further Statistics and Further Decision.

#### FAQs.

#### What do I need to know or be able to do before taking this course?

Students should have a Grade 7 in GCSE Mathematics. This A-level must be taken alongside A-Level Mathematics and cannot be taken on its own.

#### What kind of student is this course suitable for?

This course will appeal to students who:

- enjoy solving mathematical problems and applying their mathematical skills to solve real life problems;
- want to go on to study mathematics or engineering at a higher level
- have a high level of resilience with mathematics

#### What equipment will I need?

You will need to purchase an Advanced Scientific calculator. We recommend the Casio fx cg50.

# Exam Board

Edexcel

Subject Specific Entry Requirements

Maths grade 7 or above

#### Skills Gained

language skills Research skills Problem solving Independent work ethic Team work Presentation skills Revision skills

#### Careers

Accountancy Actuary Analyst Architect Engineer: Aeronautical, Chemical, Communications, Electrical, Mechanical

