

Further Mathematics **SIXTH FORM**

*Don't be anonymous...
...be remarkable*

A level Further Mathematics is highly regarded and warmly welcomed by universities. Students who take Further Mathematics are really demonstrating a strong commitment to their studies, as well as learning mathematics that is very useful for any mathematically rich degree.

If you are not planning to study for a mathematically rich degree but are keen on mathematics you will find Further Mathematics a very enjoyable course and having a Further Mathematics qualification identifies you as having excellent analytical skills, whatever area you are considering for a career.



A Level

56 UCAS points available

Student Profile

A successful student will need:

Grade 8/9 in GCSE Mathematics.

An enjoyment and understanding of algebraic methods of problem solving.

Resilience and an ability to cope when faced with a problem that takes several steps to solve.

Willingness to commit regular time to independent self study.

This must be chosen as a fourth A level and needs to be studied alongside A level Mathematics.



**The Park
Academies
Trust**

Course Content (OCR)

A level Further Mathematics is a linear qualification, and can only be studied in addition to, not instead of, A level mathematics. This course is suited only to those with a strong work ethic and keen interest in mathematics. Many universities are specifying Further Mathematics as essential for further study in science or medicine. This is especially true for Russell Group universities.

- **Core pure** consists of polar coordinates, matrices and transformations, hyperbolic functions and differential equations.
- **Mechanics** includes Hooke's law, work, energy and power and circular motion.
- **Statistics** covers Chi-squared tests and simulation.

Skills Gained

- Understanding of the mathematics that underpin many aspects of our lives.
- The ability to apply a range of mathematical skills to different situations.

Trips / Cultural Experiences

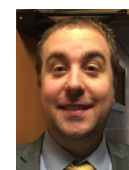
Mathematical proof - University of Warwick

Guest speakers including Simon Singh, author and biographer of Fermat and his Last Theorem.

The Future - What Next?

Further Mathematics is an entry requirement A level at many universities for students considering a mathematics degree. Further Mathematics is also a good choice for students considering higher education in any science or mathematics-based course, ranging from computer, biochemical, natural or medical sciences to engineering, psychology, economics and accountancy.

Throughout the Further Mathematics course, you are encouraged to think logically, practically and analytically. These fundamental skills are useful across several disciplines and careers.



Peter Ford

BSc (Hons) Mathematics with
Actuarial Studies, PGCE

Head of KS4 & KS5
Mathematics

FordP@

lydiardparkacademy.org.uk