Studying Maths at St Anne's College

The Mathematical Institute at Oxford provides courses that cover a wide array of topics ranging across all areas of pure and applied mathematics. St Anne's has a large teaching team in college with expertise across most areas of the subject. It is possible for Visiting Students with the appropriate background to take these courses. Visiting Students will need to attend the lectures in the Mathematical Institute, and these will be supplemented with tutorials (1-3 students), or sometimes larger classes (10-12 students).

As mathematics is a hierarchical subject, in order to take any course a strong background is a necessity. It is possible to combine Mathematics courses with those in other subjects available to Visiting Students, as long as appropriate ability in those other subject areas is demonstrated as part of the application.

The following is an indicative list of courses that should be accessible to students with some experience of calculus and algebra at university – please note courses and terms may differ

- Analysis 16 Lectures, in each of Michaelmas, Hilary and Trinity Terms
- Linear Algebra 16 Lectures, Michaelmas and 8 lectures Hilary Term
- Groups and group actions 16 lectures Hilary and Trinity Terms
- Probability 16 Lectures, Michaelmas term
- Introduction to Calculus 16 Lectures, Michaelmas Term
- Geometry 16 Lectures, Michaelmas Term
- Fourier Series and partial differential equations 16 Lectures, Hilary Term
- Multivariable calculus 16 Lectures, Hilary term
- Dynamics 16 Lectures, Hilary term
- Statistics 16 Lectures, Trinity term

The following courses are more advanced and require at least two years experience of university mathematics.

- Complex Analysis and metric spaces 32 Lectures, Michaelmas Term
- Differential Equations 16 Lectures, Michaelmas Term
- Linear Algebra 16 lectures Michaelmas Term
- Fluid Dynamics 16 Lectures, Hilary Term
- Rings and Modules 16 Lectures, Hilary Term
- Probability 16 lectures, Michaelmas Term
- Statistics 16 lectures Hilary Term
- Numerical Analysis 16 lectures Hilary Term
- Quantum Theory 16 lectures Michaelmas Term

There are also 8 hour lecture courses available on topics such as - Number Theory, Integral transforms, Calculus of Variations, Mathematical Biology, Graph Theory, Special Relativity, Group Theory, Introduction to Manifolds, Projective Geometry.

There are also higher level courses, usually taught through classes in the Mathematical Institute, and most rely on elements of the courses listed above, so enrolment in these options would be dependent on demonstrating the correct level of previous experience.

There is an indicative list of previous courses on the Mathematical Institute's website. There is also further course information here. Prelims refers to first year courses, Part A courses refer to second year, Part B to third year.

St Anne's has an active mathematical community with events held jointly with Computer Science taking place each term. In Trinity term, we have a mathematics dinner at which all those interested in mathematics and computer science at all levels within the college meet together. There are typically around 8 students participants in the mathematics degree in each year as well as a few others completing joint degrees, such as Mathematics and Statistics, Mathematics and Philosophy or Mathematics and Computer Science. This leads to a strong community of mathematicians in college.