

Mathematics

Students in the Department of Mathematics have the opportunity to study economics and mathematics in depth, investigating modern economic theory and learning the mathematical techniques that have shaped advances in economics.

Departmental Facts

LSE's Mathematics Department is an active research unit within a world-class social science institution. It is currently in a period of growth, and aims to be a leading centre for mathematics in the social sciences. The strengths of the Department are in applications of mathematics to the social sciences and in discrete mathematics. CDAM, Computational, Discrete and Applicable Mathematics@LSE, is based in the Department; its activities include the production of an extensive series of Research Reports, and the hosting of a well-attended weekly research seminar every Thursday during term-time. In the 2001 national Research Assessment Exercise (RAE), the Department was rated as 'Very Good' (5). In the most recent independent Quality Assurance Agency Teaching Assessment it achieved an approved score of 22 out of 24 and was ranked 4th in the 2007 Times Good University Guide.

Careers

The Department places an emphasis on the importance of analytical thinking as a transferable skill that students can use and develop in a wide range of careers. Other useful skills gained through the study of mathematics include:

- the ability to solve problems and to adopt an analytical approach to problem solving;
- ability to tackle intellectually difficult problems, demonstrating persistence when working through a problem to a conclusion;
- thorough knowledge of statistical analysis and the ability to apply this skill in investigating and solving problems;
- being adept at analysing and assessing information and data, demonstrating a high level of numeracy;
- the ability to use report writing and verbal presentation skills.

The specific skills and techniques gained on a mathematics degree can be useful in numerous jobs, particularly in the banking and financial services sector, which is the most popular route for mathematics graduates. There are, however, many alternatives to a career in investment banking or accountancy. Previous Mathematics graduates, for example, have chosen to complete further study, in preparation for a career in teaching.

Mathematics courses

available to General Course students include:

MA100 Mathematical Methods	MA209 Differential Equations
MA103 Introduction to Abstract Mathematics	MA300 Game Theory
MA107 Quantitative Methods	MA301 Game Theory I
MA110 Basic Quantitative Methods	MA303 Chaos in Dynamical Systems
MA200 Further Mathematical Methods (Calculus)	MA305 Optimisation in Function Spaces
MA201 Further Mathematical Methods (Linear Algebra)	MA310 Mathematics of Finance and Valuation
MA203 Real Analysis	MA313 Probability for Finance and Economics
MA207 Further Quantitative Methods	MA314 Theory of Algorithms
MA208 Optimisation Theory	MA315 Algebra and its Applications