Double Major in Mathematics & Economics

or

Applied Mathematics & Economics

NUS
National University of Singapore

Department of Mathematics
Faculty of Science
Double Major in NUS

A Double Major is a single degree programme, in which a student satisfies the requirements of two Majors. It gives an attractive opportunity for students to broaden their knowledge and capacities by pursuing a second Major which is less intense, alongside their primary Major, all within 4 years.

Why Double Major in Math/Applied Math with Economics

☑ The disciplines of Mathematics and Economics closely relate to and are natural complements of each other.

☑ Mathematical methods are indispensable to the development of economic theory and analysis.

☑ Economics has provided a variety of important problems for mathematics such as those in optimization and operations research.

To understand the economic implications fuelled by massive amount of information, for example from the internet and mobile devices, strong mathematical skills are needed to derive reliable economic insights for decision making, productivity and risk management.

Career Prospects

Career opportunities are aplenty, for those who have the right skill sets. In this Double Major in Math/Applied Math with Economics, students learn both the theory and applications of modern economics within the advanced mathematical frameworks. The training that students receive ranges from probability theory through numerical analysis to economic analysis, computational as well as optimization techniques, expertise which are much sought after in the complex world of business and industry.

Graduates have been employed in a variety of areas, including banking and finance, and government. Many have gone onto graduate study in areas such as statistics, economics, decision science and quantitative finance.
**Course Highlight**

*This is only an illustration for Applied Mathematics and Economics. For more details, refer to department’s website.*

### Year 1 & 2 (Fundamentals)

- Calculus, Multivariable Calculus, Linear Algebra, Programming Methodology, Mathematical Analysis, Probability, Numerical Analysis
- Introduction to Economic Analysis, Microeconomics, Econometrics Macroeconomics, Quantitative Methods for Economic Analysis

### Year 3 & 4 (Core & Electives in Math & Econs)

- Linear and Network Optimization, Differential Equations, Mathematical Modeling, Nonlinear Programming, Stochastic Processes, Regression Analysis, Game Theory, Discrete Optimization, Mathematical Finance etc

- Honours Project • Undergraduate Professional Internship Programme (UPIP) • Undergraduate Research Opportunities Programme (UROPS)

**Application Procedure**

**Apply by 5pm, 25 May 2014** if you are keen to read this double major combination from your first year in NUS, and have received an offer/have accepted an offer from the Faculty of Science by this date.

**Apply by 5pm, 16 July 2014** if you are keen to read this double major combination from your first year in NUS but have received an offer/have accepted an offer from the Faculty of Science after 25 May 2014.

Submit the following documents via email to AskMathUG@nus.edu.sg:

- Completed application form; and
- Copies of A-level results, or other equivalent qualifications.

Successful applicants will be notified of the outcome via email.

Download application form: