The mathematical economics major offers students a degree program that combines mathematics, statistics, and economics. In today's increasingly complicated international business world, a strong preparation in the fundamentals of both economics and mathematics is crucial to success. This degree program is designed to prepare a student to go directly into the business world with skills that are in high demand, or to go on to graduate study in economics or finance. A degree in mathematical economics would, for example, prepare a student for the beginning of a career in operations research or actuarial science.

120 hours (minimum)

Any student earning a Bachelor of Arts (BA) degree must complete a minimum of 39 hours at the 300+ level. These hours are generally completed by the major requirements. However, keep this hour requirement in mind as you choose your course work for the requirements in the major. A complete description of College requirements for a Bachelor of Arts degree can be found on pages 105-106 of the 2008-2009 UK Bulletin.

University Studies Program Requirements

I. Math (completed by Premajor Requirement) ........................................ 3
II. Foreign Language (placement exam recommended) .................... 0-8
III. Written Communication (completed by Premajor Requirement) ... 0-4
IV. Written Communication* (can be partially completed by Major Requirement) ........................................ 1
V. Oral Communication* (can be partially completed by Major Requirement) ........................................ 1
VI. Natural Sciences ........................................................................... 6
VII. Social Sciences (partially completed by Major Requirement) ........ 3
VIII. Humanities ................................................................................ 6
IX. Cross-Cultural (choose a 300+ level Humanities course) ............ 3
X. Electives (choose two Natural Science courses) ......................... 6

USP hours: ...................................................................................... 25-37

Graduation Writing Requirement

After attaining sophomore status, students must complete a Graduation Writing Requirement course. See "University Writing Requirement" on page 75 of the 2008-2009 UK Bulletin.

Graduation Writing Requirement Hours: ........................................ 3

College Requirements

I. Foreign Language (placement exam recommended) ...................... 0-8
II. Disciplinary Requirements
   a. Natural Science (completed by USP Elective Requirement) ....... 3
   b. Social Science (completed by Major Requirements) ............ 3
   c. Humanities (partially completed by USP Cross-Cultural Requirement) ........................................ 3
III. Laboratory or Field Work .......................................................... 1
IV. Electives .................................................................................. 6

College Requirement hours: ......................................................... 10-18

Premajor Requirements

^MA 113 Calculus I ........................................................................ 4
MA 114 Calculus II ....................................................................... 4

Premajor hours: ........................................................................... 8

Major Requirements

Mathematics Core Requirements

MA 213 Calculus III ...................................................................... 4
MA 214 Calculus IV ..................................................................... 3
MA 320 Introductory Probability ............................................... 3
MA 322 Matrix Algebra and its Applications ............................ 3

Mathematics Core hours: ......................................................... 13

Economics Core Requirement

^ECO 201 Principles of Economics I ........................................... 3
ECO 202 Principles of Economics II ......................................... 3
ECO 391 Economic and Business Statistics ......................... 3
ECO 401 Intermediate Microeconomic Theory ................... 3
ECO 402 Intermediate Macroeconomic Theory .................. 3

Economics Core hours: .............................................................. 15

Other Course Work Required for the Major

For the Mathematics Component:

Choose one of the following sequences: MA 416G and MA 417G, MA 471G and MA 472G, or STA 524 and STA 525

For the Economics Component

*Choose 9 hours of 300+ level Economics courses ...................... 9

For the Statistics Component

Choose STA 291 or a higher level Statistics course ................. 3

Other Major hours: ..................................................................... 18

Electives

Electives should be selected by the student to lead to the minimum total of 120 hours required for graduation ........................................ 9

Total Minimum Hours Required for Degree ............................... 120

^Course used towards completion of a USP Requirement.

^COM 199 + ECO 499 satisfy the Oral Communication Requirement.