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 93-95 of the 2005-2006 UK Bulletin.

**University Studies Program Requirements**

I. Math (completed by Premajor Requirement) .................. 0-8
II. Foreign Language (placement exam recommended) ........ 0-8
III. Inference–Logic (completed by Premajor Requirement) .... 0-4
IV. Written Communication ................................................... 0-4
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 66 of the 2005-2006 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) 
   b. Social Science (completed by Major Requirements) 
   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 Requirements**

\*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 .......................................................... 6

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.