Mathematical Economics - B.A.  College of Arts and Sciences

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 98-100 of the 2006-2007 UK Bulletin.

University Studies Program Requirements
I. Math (completed by Premajor Requirement) ................................................................. 4
II. Foreign Language (placement exam recommended) ................................................. 0-8
III. Inference–Logic (completed by Premajor Requirement) ........................................... 0-4
IV. Written Communication ............................................................................................ 6
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 70 of the 2006-2007 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) ................................ 4
   b. Social Science (completed by Major Requirement) ............................................. 2
   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.

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