

# MATHEMATICS - ECONOMICS MAJOR REQUIREMENTS

## MATHEMATICS

- \_\_\_\_\_ Calculus I (**140**)
- \_\_\_\_\_ Calculus II (**150**)
- \_\_\_\_\_ Calculus III (**160**)
- \_\_\_\_\_ Prob. and Statistics (**207**)
- \_\_\_\_\_ Foundations of Algebra (**300**)
- \_\_\_\_\_ Foundations of Analysis (**310**)
- \_\_\_\_\_ Optimization *or* Math. Stat. (**435 or 445**)
- \_\_\_\_\_ Additional 400+ mathematics elective

## ECONOMICS

- \_\_\_\_\_ Introductory course
- \_\_\_\_\_ Intermediate Micro (**300**)
- \_\_\_\_\_ Intermediate Macro (**320**)
- \_\_\_\_\_ Econometrics (**380**)
- \_\_\_\_\_ \_\_\_\_\_ Three six-unit economics courses numbered 400-580

Other requirements:

- **300**, **320** and **380** must be taken prior to the completion of junior year.
- Independent study project approved by both departments that meets the senior experience requirement
- Advisor in each department
- Only six units of tutorial or independent study may count as one of the three electives.
- Average from economics and mathematics courses: at least a C

<b>Mathematics Electives:</b>	<b>Prerequisite</b>
<b>420</b> Numerical Analysis	<b>(300 and CMSC 150 or 110)</b>
<b>*435</b> Optimization	<b>310</b>
<b>*440</b> Probability Theory	<b>310</b>
<b>*445</b> Mathematical Statistics	<b>310, 440</b>
<b>515</b> Theory of Computation	<b>300, CMSC150</b>
<b>525</b> Graph Theory	<b>300</b>
<b>530</b> Topics in Geometry	<b>300</b>
<b>535</b> Complex Analysis	<b>310</b>
<b>540</b> Mathematical Logic	<b>300</b>
<b>545</b> Rings and Fields	<b>300</b>
<b>546</b> Groups and Symmetry	<b>300</b>
<b>550</b> Topics in Analysis	<b>310</b>
<b>*560</b> Topology	<b>310</b>
<b>600</b> History of Mathematics	<b>310</b>

(Those marked with \* are recommended.)

### Introductory economics courses

- 100** Introductory Microeconomics
- 120** Introductory Macroeconomics

<b>Core Courses</b>	<b>Pre-requisite</b>
<b>300</b> Microeconomic Theory	<b>Math 140</b>
<b>320</b> Macroeconomic Theory	<b>Math 140</b>
<b>380</b> Econometrics	<b>Math 207</b>

<b>Economics Electives:</b>	<b>Prerequisite</b>
<b>400</b> Industrial Organization	<b>300</b>
<b>410</b> Advanced Game Theory	<b>300</b>
<b>420</b> Money & Mon. Policy	<b>320</b>
<b>425</b> Entrepreneurship & Finance	<b>300,320 and 170 or 220</b>
<b>430</b> Capital and Growth	<b>300,320,380</b>
<b>440</b> Public Expenditure	<b>300</b>
<b>450</b> Economics of the Firm	<b>300</b>
<b>460</b> International Trade	<b>300</b>
<b>465</b> International Finance	<b>320</b>
<b>490</b> Law and Economics	<b>300</b>
<b>495</b> Adv. Topics in Econ.	<b>300,320,380</b>
<b>500</b> Advanced Micro	<b>300</b>
<b>520</b> Advanced Macro	<b>300,320,380</b>
<b>550</b> Social Choice Theory	<b>300</b>

# Bachelor of Arts Degree Requirements

## RULES FOR 2008- CATALOG STUDENTS

### Distribution GERs:

\_\_\_ **1 Humanities**

Chinese, Classics, English,  
French, German, History,  
Japanese, Philosophy,  
Religious studies, Russian,  
Spanish.

*Anything if taught in English, or  
300+ if in foreign language  
(with some exceptions).*

\_\_\_ **1 Fine Arts**

Art, Art history, Music, Theatre.

\_\_\_ **1 Social Sciences**

Anthro, Econ, Govt, Psych.

\_\_\_ **1 Natural Science Lab**

Biology, Chemistry, Enviro,  
Geology, Physics. Enviro.  
studies w/ discussion sections  
do not count.

### Diversity GERs:

\_\_\_ **1 Global** (outside U.S./Europe)

\_\_\_ **1 Dimensions** (race, ethnicity,  
gender, etc.)

### Competency GERs

\_\_\_ **1 Writing or Speaking intensive**

\_\_\_ **1 Quantitative analysis**

\_\_\_ **1 in a Foreign Language 200+** (or  
4-5 AP or proficiency exam)

### General requirements:

\_\_\_ \_\_\_ **2 Freshman Studies**

**36 courses**

12 courses numbered 200 or above

2.0 Lawrence GPA

2.0 Major GPA

Residency

\_\_\_ **Major** (declare by start of jun year)

\_\_\_ **Capstone**

### GER stipulations

A single course may fulfill up to 2 GERs.

AP credits may not fulfill GERs.

### General stipulations (toward the 36)

Max 25 courses in a single division.

Max 15 courses in a single department  
(w/ some Art exceptions).

Max 7 courses in Education.

Max 2 courses from academic  
internships.

*Students may take additional courses.  
They just will not count toward the 36.*

*"Course" = 6 credits.*

---

### **OLD RULES (pre-2008/9 catalog year)**

\_\_\_ **1 additional humanities**

\_\_\_ **1 additional social sciences**

\_\_\_ **1 additional science or math**  
(need not be a lab)

\_\_\_ **Writing AND Speaking intensive**

• **No capstone required**