# Economics: Mathematical Emphasis

## Requirements

### Mathematics & Statistics

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**Option 1—four courses:**

- MATH 221 Calculus and Analytic Geometry 1
- MATH 222 Calculus and Analytic Geometry 2
- MATH 234 Calculus—Functions of Several Variables
- MATH 320 Linear Algebra and Differential Equations or MATH 340 Elementary Matrix and Linear Algebra

**Option 2—Honors sequence (3 courses):**

- MATH 275 Topics in Calculus I
- MATH 276 Topics in Calculus II
- MATH 375 Topics in Multi-Variable Calculus and Linear Algebra

**Statistics (1 course)**

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- ECON 310 Statistics: Measurement in Economics (Recommended)
- STAT 302 Accelerated Introduction to Statistical Methods
- ECON 410 Introductory Econometrics
- STAT/MATH 309 Introduction to Probability and Mathematical Statistics I
- STAT 311 Introduction to Theory and Methods of Mathematical Statistics I
- STAT 324 Introductory Applied Statistics for Engineers

Total Credits: 18-19

### Economics

30 credits to include:

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**Microeconomics & Macroeconomics (Select one):**

- ECON 101 & ECON 102 Principles of Microeconomics and Principles of Macroeconomics
- ECON 111 Principles of Economics—Accelerated Treatment

**Intermediate Theory (Select one):**

- ECON 301 & ECON 302 Intermediate Microeconomic Theory and Intermediate Macroeconomic Theory

**Introductory Econometrics**

- ECON 410 Introductory Econometrics 4

**Three Advanced ECON courses:**

- ECON 351 Intermediate Microeconomic Theory - Advanced Treatment
- ECON 352 Intermediate Macroeconomic Theory - Advanced Treatment (Honors Econ)

**Additional credits to achieve 30 in the major:**

Select any Advanced course (above) or one of these Applied Economics courses:

- ECON/FINANCE 300 Introduction to Finance
- ECON/HIST SCI 305 Development of Economic Thought
- ECON/A A E/REAL EST/URB R PL 306 The Real Estate Process
- ECON/FINANCE 320 Investment Theory
- ECON 321 Sports Economics
- ECON 330 Money and Banking
Two Advanced ECON courses must be taken at UW-Madison (in residence and not via study abroad)

RESIDENCE AND QUALITY OF WORK

2.000 GPA in all major and ECON courses

2.000 GPA on 15 upper-level major courses taken in residence

15 credits in ECON, taken on the UW–Madison campus

Intermediate- and advanced-level ECON courses are upper level in the major.