

ECONOMICS: MATHEMATICAL EMPHASIS

REQUIREMENTS

REQUIREMENTS FOR THE MATHEMATICAL EMPHASIS MATHEMATICS & STATISTICS

Code	Title	Credits	
Mathematics			
<i>Option 1—four courses:</i>			
MATH 221	Calculus and Analytic Geometry 1	15-16	
MATH 222	Calculus and Analytic Geometry 2		
MATH 234	Calculus--Functions of Several Variables		
MATH 320 or MATH 340	Linear Algebra and Differential Equations Elementary Matrix and Linear Algebra		
<i>Option 2—Honors sequence:</i>			
MATH 375	Topics in Multi-Variable Calculus and Linear Algebra	3	
MATH 376	Topics in Multi-Variable Calculus and Differential Equations		
Statistics (1 course)			
ECON 310	Statistics: Measurement in Economics (Recommended)	18-19	
ECON 410	Introductory Econometrics		
MATH/STAT 431	Introduction to the Theory of Probability		
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		
STAT 340	Data Science Modeling II		
Total Credits			18-19

ECONOMICS

30 credits to include:

Code	Title	Credits
Microeconomics Macroeconomics (complete one):		
ECON 101 & ECON 102	Principles of Microeconomics and Principles of Macroeconomics	4-8
ECON 111	Principles of Economics- Accelerated Treatment	
Intermediate Theory (complete one):		
		6-8

ECON 301
& ECON 302

Intermediate Microeconomic Theory and Intermediate Macroeconomic Theory

ECON 311
& ECON 312

Intermediate Microeconomic Theory - Advanced Treatment and Intermediate Macroeconomic Theory - Advanced Treatment (Honors Econ)

Introductory Econometrics

ECON 410 Introductory Econometrics 4

Three Core ECON courses: ¹ **6-12**

ECON 409 Study Abroad in Advanced Economics

ECON 435 The Financial System

ECON 441 Analytical Public Finance

ECON 442 Macroeconomic Policy

ECON 448 Human Resources and Economic Growth

ECON 450 Wages and the Labor Market

ECON 451 The Economic Approach to Human Behavior

ECON 455 Behavioral Economics

ECON 458 Industrial Structure and Competitive Strategy

ECON 460 Economic Forecasting

ECON 461 International Macroeconomics

ECON 464 International Trade

ECON 467 International Industrial Organizations

ECON 468 Industrial Organization and Imperfect Competition

ECON 475 Economics of Growth

ECON/
FINANCE 503 Markets with Frictions

ECON 521 Game Theory and Economic Analysis

ECON 522 Law and Economics

ECON/R M I 530 Insuring Life's Risks: Health, Aging, and Policy

ECON/
POP HLTH/
PUB AFFR 548 The Economics of Health Care

ECON 570 Fundamentals of Data Analytics for Economists

ECON 580 Honors Tutorial in Research Project Design

ECON 621 Markets and Models

ECON 623 Population Economics

ECON 661 Issues in International Macroeconomics

ECON 664 Issues in International Trade

ECON 666 Issues in International Finance

ECON 690 Topics in Economics

ECON 695 Topics in Economic Data Analysis

Electives**0-10**

Complete any core ECON course (above) or one of these 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 309	Study Abroad in Intermediate Economics
ECON 315	Data Visualization for Economists
ECON/ FINANCE 320	Investment Theory
ECON 321	Sports Economics
ECON 330	Money and Banking
ECON/A A E/ ENVIR ST 343	Environmental Economics
ECON 355	The Economics of Growing-up and Getting Old
ECON 370	Economics of Poverty and Inequality
ECON/A A E 371	Energy, Resources and Economics
ECON 390	Contemporary Economic Issues
ECON/REAL EST/ URB R PL 420	Urban and Regional Economics
ECON/A A E 421	Economic Decision Analysis
ECON/ENVIR ST/ POLI SCI/ URB R PL 449	Government and Natural Resources
ECON/A A E/ INTL BUS 462	Latin American Economic Development
ECON 465	The American Economy to 1865
ECON/ HISTORY 466	The American Economy Since 1865
ECON/A A E 473	Economic Growth and Development in Southeast Asia
ECON/A A E 474	Economic Problems of Developing Areas
ECON/A A E 477	Agricultural and Economic Development in Africa
ECON/ PHILOS 524	Philosophy and Economics
ECON/A A E 526	Quantitative Methods in Agricultural and Applied Economics
ECON/A A E/ F&W ECOL 531	Natural Resource Economics
ECON/SOC 663	Population and Society
ECON/A A E/ ENVIR ST/ URB R PL 671	Energy Economics

Total Credits**30****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 residence²
- 15 credits in ECON, taken on the UW–Madison campus

HONORS IN THE MAJOR REQUIREMENTS TO EARN HONORS IN THE ECONOMICS MAJOR

To earn Honors in the Major in Economics, students must be declared in and satisfy the requirements for the Economics–Mathematical Emphasis Option (above), **and** satisfy the following additional requirements:

- Earn a 3.300 University GPA
- Earn a 3.500 GPA for all ECON and major courses
- Complete the following courses, taken for Honors, with grades of B or better in each:

Code	Title	Credits
ECON 311 & ECON 312	Intermediate Microeconomic Theory - Advanced Treatment and Intermediate Macroeconomic Theory - Advanced Treatment	
ECON 580	Honors Tutorial in Research Project Design	

Select one of the following capstone experiences:

ECON 581	Honors Thesis
ECON 681 & ECON 682	Senior Honors Thesis and Senior Honors Thesis (Take for a total of 6 credits)

FOOTNOTES

- ¹ At least two core ECON courses must be taken in residence at UW–Madison, and not via transfer or a UW–Madison Study Abroad program.
- ² Intermediate and Advanced level ECON courses are Upper Level in the major.