

Applied Mathematical Economics

Director: Andrew Meyer, Ph.D.

This interdisciplinary major blends mathematics and economics to provide the quantitative tools necessary for modern economic analysis. Economics students could find this major to be excellent training for employment as a business economist or excellent preparation for graduate study. The mathematics, engineering or science student who wants to use mathematical expertise to learn a business discipline could find this major to be an interesting and useful application of mathematics.

Applied Mathematical Economics Major

The major consists of 42 credit hours as follows: 18 credit hours in economics courses and 15 credit hours in math, from the required course list below. Electives include one upper-division economics course (3 credit hours) and two mathematics courses (6 credit hours) from the elective course listing below.

Code	Title	Hours
Required Economics Courses:		
ECON 1103	Principles of Microeconomics	3
ECON 1104	Principles of Macroeconomics	3
ECON 3003	Intermediate Microeconomic Analysis	3
ECON 3004	Intermediate Macroeconomic Analysis	3
ECON 4060	Introduction to Econometrics	3
ECON 4065	Mathematical Economics	3
Required Mathematics Courses:		
MATH 1450	Calculus 1	4
MATH 1451	Calculus 2	4
MATH 2450	Calculus 3	4
MATH 4710	Mathematical Statistics	3
or MATH 4720	Statistical Methods	
Elective Economic Courses: Choose one from the following courses		3
ECON 3001	Applied Business Economics	
ECON 4006	Industrial Organization	
ECON 4008	Economics and Law	
ECON 4010	Public Finance	
ECON 4012	Urban and Regional Economics	
ECON 4016	Environmental and Natural Resource Economics	
ECON 4020	Economics of Labor Markets	
ECON 4022	Economics of Healthcare and Health Policy	
ECON 4040	International Economic Issues	
ECON 4044	Global Integration of Financial Sectors	
ECON 4045	Comparative Economic Systems	
ECON 4046	International Trade	
ECON 4047	Development Economics	
ECON 4070	Economics and Ethics	
ECON 4072	Behavioral Economics	
ECON 4080	Money, Banking and Monetary Policy	
ECON 4931	Topics in Economics	
Elective Mathematics Courses: Choose two from the following courses		6
MATH 2451	Differential Equations	
or MATH 4500	Theory of Differential Equations	
MATH 3100	Linear Algebra and Matrix Theory	
MATH 4630	Mathematical Modeling and Analysis	
MATH 4650	Theory of Optimization	
MATH 4700	Theory of Probability	

MATH 4760 Time Series Analysis

MATH 4780 Regression Analysis

Total Credit Hours:

42