

# B.A. IN ECONOMICS

## Overview

Major Area of Specialization in Economics (People & Society or STEM)

The B.A. in Economics is designed to equip students with a solid knowledge of economic theories supported by data analysis essential for understanding a wide range of modern economic problems. The program provides excellent preparation for those who plan careers in business, government, international agencies, and graduate studies.

Students pursuing the major in Economics through the College of Arts and Sciences will select one of two possible tracks: Political Economy (P&S) or Quantitative Economics (STEM). In the Political Economy track, People and Society courses are predominant. In the Quantitative Economics track, Science, Technology, Engineering, and Mathematics courses are predominant.

### Departmental Honors for the B.A. in Economics

Qualified students pursuing the B.A. in Economics have the opportunity to earn Departmental Honors by fulfilling the following:

- a minimum cumulative GPA of 3.9 and a minimum GPA of 3.9 within the economics major at the end of the junior year; and
- completion of a 3-credit hour research project during the entire senior year on a topic that is of interest to both the faculty member supervising the research in economics and the student responsible for completing it. The research and written deliverable must be deemed to be of exceptional quality, consistent with the workload of a 3-credit hour upper level independent study course, and worthy of a designation that is only open to the top 1% of the University of Miami undergraduates; and
- a minimum cumulative GPA of 3.9 and a minimum GPA of 3.9 within the economics major at graduation; and
- any other requirements, if any, established by the Department granting honors as set forth in this Academic Bulletin.

The 3-credit hour research project class is not assigned a letter grade but instead is taken for "credit only." It does not count toward the 120 credit hours required for graduation. Only projects that are deemed to be of exceptional quality will receive credit and result in the Honors designation. Students who begin a research project but do not complete it will be retroactively withdrawn from the Independent Study research course.

Further details related to Departmental Honors in Economics are available from the Director of the Undergraduate Economics program.

## Curriculum Requirements

A student pursuing the major in Economics through the College of Arts and Sciences will select one of two possible tracks: Political Economy (People and Society) or Quantitative Economics (Science, Technology, Mathematics, and Engineering) and complete the curriculum requirements as follows:

Code	Title	Credit Hours
<b>1. Choose either POLITICAL ECONOMY or QUANTITATIVE ECONOMICS <sup>1</sup></b>		<b>30</b>
<b>Political Economy Track Required Courses (People &amp; Society) :</b>		
ECO 211	Principles of Microeconomics	
ECO 212	Principles of Macroeconomics	
ECO 300	Microeconomic Theory and Applications (ECO 302 may be taken instead if MTH 161 or equivalent is completed)	
ECO 301	Macroeconomic Theory	
ECO 430	Applied Econometrics	
<b>Major Choice Courses (P&amp;S) - Select five courses (15 credit hours) from the following: <sup>2</sup></b>		
ECO 307	Public Economics	
ECO 311	Labor Economics (I)	
ECO 333	Industrial Economics and Public Policy	
ECO 345	Environmental Economics	
ECO 351	Economics of Development	
ECO 371	Latin America, the Caribbean, and the Global Economy	
ECO 379	The Political Economy of Growth	
ECO 386	Health Economics	
ECO 403	Monetary Economics	
ECO 420	Economic Growth	
ECO 441	International Trade Theory	
ECO 442	International Monetary Economics	
ECO 443	Economic Analysis of Energy and Commodity Markets	

ECO 445	Global Economics: Trade and Currencies	
ECO 496	Directed Studies in Economics	
ECO 498	Special Topics in Economics (People and Society Topics)	
ECO 532	History of Economic Thought	
<b>Students who have completed ECO 302 may select a maximum of two STEM-designated courses (6 credit hours) as their major choice courses. Students who have completed ECO 300 may select a maximum of three STEM-designated courses (9 credit hours) as major choice courses. <sup>2</sup></b>		
ECO 444	Game Theory in Economic Applications.	
ECO 460	Industrial Organization	
ECO 497	Directed Studies in Economics	
ECO 499	Special Topics in Economics (STEM Topics)	
ECO 510	Mathematical Economics and Applications	
ECO 511	Empirical Labor Economics	
ECO 512	Topics in Mathematical Economics	
ECO 520	Advanced Econometrics	
ECO 521	Advanced Macroeconomic Theory	
ECO 533	Advanced Microeconomic Theory	
<b>Quantitative Economics Track Required Courses (STEM) : <sup>3</sup></b>		
ECO 211	Principles of Microeconomics	
ECO 212	Principles of Macroeconomics	
ECO 301	Macroeconomic Theory	
ECO 302	Microeconomic Theory (requires MTH 161 or equivalent as a pre-requisite)	
ECO 430	Applied Econometrics	
<b>Major Choice Courses (STEM): Select five courses (15 credit hours). Only one course of the five major choice courses may be a People &amp; Society ECO major choice course. Students must select four to five STEM-designated major choice courses (12-15 credit hours) from the following <sup>2</sup></b>		
ECO 444	Game Theory in Economic Applications.	
ECO 460	Industrial Organization	
ECO 497	Directed Studies in Economics	
ECO 499	Special Topics in Economics (STEM Topics)	
ECO 510	Mathematical Economics and Applications	
ECO 511	Empirical Labor Economics	
ECO 512	Topics in Mathematical Economics	
ECO 520	Advanced Econometrics	
ECO 521	Advanced Macroeconomic Theory	
ECO 533	Advanced Microeconomic Theory	
<b>2. General Education Requirements</b>		
Written Communication Skills:		
WRS 105	First-Year Writing I	3
WRS 106 or ENG 106 or WRS 107	First-Year Writing II Writing About Literature and Culture First-Year Writing II: STEM	3
Quantitative Skills:		
Calculus Course <sup>4</sup>		4
Areas of Knowledge:		
Arts and Humanities Cognate		9
People & Society or STEM Cognate (fulfilled through the major)		
STEM or People & Society Cognate (depending on which one is fulfilled through the major)		9
<b>3. Additional Graduation Requirements for Degree Completion:</b>		
UMX 100	The University of Miami Experience	0
Second Language Proficiency Requirement (One 200-level language course is required.) <sup>5</sup>		3
Minor (may be used in lieu of a cognate to satisfy an Area of Knowledge in General Education)		15

Natural Science Course <sup>6</sup>	3
Electives <sup>7</sup>	41
Advanced Writing and Communication - see note regarding ECO writing course <sup>8</sup>	
<b>Total Credit Hours</b>	<b>120</b>

- <sup>1</sup> All specific coursework for either major option in Economics must be completed with a grade of "C-" or higher. A minimum cumulative GPA of 2.5 is required for all specific coursework taken in the major. All courses must be taken within the current pre-requisite structure. No ECO course may double count in any other major, minor, or cognate.
- <sup>2</sup> Course pre-requisites vary by course.
- <sup>3</sup> This track requires both MTH 161 or an equivalent calculus course and ECO 302.
- <sup>4</sup> This requirement is satisfied by MAS 110 or MTH 130 or MTH 141 or MTH 151 or MTH 161 or MTH 171 or an equivalent calculus course or higher. Please note: If the student wishes to take ECO 302 or the Quantitative Economics track, then MTH 161 or equivalent must be taken. Also note that if the student wishes to apply to transfer to the Miami Herbert Business School, he/she must take MTH 161 or an equivalent and earn a minimum "B" grade in the course, as well as have a minimum UM grade point average of 3.0.
- <sup>5</sup> Please see the College of Arts and Sciences Bulletin Overview page (<http://bulletin.miami.edu/undergraduate-academic-programs/arts-sciences/>) regarding the "Details of the Second Language Proficiency." One 200-level language course is required.
- <sup>6</sup> This requirement is waived if the student's STEM cognate includes a Natural Science course from the approved list. See the College of Arts and Sciences Bulletin Overview (<http://bulletin.miami.edu/undergraduate-academic-programs/arts-sciences/>) page for more information.
- <sup>7</sup> A minimum of 120 credits is required for graduation. Sufficient credits must be earned in electives to enable the student to complete this minimum of 120 credits. The exact number of elective credits required will vary depending on the number of credits needed to complete all other graduation requirements.
- <sup>8</sup> Advanced Writing and Communication Proficiency: Degree candidates must complete at least four writing courses, and at least one writing course must be in the student's major discipline. Either ECO 301 or ECO 445 will satisfy the College of Arts & Sciences writing requirement in the discipline.

## Sample Plan of Study

This Sample Plan of Study represents one possible version of a new first-year student's 8-semester plan. The individual student's plan may vary depending upon the initial placement into Writing Studies, mathematics, and modern language. Moreover, numerous plan variations are possible if a student enters the University with advanced college credits, wishes to participate in study abroad, chooses a special program option, or selects additional majors or minors.

Note that each major/minor satisfies a particular "Area of Knowledge" within the general education requirements of the University, so that a separate cognate in that same Area of Knowledge is not required. For example, if a student chooses the Political Economy track for the Economics major, then the People and Society Area of Knowledge will be fulfilled by the major. The STEM and Arts and Humanities Areas of Knowledge may likewise be fulfilled by an additional major, or through the minor or a cognate.

Students construct their individualized plans in collaboration with their assigned academic advisor.

Freshman Year		Credit Hours
<b>Fall</b>		
ECO 211	Principles of Microeconomics	3
MTH 161	Calculus I <sup>1</sup>	4
WRS 105	First-Year Writing I	3
UMX 100	The University of Miami Experience	0
Arts and Humanities Cognate Course		3
Language (first course)		3
<b>Credit Hours</b>		<b>16</b>
<b>Spring</b>		
ECO 212	Principles of Macroeconomics	3
WRS 106, ENG 106, or WRS 107	First-Year Writing II or Writing About Literature and Culture or First-Year Writing II: STEM	3
Arts and Humanities Cognate Course		3
Elective or Language (second course)		3
Elective		3
<b>Credit Hours</b>		<b>15</b>

<b>Sophomore Year</b>		
<b>Fall</b>		
ECO 302 or 300	Microeconomic Theory or Microeconomic Theory and Applications	3
Arts and Humanities Cognate Course		3
Minor (first course)		3
Elective or Language (third course)		3
Elective		3
<b>Credit Hours</b>		<b>15</b>
<b>Spring</b>		
ECO 301	Macroeconomic Theory	3
Economics Major Choice Course		3
Minor (second course)		3
People and Society or STEM Cognate Course		3
Elective		3
<b>Credit Hours</b>		<b>15</b>
<b>Junior Year</b>		
<b>Fall</b>		
ECO 430	Applied Econometrics	3
Economics Major Choice Course		3
Minor (third course)		3
People and Society or STEM Cognate Course		3
Elective		3
<b>Credit Hours</b>		<b>15</b>
<b>Spring</b>		
Economics Major Choice Course		3
Minor (fourth course)		3
People and Society or STEM Cognate Course		3
Elective		3
Elective		3
<b>Credit Hours</b>		<b>15</b>
<b>Senior Year</b>		
<b>Fall</b>		
Economics Major Choice Course		3
Minor (fifth course)		3
Natural Science Course (if needed)		3
Elective		3
Elective		3
<b>Credit Hours</b>		<b>15</b>
<b>Spring</b>		
Economics Major Choice Course		3
Elective		3
Elective		3
Elective		3
Elective		2
<b>Credit Hours</b>		<b>14</b>
<b>Total Credit Hours</b>		<b>120</b>

<sup>1</sup> A calculus course is required for the Economics major. If a student wishes to take ECO 302 or selects the Quantitative Economics Major option, then MTH 161 or an equivalent must be taken. If a student has taken an "applied" calculus course such as MAS 110 or MTH 130, then he/she will take ECO 300 instead of ECO 302 and must follow the Political Economy (P&S) Major option for Economics.

## Mission

Economics uses the principle of utility maximizing behavior to provide a unified framework for studying how people make choices. The economics curriculum is designed to give students an understanding of economic theory and its application to a wide range of human behavior. The program provides excellent preparation for careers in business, government, research organizations, and international agencies. It is particularly recommended for students planning graduate study or professional training in fields such as economics, law, business, international studies, public administration, and public health.

## Goals

- To teach students foundational material to ensure they have a deep understanding of economic theories and quantitative methods.
- To prepare students with the skills essential for professional careers and admission to business school, law school, economics Ph.D. programs, or multidisciplinary programs.
- To ensure students demonstrate analytical thinking and problem-solving skills.
- To prepare students for using quantitative tools, analytical models, and conceptual frameworks to analyze economic data.
- To ensure students are able to demonstrate technical writing skills.
- To prepare students to effectively collaborate in group settings and to effectively communicate in both written and oral formats.

## Student Learning Outcomes

- Students will demonstrate proficiency in the fundamentals of economic theories and quantitative methods.
- Students will be able to think analytically and demonstrate problem-solving skills.
- Students will be able to interpret quantitative data appropriately, and select and use appropriate models, conceptual frameworks, and quantitative tools to analyze economic data.