

# MANAGERIAL ECONOMICS, BACHELOR OF SCIENCE

College of Agricultural & Environmental Sciences

## The Major Program

The Managerial Economics major at UC Davis is a disciplinary program combining strong preparation in microeconomic theory and quantitative methods. It prepares students for the analysis of management and policy issues in business, finance, marketing, production, agriculture, food distribution, natural resources, the environment, resource allocation, and international trade and development. Students in the Managerial Economics program develop valuable skills and strengths that lead to careers in business and government. Students specialize in one or more emphases selected from the following:

- *Business Economics* focuses on the economic aspects of managerial decision-making essential for solving problems in business, management, marketing, and finance.
- *International Business Economics* explores the economic drivers and policy challenges in the major emerging markets and focuses on how these markets are impacting the world economy.
- *Environmental & Resource Economics* concentrates on issues related to the use of resources and environmental quality.
- *Agribusiness Economics* focuses on the economic and policy aspects of the production and marketing of foods and fibers.

## Major Advisor

Contact Managerial Economics Student Services at manecon@ucdavis.edu or 530-754-9536.

## Internships & Career Alternatives

Internships for students in Managerial Economics provide additional career experience, information, and preparation in a variety of business enterprises and governmental agencies. For more information, see Internship & Career Center (<http://icc.ucdavis.edu/>). Managerial Economics majors have established careers in every area of business and industry, including marketing, analysis, consulting, financial services, accounting, entrepreneurship, real estate and government. Many graduates have entered advanced degree programs in business management, accounting, finance, agricultural and resource economics, economics, public policy, and law.

## Study Abroad

The Agricultural & Resource Economics department encourages students to complement their Managerial Economics degree with a study abroad experience. Students must seek pre-approval from a Managerial Economics staff advisor for major-related courses. A total of two upper-division courses (maximum four units each) may be applied to major requirements. However, core courses (ARE 100A, ARE 100B, ARE 106, ARE 155, and ECN 101) are excluded. Students are expected to complete ARE 100A and STA 103 prior to taking upper-division classes abroad for the major.

## Domestic Institutions

Upper-division coursework taken at other four-year institutions for credit in the major must be reviewed by the Managerial Economics Lead Faculty Advisor.

## Graduate Study

Students who meet the admission requirements of Graduate Studies and the Department of Agricultural and Resource Economics may pursue studies leading to M.S. and Ph.D. degrees. For information on admission to graduate study and degree requirements, consult the Graduate Program Coordinator in the Department of Agricultural & Resource Economics (<https://catalog.ucdavis.edu/departments-programs-degrees/agricultural-resource-economics/>).

The major requirements below are in addition to meeting University Degree Requirements (<https://catalog.ucdavis.edu/undergraduate-education/university-degree-requirements/>) & College Degree Requirements (<https://catalog.ucdavis.edu/undergraduate-education/college-degree-requirements/>); unless otherwise noted. The minimum number of units required for the Managerial Economics Bachelor of Science is 100.

Code	Title	Units
<b>Major English Requirements</b>		
The following must be completed with minimum C- (or PASS) grades.		
<b>Communication; choose one:</b>		4
CMN 001	Introduction to Public Speaking	
or CMN 001V	Introduction to Public Speaking	
<b>OR</b>		
CMN 003	Interpersonal Communication Competence	
or CMN 003Y	Interpersonal Communication Competence	
or CMN 003V	Interpersonal Communication Competence	
<b>Business Writing; choose one:</b>		4
UWP 104A	Writing in the Professions: Business Writing <sup>1,2</sup>	
or UWP 104AV	Writing in the Professions: Business Writing	
or UWP 104AY	Writing in the Professions: Business Writing	
<b>Major English Requirements Subtotal</b>		8
<b>Preparatory Subject Matter</b>		
All lower-division preparatory coursework must be completed with minimum C- (or PASS) grades; however, STA 103 must be taken for a letter grade.		
<i>Business Law</i>		4
ARE 018	Business Law	
<i>Management (Accounting)</i>		8
MGT 011A	Elementary Accounting	
MGT 011B	Elementary Accounting	
<i>Economics</i>		8
ECN 001A	Principles of Microeconomics	
or ECN 001AV	Principles of Microeconomics	
or ECN 001AY	Principles of Microeconomics	
ECN 001B	Principles of Macroeconomics	
or ECN 001BV	Principles of Macroeconomics	
<i>Mathematics; choose a series:</i>		12-13
The preferred calculus series for Managerial Economics majors is MAT 019. The MAT 016 series is accepted if started prior to Fall 2024. PLS 021, PLS 021V, or ECS 032A is required with the MAT 016 series.		
<b>Choose 019 series, 12 units:</b>		

MAT 019A Calculus for Data-Driven Applications  
& MAT 019B and Calculus for Data-Driven Applications  
& MAT 019C and Calculus for Data-Driven Applications

**OR** choose 016 series with Computer Science, 12-13 units:

MAT 016A Short Calculus  
& MAT 016B DISCONTINUED  
& MAT 016C DISCONTINUED (Discontinued)

**AND** one computer science course:

PLS 021 Application of Computers in Technology  
or PLS 021V Application of Computers in Technology  
or ECS 032A Introduction to Programming  
or ECS 032AV Introduction to Programming

**OR** choose 017 series, 12 units:

MAT 017A Calculus for Biology & Medicine  
& MAT 017B and Calculus for Biology & Medicine  
& MAT 017C and Calculus for Biology & Medicine

**OR** choose 021 series, 12 units:

MAT 021A Calculus  
& MAT 021B and Calculus  
& MAT 021C and Calculus

*Statistics* 8

STA 013 Elementary Statistics  
or STA 013Y Elementary Statistics  
or STA 032 Gateway to Statistical Data Science

STA 103 Applied Statistics for Business & Economics (Must be taken for a letter grade.)

**Preparatory Subject Matter Subtotal** 40-41

**Depth Subject Matter**

*Core Courses* 20

*All core courses must be taken for a letter grade. It is recommended that students complete core courses during their third year.*

ARE 100A Intermediate Microeconomics: Theory of Production & Consumption (Must be completed with a minimum grade of C-) <sup>3</sup>

ARE 100B Intermediate Microeconomics: Imperfect Competition, Markets & Welfare Economics <sup>4</sup>

ARE 106 Econometric Theory & Applications

ARE 155 Operations Research & Management Science

ECN 101 Intermediate Macro Theory

**Restricted Electives; choose at least one of the emphases, below:** 32

Business Economics (p. 2)

International Business Economics (p. 3)

Environmental & Resource Economics (p. 3)

Agribusiness Economics (p. 4)

**Depth Subject Matter Subtotal** 52

**Total Units** 100-101

1

May also count for English Composition.

2

The upper-division composition exam will not satisfy this requirement.

3

**Note:** ECN 100A is not accepted.

4

**Note:** ECN 100B is not accepted.

## Exceptions to All Emphases

The following courses do not apply toward any emphasis:

Code	Title	Units
ARE 113	Fundamentals of Marketing Management	4
ARE 135	Agribusiness Marketing Plan Development	2
ARE 142	Personal Finance	3
ARE 147	Resource & Environment Policy Analysis	3
ARE 147M	Resource & Environmental Policy Analysis	2
ECN 102	Analysis of Economic Data	4
ECN 134	Financial Economics	4
or ECN 134Y	Financial Economics	
ECN 140	Econometrics	4
ECN 151A	Economics of the Labor Market	4
ECN 162	International Economic Relations	4

## Completing More Than One Emphasis

Courses may overlap between emphases. Requirements must be fulfilled as outlined in each emphasis with a minimum of 32 units.

## Major GPA

Students must attain a major GPA of at least a C average (2.000) in courses taken for depth subject matter (core and restricted electives). These courses must be taken for a letter grade. All restricted elective courses taken will be calculated as part of the major GPA, including courses with F grades that have not been repeated.

## Business Economics Emphasis

**Code** **Title** **Units**

All restricted electives must be taken for a letter grade.

Choose 16 units: 16

ARE 107 Econometrics for Business Decisions

ARE 112 Fundamentals of Organization Management

ARE 118 Tax Accounting

ARE 119 Intermediate Managerial Accounting

ARE 136 Managerial Marketing

ARE 157 Analysis for Operations & Production Management

ARE 171 Principles of Finance <sup>1</sup>

ARE 172 Financial Management of the Firm <sup>2</sup>

ARE 173 Capital Markets

Choose remaining 16 units from the above list or from: 16

ARE/ECN 115A Economic Development

ARE 115B/115BY/  
ECN 115B/115BY

ARE 130 Agricultural Markets

ARE 132 Cooperative Business Enterprises

ARE 133 Introduction to Behavioral Economics

ARE 138	International Commodity & Resource Markets
ARE 139	Futures & Options Markets
ARE 140	Farm Management
ARE 143	Investments
ARE 144	Real Estate Economics
ARE 145	Farm & Rural Resources Appraisal
ARE 146	Business, Government Regulation, & Society
ARE 150	Agricultural Labor
ARE 156	Introduction to Mathematical Economics
ARE 194HA	Special Study for Honors Students
ARE 194HB	Special Study for Honors Students
ECN 121A	Industrial Organization
ECN 121B	Industrial Organization
ECN 151B	Economics of Human Resources
<b>Total Units</b>	<b>32</b>

1

Formerly ARE 171A Discontinued.

2

Formerly ARE 171B Discontinued.

## International Business Economics Emphasis

Code	Title	Units
All restricted electives must be taken for a letter grade.		
Choose 20 units:		20
ARE 107	Econometrics for Business Decisions	
ARE/ECN 115A	Economic Development	
ARE 115B/115BY/ ECN 115B/115BY	Economic Development	
ARE 138	International Commodity & Resource Markets	
ARE 139	Futures & Options Markets	
ARE 146	Business, Government Regulation, & Society	
ARE 165	Emerging Economies & Globalization	
ARE 166	Economics of Global Poverty Reduction: What Works & Why	
ECN 160A	International Microeconomics	
ECN 160B	International Macroeconomics	
ECN 171	Economy of East Asia	
Choose the remaining 12 units from the above list or from:		12
ARE 130	Agricultural Markets	
ARE 171	Principles of Finance <sup>1</sup>	
ARE 172	Financial Management of the Firm <sup>2</sup>	
ARE 173	Capital Markets	
ARE/ESP 175	Natural Resource Economics	
ARE 176	Environmental Economics	
ARE 194HA	Special Study for Honors Students	
ARE 194HB	Special Study for Honors Students	
ECN 121A	Industrial Organization	

ECN 121B	Industrial Organization
POL 130	Recent U.S. Foreign Policy

**Total Units** 32

1

Formerly ARE 171A.

2

Formerly ARE 171B.

## Environmental & Resource Economics Emphasis

Code	Title	Units
All restricted electives must be taken for a letter grade.		
Choose eight units:		8
ARE/ESP 175	Natural Resource Economics	
ARE 176	Environmental Economics	
Choose 20 units:		20
ARE 107	Econometrics for Business Decisions	
ARE 120	Agricultural Policy	
ARE 132	Cooperative Business Enterprises	
ARE 138	International Commodity & Resource Markets	
ARE 140	Farm Management	
ARE 145	Farm & Rural Resources Appraisal	
ARE 146	Business, Government Regulation, & Society	
ARE 150	Agricultural Labor	
ARE 156	Introduction to Mathematical Economics	
ARE 194HA	Special Study for Honors Students	
ARE 194HB	Special Study for Honors Students	
ECN 125	Energy Economics	
ECN 130 or ECN 130Y	Public Microeconomics	
ESP 168A	Methods of Environmental Policy Analysis	
ESP 168B	Methods of Environmental Policy Evaluation	
ESP 178	Applied Research Methods	
Choose the remaining 4 units from the above list or from:		4
Upper division in Agricultural & Resource Economics (ARE).		
Upper division in Economics (ECN).		
ESP 160	The Policy Process	
ESP 161	Environmental Law	
ESP/ECI 163	Energy & Environmental Aspects of Transportation	
ESP 167	Energy Policy	
ESP 171	Urban & Regional Planning	
ESP 172	Public Lands Management	
ESP 173	Land Use & Growth Controls	
ETX 138	Legal Aspects of Environmental Toxicology	

**Total Units** 32

## Agribusiness Economics Emphasis

Code	Title	Units
All restricted electives must be taken for a letter grade.		
Choose 8 units:		8
ARE 120	Agricultural Policy	
ARE 140	Farm Management	
ARE 150	Agricultural Labor	
Choose 16 units:		16
ARE 107	Econometrics for Business Decisions	
ARE 120	Agricultural Policy	
ARE 121	Economics of Agricultural Sustainability	
ARE 130	Agricultural Markets	
ARE 132	Cooperative Business Enterprises	
ARE 138	International Commodity & Resource Markets	
ARE 139	Futures & Options Markets	
ARE 140	Farm Management	
ARE 145	Farm & Rural Resources Appraisal	
ARE 150	Agricultural Labor	
Choose the remaining 8 units from the above list or from:		8
Upper division in Agricultural and Resource Economics (ARE).		
Upper division in Economics (ECN).		
<b>Total Units</b>		<b>32</b>