

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 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. For more detailed instructions and a list of pre-approved Study Abroad courses, see Managerial Economics Study Abroad (<https://managerialeconomics.ucdavis.edu/education-abroad/>).

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
Major English Requirements		
The following must be completed with minimum C- (or PASS) grades.		
Communication; choose one:		4
CMN 001	Introduction to Public Speaking	
or CMN 001V	Introduction to Public Speaking	
OR		
CMN 003	Interpersonal Communication Competence	
or CMN 003V	Interpersonal Communication Competence	
or CMN 003Y	Interpersonal Communication Competence	
Business Writing; choose one:		4
UWP 104A	Writing in the Professions: Business Writing ^{1,2}	
or UWP 104AV	Writing in the Professions: Business Writing	
or UWP 104AY	Writing in the Professions: Business Writing	
Major English Requirements Subtotal		8
Preparatory Subject Matter		
All lower-division preparatory coursework must be completed with minimum C- (or PASS) grades; however, STA 103 must be taken for a letter grade.		
Business Law		4
ARE 018	Business Law	
Management (Accounting)		
MGT 011A	Elementary Accounting	8
MGT 011B	Elementary Accounting	
Economics		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	
Mathematics; choose a series:		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.

Choose 019 series, 12 units:	
MAT 019A & MAT 019B & MAT 019C	Calculus for Data-Driven Applications and Calculus for Data-Driven Applications and Calculus for Data-Driven Applications
OR choose 017 series, 12 units:	
MAT 017A & MAT 017B & MAT 017C	Calculus for Biology & Medicine and Calculus for Biology & Medicine and Calculus for Biology & Medicine
OR choose 021 series, 12 units:	
MAT 021A & MAT 021B & MAT 021C	Calculus and Calculus and Calculus
<i>Statistics</i> 8	
STA 013	Elementary Statistics (Must be taken for a letter grade)
or STA 013V	
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	
<i>Core Courses</i> 20	
<i>All core courses must be taken for a letter grade. It is recommended that students complete core courses during their third year.</i>	
ARE 100A	Intermediate Microeconomics: Theory of Production & Consumption (Must be completed with a minimum grade of C-) ³
ARE 100B	Intermediate Microeconomics: Imperfect Competition, Markets & Welfare Economics ⁴
ARE 106	Econometric Theory & Applications
ARE 155	Operations Research & Management Science
ECN 101	Intermediate Macro Theory
Restricted Electives; choose at least one emphasis: 32	
Business Economics (p. 2)	
International Business Economics (p. 3)	
Environmental & Resource Economics (p. 3)	
Agribusiness Economics (p. 3)	
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.

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 ¹	
ARE 172	Corporate Finance ²	
ARE 173	Investments	
Choose remaining 16 units from above or the following list:		16
ARE 115A or ECN 115A	Economic Development	
ARE 115B or ARE 115BY or ECN 115B or ECN 115BY	Economic Development	
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	Basics of Investing	
ARE 144	Real Estate Economics	
ARE 145	Farm & Rural Resources Appraisal	
ARE 146	Economics of Business Regulation	
ARE 150	Agricultural Labor	
ARE 156	Introduction to Mathematical Economics	
ARE 194HA	Senior Research Thesis	
ARE 194HB	Senior Research Thesis	
ECN 121A	Industrial Organization	
ECN 121B	Industrial Organization	
ECN 151B	Economics of Human Resources	
Total Units		32

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 115A	Economic Development	
or ECN 115A	Economic Development	
ARE 115B	Economic Development	
or ARE 115BY	Economic Development	
or ECN 115B	Economic Development	
or ECN 115BY	Economic Development	
ARE 138	International Commodity & Resource Markets	
ARE 139	Futures & Options Markets	
ARE 146	Economics of Business Regulation	
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 above or the following list:		12
ARE 130	Agricultural Markets	
ARE 171	Principles of Finance ¹	
ARE 172	Corporate Finance ²	
ARE 173	Investments	
ARE 175	Natural Resource Economics	
or ESP 175	Natural Resource Economics	
ARE 176	Environmental Economics	
ARE 194HA	Senior Research Thesis	
ARE 194HB	Senior Research Thesis	
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 175	Natural Resource Economics	
or 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	Economics of Business Regulation
ARE 150	Agricultural Labor
ARE 156	Introduction to Mathematical Economics
ARE 194HA	Senior Research Thesis
ARE 194HB	Senior Research Thesis
ECN 125	Energy Economics
ECN 130	Public Microeconomics
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 above, from any upper division course in ARE or ECN, or from the following list:	4
ESP 160	The Policy Process
ESP 161	Environmental Law
ESP 163	Energy & Environmental Aspects of Transportation
or 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 above or from any upper division course in ARE or ECN. 8

Total Units 32

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.