# **DEPARTMENT OF ECONOMICS**

# **Mission Statement**

The mission of the Department of Economics at The University of Texas at San Antonio is to offer courses and degree programs at both the undergraduate and graduate levels that provide students with the opportunity to gain the necessary theoretical and quantitative tools in economics such that they can understand and apply economics in their daily lives, seek advanced degrees in economics, pursue careers in the global marketplace, and engage in public policy-making. It is also the mission of the Department to provide an environment for its faculty and students to engage in research that will further the understanding of economics and enhance the reputation of the Department, the Carlos Alvarez College of Business, and the University.

The Department of Economics offers both a Bachelor of Arts degree and a Bachelor of Business Administration degree in Economics. Economics is a highly versatile major that assists students in pursuing a variety of careers, including positions in business, the public sector, the legal field, and politics, where knowledge of economics is a fundamental asset. The department also offers a minor in economics that is open to all majors in the University.

- B.B.A. degree in Economics (p. 1)
- B.A. degree in Economics (p. 4)
- Accelerated Master of Science in Economics (p. 6)

## **Bachelor of Business Administration Degree in Economics**

The minimum semester credit hours for the Bachelor of Business Administration (B.B.A.) degree in Economics is 120, at least 39 of which must be at the upper-division level.

All candidates seeking this degree must fulfill the Core Curriculum requirements, the Common Body of Knowledge (CBK) requirements, and the degree requirements, which are listed below.

# Core Curriculum Requirements (42 semester credit hours)

Students seeking the B.B.A. degree in Economics must fulfill University Core Curriculum requirements in the same manner as other students.

MAT 1053 and MAT 1133 should be used to satisfy the core requirement in Mathematics (020) and the core requirement in the Component Area Option (090). ECO 2023 should be used to satisfy the core requirement in Social and Behavioral Sciences (080).

MAT 1053, MAT 1133, and ECO 2023 may be used to satisfy both Core Curriculum requirements and Common Body of Knowledge (CBK) requirements.

All degrees in the Carlos Alvarez College of Business (ACOB) require 120 hours. If students elect to take a course that satisfies both a Core and ACOB requirement, students may need to take an additional course to meet the 120 hours.

#### Core Curriculum Component Area Requirements (http://catalog.utsa.edu/ undergraduate/bachelorsdegreeregulations/degreerequirements/ corecurriculumcomponentarearequirements/)

Total Credit Hours	42
Component Area Option	3
Social and Behavioral Sciences	3
Government-Political Science	6
American History	6
Creative Arts	3
Language, Philosophy and Culture	3
Life and Physical Sciences	6
Mathematics	3
Communication	6
First Year Experience Requirement	3
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## **Common Body of Knowledge (CBK)**

All students seeking a B.B.A. degree in the Carlos Alvarez College of Business must complete the following Common Body of Knowledge (CBK) courses in addition to the Core Curriculum.

ACC 2013	Principles of Accounting I	3
ACC 2033	Principles of Accounting II	3
ECO 2013	Introductory Macroeconomics	3
ECO 2023	Introductory Microeconomics (satisfies Social and Behavioral Sciences Core Curriculum requirement)	3
FIN 3013	Principles of Business Finance	3
GBA 2013	Legal, Social and Ethical Issues in Business	3
IS 1403	Business Information Systems Fluency	3
or IS 1413	Excel for Business Information Systems	
IS 3003	Principles of Information Systems for Management	3
MAT 1053	Mathematics for Business (satisfies Mathematics Core Curriculum requirement; this course is not required for Actuarial Science majors) <sup>1</sup>	3
MAT 1133	Calculus for Business (satisfies Mathematics or Component Area Option Core Curriculum requirement; Actuarial Science majors must take MAT 1213 in lieu of MAT 1133)	3
MGT 3003	Business Communication and Professional Development	3
MGT 3013	Introduction to Organization Theory, Behavior, and Management	3
MGT 4893	Management Strategy (taken in semester of graduation)	3
MKT 3013	Principles of Marketing	3
MS 1023	Business Statistics with Computer Applications I (Actuarial Science majors must take STA 3003 in lieu of MS 1023)	3
MS 3043	Business Statistics with Computer Applications II (Actuarial Science majors must take STA 3513 in lieu of MS 3043)	3
MS 3053	Management Science and Operations Technology	3

Note: Students majoring in Actuarial Science, Economics, Finance, Operations and Supply Chain Management and Business Analytics are strongly encouraged to select IS 1413 Excel for Business Information Systems. IS 1413 is required for Accounting majors.

Students may elect to substitute MAT 1093 Precalculus for MAT 1053 Mathematics for Business. Students electing to take MAT 1093 will need to meet prerequisites or achieve satisfactory performance on a placement examination. Visit UTSA Testing Services for more information regarding math placement exams.

In addition to the Core Curriculum requirements and requirements from the Carlos Alvarez College of Business Common Body of Knowledge (CBK), all candidates for the degree must complete the following degree requirements.

## **Gateway Course**

Students pursuing the B.B.A. degree in Economics must successfully complete the business math gateway course MAT 1053 (TCCN MATH 1324) or equivalent with a grade of "C-" or better in no more than two attempts. A student who is unable to successfully complete this course within two attempts, including dropping the course with a grade of "W" or by taking an equivalent course at another institution, will be required to change their major outside of business. **Upon the second failed attempt students will be changed to undeclared and will not be eligible for any Bachelor of Business Administration (B.B.A) degree or a Bachelor of Arts in Economics degree**.

Code	Title	С	redit
		н	ours

Mathematics for Business

## **Degree Requirements**

MAT 1053

Code	Title	Credit Hours
A. Major Requirements		33
ECO 2013	Introductory Macroeconomics	
ECO 2023	Introductory Microeconomics <sup>1</sup>	
ECO 3013	Intermediate Microeconomics	
ECO 3053	Intermediate Macroeconomics	
ECO 3113	Introduction to Mathematical Economics	\$
ECO 3123	Introduction to Econometrics	
15 semester credit ho	urs of upper-division Economics electives	
B. Support Work		45
	ody of Knowledge (51 SCH) (9 SCH satisfy rements and additional 3 SCH satisfy the	
C. Free Electives		9
9 semester credit hou	rs of free electives	
<b>Recommendations:</b>		
	ee Electives requirement, students are plete one of the Focus Options listed in th	e
	pursuing a Ph.D. in Economics or Finance ir of the Economics department.	ē
Total Credit Hours		87

- <sup>1</sup> ECO 2023 may also be used to satisfy Core requirement in Social and Behavioral Sciences.
- <sup>2</sup> Semester credit hours for ECO 2013 and ECO 2023 count toward the Major requirement.
- <sup>3</sup> If applicable, a course appearing under a focus option may be counted toward Major or Support Work requirements and not as a free elective. Note that an individual focus option may not exhaust the semester credit hours available for free electives. Semester credit hours required to achieve the total of 120 semester credit hours for the degree can be completed by way of one or more focus options, or by using any other combination of free electives.

#### **Focus Options**

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A Focus Option is a pathway of courses connected by a theme, to support the degree planning of a student. One or more Focus Options may be pursued to help satisfy the Free Electives requirement.

If applicable, a course appearing under a focus option may be counted toward the Major or Support Work requirements instead of the Free Elective requirement. Completion of a Focus Option may not exhaust the semester credit hours available for free electives. Focus Options will not appear on the transcript or diploma.

Code	Title	Credit Hours
Focus Option 1, Quantita	tive Economics and Analytics	21
ACC 2013	Principles of Accounting I <sup>1</sup>	
MS 3043	Business Statistics with Computer Applications II <sup>1</sup>	
or STA 3003	Statistical Methods and Applications	
Two of the following: <sup>2</sup>	2	
ECO 4413	Game Theory	
ECO 4513	Industrial Organization	
ECO 4553	Public Economics	
ECO 4583	Labor Economics	
ECO 4813	Seminar on Research in Economics	
One of the following:		
STA 4133	Introduction to Programming and Data Management in SAS	
STA 4233	Introduction to Programming and Data Management in R	
MS 3083	Data Management for Business Analytic	s
Two of the following:		
MS 3073	Business Intelligence and Analytics	
MS 3313	Statistical Modeling for Business Analyti	CS
MS 4373	Data Mining for Business Analytics	
STA 3313	Statistical Sampling	
STA 3333	Introduction to Data Science and Analyti	cs
STA 4143	Data Mining and Predictive Modeling	
Code	Title	Credit Hours
Focus Option 2, Business	s Competency	9
Complete a Business select Analytics or Mo	Competency. Students are recommended deling. <sup>3</sup>	to

- <sup>1</sup> Semester credit hours for ACC 2013 and MS 3043 may be counted toward the Support Work requirement, as part of the Common Body of Knowledge.
- <sup>2</sup> Semester credit hours of ECO courses may be counted toward the Major requirement.
- <sup>3</sup> Semester credit hours for ECO 3123 are counted toward the Major requirement.

## Course Sequence Guide for B.B.A. Degree in Economics

This course sequence guide is designed to assist students in completing their UTSA undergraduate business degree requirements. This is a term-by-term sample course guide. Students must satisfy other requirements in their catalog and meet with their academic advisor for an individualized degree plan. Progress within this guide depends upon such factors as course availability, individual student academic preparation, student time management, work obligations, and individual financial considerations. Students may choose to take courses during Summer terms to reduce course loads during long semesters.

#### **Recommended Four-Year Academic Plan**

First Year		
Fall		Credit Hours
AIS 1233	AIS: Business (core)	3
ECO 2023	Introductory Microeconomics (core, CBK, and major) <sup>1</sup>	3
MAT 1053 or MAT 1093	Mathematics for Business (core and CBK) <sup>1</sup>	3
	or Precalculus	-
WRC 1013	Freshman Composition I (core)	3
American History (co		3
	Credit Hours	15
Spring		
WRC 1023	Freshman Composition II (core)	3
MAT 1133 or MAT 1213	Calculus for Business (core and CBK) <sup>1</sup> or Calculus I	3
ECO 2013	Introductory Macroeconomics (CBK and major)	3
IS 1413	Excel for Business Information Systems (CBK)	3
Language, Philosoph	ny & Culture (core)	3
	Credit Hours	15
Second Year Fall		
ECO 3113	Introduction to Mathematical Economics (major)	3
MS 1023	Business Statistics with Computer Applications I (CBK)	3
ACC 2013	Principles of Accounting I (CBK)	3
IS 3003	Principles of Information Systems for Management (CBK)	3
American History (co	ore)	3
Spring	Credit Hours	15
ECO 3013	Intermediate Microeconomics (major)	3

	Total Credit Hours	120
	Credit Hours	15
Life & Physical Se	· · ·	3
(major)	elective (free elective)	3
(major)	conomics elective (3XXX or 4XXX level)	3
MGT 4893 Upper-division ec	Management Strategy (CBK) conomics elective (3XXX or 4XXX level)	3
Spring		
	Credit Hours	15
	elective (free elective)	3
	conomics elective (3XXX or 4XXX level)	3
Upper-division ec (major)	conomics elective (3XXX or 4XXX level)	3
MGT 3013	Introduction to Organization Theory, Behavior, and Management (CBK)	3
Fourth Year Fall MKT 3013	Principles of Marketing (CBK)	3
Life & Physical So	Credit Hours	3
Focus option or e Life & Physical So	elective (free elective)	3
(major)	conomics elective (3XXX or 4XXX level)	3
GBA 2013	Legal, Social and Ethical Issues in Business (CBK)	3
<b>Spring</b> MS 3053	Management Science and Operations Technology (CBK)	3
	Credit Hours	15
	tical Science (core)	3
Creative Arts (cor	Professional Development (CBK) re)	3
MGT 3003	Business Communication and	3
ECO 3123	Introduction to Econometrics (major)	3
Third Year Fall ECO 3053	Intermediate Macroeconomics (major)	3
	Credit Hours	15
Government-Polit	tical Science (core)	3
FIN 3013	Principles of Business Finance (CBK)	3
ACC 2033	Principles of Accounting II (CBK)	3
MS 3043	Business Statistics with Computer Applications II (CBK)	3

<sup>1</sup> Carlos Alvarez College of Business students should take MAT 1053 (or MAT 1093), MAT 1133 (or MAT 1213), and ECO 2023 to satisfy both Core Curriculum and CBK requirements.

# **Bachelor of Arts Degree in Economics**

The minimum semester credit hours for the Bachelor of Arts (B.A.) degree in Economics is 120, at least 39 of which must be at the upper-division level.

All candidates seeking this degree must fulfill the Core Curriculum requirements and the degree requirements, which are listed below.

# Core Curriculum Requirements (42 semester credit hours)

Students seeking the B.A. degree in Economics must fulfill University Core Curriculum requirements in the same manner as other students.

MAT 1053 (or MAT 1093) and MAT 1133 (or MAT 1213) should be used to satisfy the core requirement in Mathematics (020) and the core requirement in the Component Area Option (090). ECO 2023 should be used to satisfy the core requirement in Social and Behavioral Sciences (080).

All degrees in the Carlos Alvarez College of Business require 120 hours.

#### Core Curriculum Component Area Requirements (http://catalog.utsa.edu/ undergraduate/bachelorsdegreeregulations/degreerequirements/ corecurriculumcomponentarearequirements/)

First Year Experience Requirement	3
Communication	6
Mathematics	3
Life and Physical Sciences	6
Language, Philosophy and Culture	3
Creative Arts	3
American History	6
Government-Political Science	6
Social and Behavioral Sciences	3
Component Area Option	3
Total Credit Hours	42

## **Gateway Course**

Students pursuing the B.A. degree in Economics must successfully complete the business math gateway course MAT 1053 (TCCN MATH 1324) or equivalent with a grade of "C-" or better in no more than two attempts. A student who is unable to successfully complete this course within two attempts, including dropping the course with a grade of "W" or by taking an equivalent course at another institution, will be required to change their major outside of business. **Upon the second failed attempt students will be changed to undeclared (UND) and will not be eligible for any Bachelor of Business Administration (B.B.A) degree or a Bachelor of Arts in Economics degree.** 

Code	Title	Credit
		Hours
MAT 1053	Mathematics for Business	3

## **Degree Requirements**

In addition to the Core Curriculum requirements, all candidates for the degree must complete the following degree requirements.

Code	Title	Credit Hours
A. Major Requirements		33
ECO 2013	Introductory Macroeconomics	
ECO 2023	Introductory Microeconomics <sup>1</sup>	
ECO 3013	Intermediate Microeconomics	
ECO 3053	Intermediate Macroeconomics	
ECO 3113	Introduction to Mathematical Economics	
ECO 3123	Introduction to Econometrics	
15 semester credit ho	ours in upper-division Economics electives	
B. Support Work		9
Option 1.		
MAT 1053	Mathematics for Business	
MAT 1133	Calculus for Business	
Option 2. Quantitative	e pathway <sup>2</sup>	
MAT 1093	Precalculus	
MAT 1213	Calculus I	
and		
STA 3003	Statistical Methods and Applications	
or MS 3043	Business Statistics with Computer Applications II	
C. Free Electives		45
	ours of free electives, of which 12 semester at the upper-division level	
Recommendations:		
	ee Electives requirement, students are nplete one or more of the Focus Options elow. <sup>3</sup>	
discipline such as Sta	er completing a minor in a quantitative atistics, Mathematics, or Computer Science d social science such as Political Science, logy.	,
should inform the cha as possible. To be a c Ph.D. program, stude	n pursuing a Ph.D. in Economics or Finance air of the Economics department as soon competitive candidate for admission to a nts are strongly recommended to complete h.D. Focus Option (see below). A minor in advisable.	
Total Credit Hours		87
<ul> <li>Behavioral Sciences.</li> <li>Students considering should consider choos</li> <li>If applicable, a course counted toward Major free elective. Note that</li> </ul>	e used to satisfy Core requirement in Social a quantitative pathway through the degree sing MAT 1093 and MAT 1213. appearing under a Focus Option may be or Support Work requirements and not as a t an individual focus option may not exhaus purs available for free electives. Semester c	a st

free elective. Note that an individual focus option may not exhaust the semester credit hours available for free electives. Semester credit hours required to achieve the total of 120 semester credit hours for the degree can be completed by way of one or more focus options, or by using any other combination of free electives.

#### **Focus Options**

A Focus Option is a pathway of courses connected by a theme, to support the degree planning of a student. One or more Focus Options may be pursued to help satisfy the Free Electives requirement.

Geography of Local Economic Activity

If applicable, a course appearing under a focus option may be counted toward the Major or Support Work requirements instead of the Free Elective requirement. Completion of a Focus Option may not exhaust the semester credit hours available for free electives. Focus Options will not appear on the transcript or diploma.

GES 3533

Code	Title	Credit Hours
Focus Option 1, Quantita	tive Economics and Analytics	27
ACC 2013	Principles of Accounting I	
ECO 3253	Economics of Public and Social Issues <sup>1</sup>	
STA 3003	Statistical Methods and Applications <sup>2</sup>	
or MS 3043	Business Statistics with Computer Applications II	
One of the following:		
STA 4243	Data Exploratory Methods with Python	
IS 2053	Programming I	
Two of the following:	1	
ECO 4413	Game Theory	
ECO 4513	Industrial Organization	
ECO 4553	Public Economics	
ECO 4583	Labor Economics	
ECO 4813	Seminar on Research in Economics	
One of the following:		
STA 4133	Introduction to Programming and Data Management in SAS	
STA 4233	Introduction to Programming and Data Management in R	
MS 3083	Data Management for Business Analytic	S
Two of the following:		
MS 3073	Business Intelligence and Analytics	
MS 3313	Statistical Modeling for Business Analyti	CS
MS 4373	Data Mining for Business Analytics	
STA 3313	Statistical Sampling	
STA 3333	Introduction to Data Science and Analyti	cs
STA 4143	Data Mining and Predictive Modeling	
Code	Title	Credit Hours
Focus Option 2, Human	and Social Well-being	24
Two of the following:		
SOC 1013	Introduction to Sociology	
GES 2623	Human Geography: People, Place, Cultur	е
PSY 1013	Introduction to Psychology	
Four of the following:	1	
ECO 3233	Health Economics and Policy	
ECO 3253	Economics of Public and Social Issues	

GES 3573		
010 0010	Urban Planning and Development	
GES 3613	Conservation of Resources	
GES 3633	Geography of Globalization and Development	
GES 3733	Urban and Regional Analysis	
POL 3483	International Political Economy	
POL 3553	The Welfare State in Comparative Perspective	
POL 3633	Political Economy	
POL 3763	Globalization	
PSY 2533	Social Psychology	
PSY 2563	Cognitive Psychology	
PSY 3203	Industrial and Organizational Psycholog	y
SOC 3193	The Sociology of Work and Occupations	-
SOC 3283	Poverty	
Code	Title	Credit Hours
Focus Option 3, Econom	ics Pre-Ph.D.	27
MAT 1213	Calculus I <sup>2</sup>	
MAT 1223	Calculus II	
MAT 2213	Calculus III	
MAT 2233	Linear Algebra	
STA 3003	Statistical Methods and Applications <sup>2</sup>	
STA 3513	Probability and Statistics	
STA 3523	Mathematical Statistics for Inference	
IS 2053	Programming I	
ECO 4813	Seminar on Research in Economics <sup>1</sup>	
	Seminar on Research in Economics <sup>1</sup> Title	Credit
Code Focus Option 4, Econom		Credit Hours 18
Code Focus Option 4, Econom	Title ics and Machine Learning/Artificial	Hours
Code Focus Option 4, Econom Intelligence MAT 1213	Title	Hours
Code Focus Option 4, Econom Intelligence	Title ics and Machine Learning/Artificial Calculus I <sup>2</sup> Calculus II	Hours
Code Focus Option 4, Econom Intelligence MAT 1213 MAT 1223 ECO 4413	Title ics and Machine Learning/Artificial Calculus I <sup>2</sup>	Hours
Code Focus Option 4, Econom Intelligence MAT 1213 MAT 1223	Title ics and Machine Learning/Artificial Calculus I <sup>2</sup> Calculus II Game Theory <sup>1</sup>	Hours
Code Focus Option 4, Econom Intelligence MAT 1213 MAT 1223 ECO 4413 One of the following:	Title ics and Machine Learning/Artificial Calculus I <sup>2</sup> Calculus II Game Theory <sup>1</sup> Programming I for Computer Scientists	Hours
Code Focus Option 4, Econom Intelligence MAT 1213 MAT 1223 ECO 4413 One of the following: CS 1083 IS 2053	Title ics and Machine Learning/Artificial Calculus I <sup>2</sup> Calculus II Game Theory <sup>1</sup>	Hours
Code Focus Option 4, Econom Intelligence MAT 1213 MAT 1223 ECO 4413 One of the following: CS 1083	Title ics and Machine Learning/Artificial Calculus I <sup>2</sup> Calculus II Game Theory <sup>1</sup> Programming I for Computer Scientists Programming I	Hours
Code Focus Option 4, Econom Intelligence MAT 1213 MAT 1223 ECO 4413 One of the following: CS 1083 IS 2053 One of the following:	Title ics and Machine Learning/Artificial Calculus I <sup>2</sup> Calculus II Game Theory <sup>1</sup> Programming I for Computer Scientists Programming I Computer Programming in C	Hours
Code Focus Option 4, Econom Intelligence MAT 1213 MAT 1223 ECO 4413 One of the following: CS 1083 IS 2053 One of the following: CS 2713 IS 2063	Title ics and Machine Learning/Artificial Calculus I <sup>2</sup> Calculus II Game Theory <sup>1</sup> Programming I for Computer Scientists Programming I	Hours
Code Focus Option 4, Econom Intelligence MAT 1213 MAT 1223 ECO 4413 One of the following: CS 1083 IS 2053 One of the following: CS 2713 IS 2063 One of the following:	Title ics and Machine Learning/Artificial Calculus I <sup>2</sup> Calculus II Game Theory <sup>1</sup> Programming I for Computer Scientists Programming I Computer Programming in C Programming II	Hours
Code Focus Option 4, Econom Intelligence MAT 1213 MAT 1223 ECO 4413 One of the following: CS 1083 IS 2053 One of the following: CS 2713 IS 2063 One of the following: CS 3793	Title         Calculus I         Calculus I         Game Theory 1         Programming I for Computer Scientists         Artificial Intelligence	Hours
Code Focus Option 4, Econom Intelligence MAT 1213 MAT 1223 ECO 4413 One of the following: CS 1083 IS 2053 One of the following: CS 2713 IS 2063 One of the following: CS 3793 CS 4253	Title         Calculus I         Calculus II         Game Theory 1         Programming I for Computer Scientists         Artificial Intelligence         Machine Learning	Hours
Code Focus Option 4, Econom Intelligence MAT 1213 MAT 1223 ECO 4413 One of the following: CS 1083 IS 2053 One of the following: CS 2713 IS 2063 One of the following: CS 3793	Title         Calculus I         Calculus I         Game Theory 1         Programming I for Computer Scientists         Artificial Intelligence	Hours
Code Focus Option 4, Econom Intelligence MAT 1213 MAT 1223 ECO 4413 One of the following: CS 1083 IS 2053 One of the following: CS 2713 IS 2063 One of the following: CS 3793 CS 4253 CS 4263	Title         Calculus I <sup>2</sup> Calculus II         Calculus II         Game Theory <sup>1</sup> Programming I for Computer Scientists         Programming I         Artificial Intelligence         Machine Learning         Deep Learning	Hours 18
Code Focus Option 4, Econom Intelligence MAT 1213 MAT 1223 ECO 4413 One of the following: CS 1083 IS 2053 One of the following: CS 2713 IS 2063 One of the following: CS 3793 CS 4253 CS 4263 IS 4043 Code	Title   Calculus I   Calculus I   Calculus I   Game Theory 1   Programming I for Computer Scientists   Programming I for Computer Scientists   Programming I for Computer Scientists   Programming I   Artificial Intelligence   Machine Learning   Deep Learning   Natural Language Processing   Title	Hours 18 Credit Hours
Code Focus Option 4, Econom Intelligence MAT 1213 MAT 1223 ECO 4413 One of the following: CS 1083 IS 2053 One of the following: CS 2713 IS 2063 One of the following: CS 3793 CS 4253 CS 4253 CS 4263 IS 4043 Code	Title   Calculus I   Calculus I   Calculus I   Game Theory 1   Programming I for Computer Scientists   Programming I for Computer Scientists   Programming I for Computer Scientists   Programming I   Artificial Intelligence   Machine Learning   Deep Learning   Natural Language Processing   Title	Hours 18 Credit Hours 9

**Environmental Economics** 

Behavioral Economics and Finance

**Economics of Migration** 

**Development Economics** 

**Public Economics** 

Labor Economics

ECO 3413

ECO 3513

ECO 4233

ECO 4303

ECO 4553

ECO 4583

- <sup>1</sup> Semester credit hours for ECO courses may be counted toward the Major requirement.
- <sup>2</sup> Semester credit hours for STA 3003 and MAT 1213 may be counted toward the Support Work requirement.
- <sup>3</sup> Semester credit hours for ECO 3123 are counted toward the Major requirement.

## **Course Sequence Guide for B.A. Degree in Economics**

This course sequence guide is designed to assist students in completing their UTSA undergraduate business degree requirements. This is a term-by-term sample course guide. Students must satisfy other requirements in their catalog and meet with their academic advisor for an individualized degree plan. Progress within this guide depends upon such factors as course availability, individual student academic preparation, student time management, work obligations, and individual financial considerations. Students may choose to take courses during Summer terms to reduce course loads during long semesters.

#### **Recommended Four-Year Academic Plan**

First Year			
Fall		Credit Hours	
AIS 1233	AIS: Business	3	
WRC 1013	Freshman Composition I (core)	3	
MAT 1053 or MAT 1093	Mathematics for Business (core and support work) <sup>1</sup> or Precalculus	3	
ECO 2023	Introductory Microeconomics (core and major) <sup>1</sup>	3	
American History (core)			
	Credit Hours	15	
Spring			
ECO 2013	Introductory Macroeconomics (major)	3	
WRC 1023	Freshman Composition II (core)	3	
MAT 1133 or MAT 1213	Calculus for Business (core and support work) <sup>1</sup> or Calculus I	3	
Language, Philosophy	3		
Government-Political	Government-Political Science (core)		
	Credit Hours	15	
Second Year			
Fall			
ECO 3113	Introduction to Mathematical Economics (major)	3	
STA 3003	Statistical Methods and Applications (support work)	3	
Focus option or elective (free elective)		3	
American History (core)		3	
Life & Physical Sciences (core)		3	
	Credit Hours	15	
Spring			
ECO 3013	Intermediate Microeconomics (major)	3	
Life & Physical Scient	3		
Focus option or elect	3		

Fall         ECO 3053       Intermediate Macroeconomics (major)         ECO 3123       Introduction to Econometrics (major)         ECO 3123       Introduction to Econometrics (major)         Focus option or elective (free elective)         Creative Arts (core)         Government-Political Science (core)         Credit Hours         Spring         Upper-division ECO elective (3XXX or 4XXX level) (major)         Upper-division ECO elective (3XXX or 4XXX level) (major)         Upper-division focus option or elective (free elective)         Credit Hours         Fourth Year	Focus option or elective (free elective)		
Third Year Fall ECO 3053 Intermediate Macroeconomics (major) ECO 3123 Introduction to Econometrics (major) Focus option or elective (free elective) Creative Arts (core) Government-Political Science (core) Credit Hours Spring Upper-division ECO elective (3XXX or 4XXX level) (major) Upper-division focus option or elective (free elective) Focus option or elective (f	Focus option or	elective (free elective)	3
Fall Fall Fall Fall Fall Fall Fall Fall		Credit Hours	15
ECO 3053 Intermediate Macroeconomics (major) ECO 3123 Introduction to Econometrics (major) Focus option or elective (free elective) Creative Arts (core) Government-Political Science (core) Credit Hours Spring Upper-division ECO elective (3XXX or 4XXX level) (major) Upper-division focus option or elective (free elective) Fourth Year Fall Upper-division ECO elective (3XXX or 4XXX level) (major) Upper-division focus option or elective (free elective) Focus option focus option or elective (free elective)	Third Year		
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<sup>1</sup> Carlos Alvarez College of Business students should take MAT 1053 (or MAT 1093), MAT 1133 (or MAT 1213), and ECO 2023 to satisfy Core Curriculum requirements.

# Accelerated Master of Science in Economics

The Department of Economics offers an Accelerated Economics Program tailored to UTSA students who demonstrate exceptional motivation and qualifications and aspire to develop marketable skills in datacentric economic analysis and decision-making. Designed to facilitate a seamless transition into the Master of Science program and provide an expedited admission process, this program allows participants to initiate their graduate studies as early as the senior year of their undergraduate education.

The benefit of the accelerated program is it allows students to complete some graduate courses while still earning their undergraduate degree. In

addition, students have the potential to reduce their time until graduation (e.g., students can start completing their graduate-level coursework during their senior year) and save money (e.g., students are not charged an application fee and potentially could double count one course); the program also creates an easier transition into graduate school (i.e., a known admission into graduate school while in their undergraduate education and a constant connection with UTSA faculty and staff).

### **Program Admission Requirements**

An individual seeking admission into the Accelerated Program in Economics must meet the following minimum requirements: 1) be a current UTSA student enrolled in a bachelor's degree program, 2) complete 90 semester credit hours in their bachelor's degree program by the end of the semester of application, and 3) have an overall UTSA grade point average of 3.0 or higher.

A free application must be completed and submitted online (https:// utsa.az1.qualtrics.com/jfe/form/SV\_8c77p5n6G5wBrCe/). If the applicant meets the minimum requirements for admission, they will be contacted for a meeting to review the applicant file, to provide the undergraduate degree plan expected of the applicant if admitted to the accelerated program, and to discuss the expectations of the program for eventual admission into graduate student status, which will include completion of the requirements for the applicant's undergraduate degree.

Applicants may be enrolled in any bachelor's degree program at UTSA. However, applicants pursuing a business degree, a STEM degree, a social science degree, or a public administration degree are likely to meet the Foundation Requirements of the master's program in Economics by the time of completion of the applicant's undergraduate degree.

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# **Minor in Economics**

The Minor in Economics is open to all majors in the University. All students pursuing the Minor in Economics must complete 18 semester credit hours.

Code	Title	Credit Hours
A. Required courses		6
ECO 2013	Introductory Macroeconomics	
ECO 2023	Introductory Microeconomics	
B. Upper-division economics courses		12
Select 12 additional semester credit hours of upper-division		
economics courses		
Total Credit Hours		18

To declare a Minor in Economics, obtain advice, and seek approval of substitutions for course requirements, students must consult their academic advisor.

## **Economics (ECO) Courses**

# ECO 2003. Economic Principles and Issues. (3-0) 3 Credit Hours. (TCCN = ECON 1301)

A nontechnical introduction to economic concepts such as scarcity, costs and benefits, supply and demand, trade, employment, and growth, with applications to current economic issues and policies. This course is designed for nonbusiness majors and cannot be applied toward a degree in the Carlos Alvarez College of Business. May be applied toward the core curriculum requirement in Social and Behavioral Sciences. Generally offered: Fall, Spring, Summer. Course Fees: BISP \$10; BTSI \$15.41; DL01 \$75; LRB1 \$15.41; LRC1 \$12.

# ECO 2013. Introductory Macroeconomics. (3-0) 3 Credit Hours. (TCCN = ECON 2301)

Economic analysis at the national level, including the determination of aggregate income and employment, operation of the domestic and international monetary systems, short-term income fluctuations, and long term economic growth. Course Fee: BISP \$10; BTSI \$15.41; DL01 \$75; LRB1 \$46.23.

# ECO 2023. Introductory Microeconomics. (3-0) 3 Credit Hours. (TCCN = ECON 2302)

Prerequisite: Placement into a college-level mathematics course. An introduction to the economic theory of decision making by consumers and business firms; an analysis of the domestic and international market systems and their roles in allocating goods and services; and problems of market failure. May be applied toward the core curriculum requirement in Social and Behavioral Sciences. Generally offered: Fall, Spring, Summer. Course Fees: BISP \$10; BTSI \$15.41; DL01 \$75; LRB1 \$15.41; LRC1 \$12.

#### ECO 3013. Intermediate Microeconomics. (3-0) 3 Credit Hours.

Prerequisite: Completion of ECO 2023, and MAT 1133, or their equivalents, with a grade of "C-" or better. The study of price determination in and the welfare implications of various market structures through the development of the preference theory of consumer behavior and the profit maximization theory of producer behavior. The role and welfare impact of externalities and of government actions are also examined. (Formerly titled "Theory of Price." Credit cannot be earned for both "Theory of Price" and "Intermediate Microeconomics.") Generally offered: Fall, Spring. This course has Differential Tuition.

#### ECO 3033. Economics of Managerial Decisions. (3-0) 3 Credit Hours.

Prerequisite: Completion of ECO 2013, ECO 2023, and MAT 1133, or their equivalents, with a grade of "C-" or better. Managerial economic decisions in firms and related entities. Topics include demand analysis, least-cost production, profit strategy, the influence of various market structures on the firm, advanced issues in pricing, and the impact of the international sector. Generally offered: Fall, Spring. This course has Differential Tuition.

#### ECO 3053. Intermediate Macroeconomics. (3-0) 3 Credit Hours.

Prerequisite: Completion of ECO 2013, ECO 2023, and MAT 1053, or their equivalents, with a grade of "C-" or better. Analysis of the measurement, determination, and control of aggregate economic activity such as national income, output, employment, interest rates, inflation, and exchange rates. The roles of monetary and fiscal policy and their relation to income and employment, short-term income fluctuations, and long-term growth are also explored. This course has Differential Tuition. Course Fee: DL01 \$75.

#### ECO 3113. Introduction to Mathematical Economics. (3-0) 3 Credit Hours.

Prerequisites: Completion of ECO 2013, ECO 2023, and MAT 1133, or their equivalents, with a grade of "C-" or better. Systematic approach to economic analysis using algebra and calculus; modeling and treatment of optimizing behavior with applications to micro and macro economics; emphasis on understanding and application of analytical techniques. Generally offered: Fall, Spring. This course has Differential Tuition. Course Fee: DL01 \$75.

#### ECO 3123. Introduction to Econometrics. (3-0) 3 Credit Hours.

Prerequisites: Completion of MAT 1133, and one of STA 1053 or STA 3003 or MS 1023, or their equivalents, and with a grade of "C-" or better. An introduction to statistical techniques for estimating economic relationships, testing economic theories, and evaluating government and business policy. Major topics include causal inference in the analysis of non-experimental data and implementing common econometric methods in statistical software. (Formerly titled "Introduction to Econometrics and Business Forecasting.") Generally offered: Fall, Spring. This course has Differential Tuition.

ECO 3163. Evolution of Economic Thought. (3-0) 3 Credit Hours. Prerequisite: Completion of one of the following: ECO 2003, ECO 2013, ECO 2023, or the equivalent, with a grade of "C-" or better. Development of economic theories, models, and schools of thought from the birth of market economies to the present, with an emphasis on the historical, institutional, and social forces shaping economic thinking and public policy. This course has Differential Tuition. Course Fee: BISP \$10; BTSI \$15.41; LRB1 \$15.41.

ECO 3183. Economic History of the United States. (3-0) 3 Credit Hours. Prerequisite: Completion of one of the following: ECO 2003, ECO 2013, ECO 2023, or the equivalent, with a grade of "C-" or better. The growth and development of the American economy from colonial times to the present; emphasis on applying a variety of economic concepts to a topical study of the economic forces that shaped the country's history. This course has Differential Tuition.

#### ECO 3193. International Economics. (3-0) 3 Credit Hours.

Prerequisite: Completion of ECO 2003 or ECO 2023, or the equivalent, with a grade of "C-" or better. Principles of international trade; significance of geographic, economic, social, and political influences; current problems in international trade and payments; tariffs and commercial policy; and the role of international organizations. (Formerly titled "The International Economy.") Generally offered: Fall, Spring. This course has Differential Tuition.

#### ECO 3213. Economics of Antitrust and Regulation. (3-0) 3 Credit Hours.

Prerequisite: Completion of ECO 2003 or ECO 2023, or the equivalent, with a grade of "C-" or better. Theory and practice of governmental regulation, deregulation, and privatization; economic, legal, and ethical concerns regarding private-sector output; and pricing as influenced by public policy and marketing structure. This course has Differential Tuition.

#### ECO 3223. Sports Economics. (3-0) 3 Credit Hours.

Prerequisite: ECO 2023. The course examines the impact of the sports industry on the U.S. and other global economies. The emphasis is given to the topics related to sport economics in the areas of industrial organization, public finance, and labor markets. Current sports-related economic policy issues are also addressed. This course has Differential Tuition.

#### ECO 3233. Health Economics and Policy. (3-0) 3 Credit Hours.

Prerequisite: Completion of ECO 2003 or ECO 2023, or the equivalent, with a grade of "C-" or better. The course examines and analyzes the everchanging role of healthcare and its impact on the economy and society. Social issues with respect to healthcare in the U.S. and world markets are analyzed using economics principles. Current healthcare related topics are addressed. This course has Differential Tuition.

#### ECO 3253. Economics of Public and Social Issues. (3-0) 3 Credit Hours.

Prerequisite: Completion of ECO 2003 or ECO 2023, or the equivalent, with a grade of "C-" or better, or consent of instructor. A seminar on applying economic reasoning and models to a wide variety of public, ethical, and social issues. This course has Differential Tuition.

#### ECO 3313. Money and Banking. (3-0) 3 Credit Hours.

Prerequisite: ECO 2013 and MAT 1053, or their equivalents. A study of money, the financial system, interest rates, commercial and central banking, monetary theory and policy implementation by the Federal Reserve, and resultant economic impacts both nationally and internationally. (Credit cannot be earned for both ECO 3313 and FIN 3313.) This course has Differential Tuition. Course Fee: DL01 \$75.

#### ECO 3413. Environmental Economics. (3-0) 3 Credit Hours.

Prerequisite: Completion of ECO 2023 and MAT 1053, or their equivalents, with a grade of "C-" or better. Economic principles applied to environmental problems. Topics include benefit-cost analysis of environmental policies, valuation of environmental goods and services, pollution control, natural resource management, and climate change. (Formerly ECO 4273. Credit cannot be earned for both ECO 3413 and ECO 4273.) This course has Differential Tuition.

#### ECO 3513. Economics of Migration. (3-0) 3 Credit Hours.

Prerequisite: ECO 2023, or the equivalent. An exploration of motives to migrate and the resulting socio-economic effects on migrants and the origin and destination countries. The design and implementation of immigration policies are also analyzed. Both theoretical models and empirical findings form the basis of study. This course has Differential Tuition.

#### ECO 4233. Behavioral Economics and Finance. (3-0) 3 Credit Hours.

Prerequisites: Completion of ECO 2013, ECO 2023, and MAT 1133, or their equivalents, with a grade of "C-" or better. This course introduces the behavioral concepts and theories. Topics include prospect theory, biases in probabilistic judgment, and nudge theory. Issues on how to apply these behavioral concepts to real life, focusing on improving decision making in health, financial wealth, and happiness are addressed. This course has Differential Tuition.

#### ECO 4303. Development Economics. (3-0) 3 Credit Hours.

Prerequisite: Completion of ECO 2013 and ECO 2023, or their equivalents, with a grade of "C-" or better. Specific economic problems of developing countries and national groupings; basic approaches to economic development; major proposals for accelerating development; role of planning; and trade, aid, and economic integration. (Formerly titled "Economics of Developing Countries.") This course has Differential Tuition. Course Fee: DL01 \$75.

#### ECO 4413. Game Theory. (3-0) 3 Credit Hours.

Prerequisite: ECO 3013 and MAT 1133, or their equivalents, with a "C-" or better. A study of strategic decision-making in interactive situations, with an emphasis on economics and business applications, including oligopolies, pricing, bargaining, and incentive contracts. The strategic role of commitment, credibility, unpredictability, and pre-emption are explored. This course has Differential Tuition.

#### ECO 4513. Industrial Organization. (3-0) 3 Credit Hours.

Prerequisites: Completion of ECO 3013 and MAT 1133, or their equivalents, with a grade of "C-" or better. Theory and empirical evidence relating to the structure of industry and its effect on firms' conduct and performance, as well as the role of government policy and regulation on market competition and performance. (Formerly ECO 3263. Credit cannot be earned for both ECO 4513 and ECO 3263.) This course has Differential Tuition.

#### ECO 4553. Public Economics. (3-0) 3 Credit Hours.

Prerequisite: Completion of ECO 3013 and MAT 1133, or their equivalents, with a grade of "C-" or better. Role of government in the economy, externalities and public goods, efficiency and equity analysis of taxation, incentives within government, fiscal federalism, discrimination and inequality, public policy issues. (Formerly ECO 3273. Credit cannot be earned for both ECO 4553 and ECO 3273.) This course has Differential Tuition.

#### ECO 4583. Labor Economics. (3-0) 3 Credit Hours.

Prerequisites: ECO 3013 and MAT 1133, or their equivalents, with a grade of "C-" or better. Application of microeconomic theory to wage and employment determination in labor markets. Theoretical and empirical evaluation of current and proposed labor market regulations such as minimum wages, taxes, and universal basic income. This course has Differential Tuition.

#### ECO 4813. Seminar on Research in Economics. (3-0) 3 Credit Hours.

Prerequisite: ECO 3013, ECO 3053, ECO 3123, and a major grade point average of 3.0 or higher, or consent of instructor and department chair. A seminar exploring the essential steps in the practice of research in economics: critical reading of existing literature, formulation of the research question, development of models or empirical strategies, writing of the research paper, and presentation of research findings. This course has Differential Tuition.

#### ECO 4913. Independent Study. (0-0) 3 Credit Hours.

Prerequisites: A 3.0 Carlos Alvarez College of Business grade point average, permission in writing (form available) from the instructor, the Department Chair, and the Dean of the College. Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree. This course has Differential Tuition.

#### ECO 4933. Internship in Economics. (0-0) 3 Credit Hours.

Prerequisites: 12 semester credit hours of upper-division economics, a 2.5 UTSA grade point average, and permission in writing from the instructor, the Department Chair, and the Dean of the Carlos Alvarez College of Business (see academic advisor for required forms). This opportunity for work experience in research or applied economics may be undertaken either in private business or a public agency; opportunities are developed in consultation with the faculty advisor and Department Chair and require approval of both. May be repeated once for credit (for a total of 6 semester credit hours), provided they are with different organizations. This course has Differential Tuition.

#### ECO 4953. Special Studies in Economics. (3-0) 3 Credit Hours.

Prerequisite: Consent of instructor, Department Chair, and Dean of the College. An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree. This course has Differential Tuition.