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 College of Business, and the University.

- M.A. Economics – General Economics Concentration (p. 2)
- M.A. Economics – Financial Economics Concentration (p. 2)
- M.A. Economics – Business Analysis and Forecasting Concentration (p. 2)

Master of Arts Degree in Economics

The Master of Arts degree in Economics (M.A.E.) offers a program with modern quantitative methods and analytical tools suitable for a business-oriented or a social science-oriented study of economics. The program covers the essential theory of economics and econometrics but is primarily focused on applications and skill development. The program’s design accommodates both students seeking a terminal degree in economics and students wishing to lay the groundwork to pursue a Ph.D. degree. Enrollment may be full-time or part-time.

There are three concentrations—general economics, financial economics, and business data analysis and forecasting—to choose from. The general economics concentration is designed to offer flexibility in course planning and is suitable for students preparing for doctoral studies in economics or related disciplines, as well as for those with interdisciplinary interests. Under the general economics concentration, students with outstanding coursework or research experience may choose to write a thesis, though it is not required for the degree. The concentrations of financial economics and of business data analysis and forecasting are each designed with a selection of courses to offer students seeking careers in the private or public sectors the opportunity to learn and develop concentration-specific knowledge and practical skills. These two concentrations do not allow for a Master’s thesis. The program is supervised by the Economics Graduate Director together with the Economics Graduate Programs Committee.

Program Admission Requirements

For admission to the M.A.E. program, applicants must meet University-wide graduate admission requirements. Applicants are further considered on the basis of potential for success in graduate study in economics as indicated by a combination of records in the application package, including:

- A completed application form.
- Transcripts from all universities attended.
- Official Graduate Record Examination (GRE) or Graduate Management Admission Test (GMAT) scores.
- A statement of purpose.

- A letter of recommendation (additional letters are welcome but optional).
- (Optional) A résumé or curriculum vitae.

At least one letter of recommendation from a university professor or instructor is appropriate, particularly for applicants with fewer than three years elapsed since the last semester of enrollment in an institution of higher education. Personal references should be avoided.

The Graduate Admissions Committee evaluates each applicant individually based on the stated records. Accepted students are required to have completed an undergraduate degree before the start of the Master’s program.

Foundation Requirements

To facilitate good progress in the degree program, students will require the following three bodies of knowledge upon enrollment in the program:

- Economic Theory: Undergraduate level of economic theory, including Intermediate Microeconomics and Intermediate Macroeconomics.
- Mathematics: An ability to apply calculus and linear algebra to equilibrium and optimization models in economics.
- Statistics: A basic knowledge of statistics, including probability distributions, sampling, and hypothesis testing.

The Graduate Admissions Committee examines the application package to evaluate whether an applicant meets the foundation requirements, with significant consideration given to the record of courses taken and grades earned in the three areas. Students who are admitted to the program but determined not to meet adequately the foundation requirements may be required to fulfill conditions as stipulated by the Graduate Admissions Committee in order to provide the necessary foundation prior to or within the first year of enrollment into the program.

The program admits students in both the Fall and Spring semesters. The core courses are scheduled on an annual basis in the form of a two-semester sequence beginning with the Fall semester.

Degree Requirements

Students must complete 33 semester credit hours and a comprehensive examination. Students must earn 15 of the 33 semester credit hours from the core courses required for the program. The remaining 18 semester credit hours may include the credits that students can earn from an internship and a directed research project or a Master’s Thesis, depending upon a student’s chosen concentration.

Comprehensive Examination. Students must pass a comprehensive examination administered by a graduate committee. This examination is normally taken in the semester in which degree requirements are completed. The student informs the Economics Graduate Advisor of the intent to take the examination during the first month of the graduating semester.

Internships. Students are encouraged to pursue an internship (in the U.S. or overseas) that would substitute for an elective course (3 semester credit hours) upon approval by the Graduate Advisor.

Directed Research Project. Students are encouraged to undertake a research project in their area of concentration. To do so, a student seeks out an Economics faculty member willing to advise the student on developing practical and relevant ideas for a research project in a shared area of interest. The project can be conducted as a course of independent study and substitute for an elective course (3 semester credit hours).
**Master’s Thesis.** The Master’s Thesis option is only available in the general economics concentration and requires outstanding coursework or research experience. After successfully seeking out an Economics faculty member to serve as thesis advisor, students pursuing the thesis option will register in the Master’s Thesis course (3 semester credit hours) in each of their final two semesters of the program. The thesis advisor supervises the writing of the research paper/project that involves a command of relevant economic theory, statistical methods, or field-research methodology. The Master’s Thesis will be copyrighted and made available to the public in the UTSA library.

Students may do both an internship and a directed research paper (6 semester credit hours in total), or both an internship and a Master’s Thesis (9 semester credit hours in total), but not both a directed research paper and a Master’s Thesis.

**Master of Arts Degree in Economics - General Economics Concentration**

This concentration offers students the flexibility to tailor the course plan to their specific interests. It is particularly recommended for students interested in pursuing doctoral studies in Economics or a related discipline. This concentration may also be attractive to students seeking careers in government, politics, or the public sector, or pursuing interdisciplinary interests.

Students who select this concentration must complete the 15 semester credit hours of core courses and 18 semester credit hours of electives, with a plan of study designed in collaboration with the Graduate Advisor/Graduate Program Director. This concentration allows for, but does not require, a Master’s Thesis.

**Concentration**

**Master of Arts Degree in Economics - Financial Economics Concentration**

This concentration helps to prepare students seeking careers in the banking or financial sector that require finding solutions to real-world financial problems. This concentration facilitates the acquisition of both quantitative analytic skills in economics and financial modeling tools. The concentration-specific requirements offer students the opportunity to study domestic and international financial markets, as well as the principles of financial decision-making in the banking, investments, and corporate financial management professions.

Students who select this concentration must complete the 15 semester credit hours of core courses, 15 semester credit hours of concentration-specific courses, and 3 semester credit hours of electives. A Master’s thesis option is not available for this concentration.

### Code | Title | Credit Hours
--- | --- | ---
**A. 15 semester credit hours of core courses** | | 15
ECO 6013 | Microeconomic Theory |  
ECO 6033 | Macroeconomic Theory |  
ECO 6103 | Econometrics I |  
ECO 6113 | Mathematical Methods for Economic Analysis |  
STA 6003 | Statistical Methods in Research and Practice |  
or STA 5093 | Introduction to Statistical Inference |  
**B. 18 semester credit hours of elective courses** | | 18
All 6000 level or higher Economics courses may be used to fulfill the electives requirement, with the exceptions of ECO 6961 and the core courses for the degree, including:
ECO 6203 | Industrial Organization |  
ECO 6213 | Public Economics |  
ECO 6303 | Econometrics II |  
ECO 6323 | International Trade Theory and Policy |  
ECO 6403 | Financial Economics |  
ECO 6523 | Labor Economics |  
ECO 6543 | Healthcare Economics and Policy |  
ECO 6553 | Urban and Regional Economics |  
ECO 6573 | Game Theory and Business Strategy |  
ECO 6583 | Special Topics in Econometrics/Forecasting |  
ECO 6633 | Economic Design of Markets and Platforms |  
ECO 6713 | Causal Inference and Machine Learning |  
ECO 6763 | Data Analytics with Python |  
ECO 6943 | Economics Internship |  
ECO 6951 | Independent Study |  
ECO 6953 | Independent Study |  
ECO 6973 | Special Topics |  
ECO 6983 | Master’s Thesis |  

Furthermore, up to 6 semester credit hours of non-economics courses listed under the concentration-specific requirements in either the Financial Economics or the Business Data Analysis and Forecasting concentrations may be counted towards this electives requirement.

### Code | Title | Credit Hours
--- | --- | ---
**A. 15 semester credit hours of core courses** | | 15
ECO 6013 | Microeconomic Theory |  
ECO 6033 | Macroeconomic Theory |  
ECO 6103 | Econometrics I |  
ECO 6113 | Mathematical Methods for Economic Analysis |  
STA 6003 | Statistical Methods in Research and Practice |  
or STA 5093 | Introduction to Statistical Inference |  
**B. 15 semester credit hours of concentration-specific courses** | | 15
ECO 6403 | Financial Economics |  
or FIN 6213 | Derivatives Markets and Instruments |  
ECO 6303 | Econometrics II |  
or ECO 6583 | Special Topics in Econometrics/Forecasting |  
or ECO 6713 | Causal Inference and Machine Learning |  
FIN 5023 | Financial Management |  
Any two of the following courses:  
FIN 5633 | Investment Theory and Problems |  
FIN 5733 | Banking and the Financial Services Industry |  
FIN 5813 | Corporate Valuation |  
FIN 5833 | International Financial Management |  
FIN 6313 | Modeling of Financial Decision Making |  

Students must pass a comprehensive examination administered by the Economics Graduate Programs Committee.

### Total Credit Hours 33
Master of Arts Degree in Economics - Business Data Analysis and Forecasting Concentration

This concentration helps to prepare students seeking careers in the private or public sector that require analyses of economic or business data for the purposes of facilitating managerial decision-making, prediction, and causal explanation, by facilitating the acquisition of both quantitative modeling skills in econometrics and computational data analytics tool. The concentration-specific requirements offer students the opportunity to gain knowledge and skills in working with data and selecting appropriate econometric tools to tackle issues of causal inference, prediction, and theory-testing arising in economic, business, and policy contexts.

Students who select this concentration must complete the 15 semester credit hours of core courses, 15 semester credit hours of concentration-specific courses, and 3 semester credit hours of electives. A Master’s thesis option is not available for this concentration.

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<tr>
<th>Code</th>
<th>Title</th>
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<td>Mathematical Methods for Economic Analysis</td>
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<td>B. 15 semester credit hours of concentration-specific courses</td>
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<td>1. Econometric Tools</td>
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<td>Two or more of the following:</td>
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<td>2. Computational Tools</td>
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<td>One or more of the following:</td>
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<td>ECO 6763</td>
<td>Data Analytics with Python</td>
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<td>STA 6033</td>
<td>SAS Programming and Data Management</td>
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<td>STA 6233</td>
<td>R Programming for Data Science</td>
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<td>3. Advanced Analytic Tools and Applications</td>
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<td>Any number up to two of the following:</td>
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<td>ECO 6633</td>
<td>Economic Design of Markets and Platforms</td>
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Economics (ECO) Courses

ECO 5003. Economic Theory and Policy. (3-0) 3 Credit Hours.
The opportunity for intensive study of micro- and macroeconomic concepts; the price system as it functions under competition, monopoly, and partial monopoly; national income measurement and determination; business cycles; money and banking; monetary policy; and fiscal policy and economic stabilization. Differential Tuition: $387.

ECO 5023. Managerial Economics. (3-0) 3 Credit Hours.
Prerequisites: ECO 5003 and MS 5003, or their equivalents. Application of price theory to economic decisions of the firm. A problem-oriented approach emphasizing demand, production, and profit maximizing conditions, and their implications for output and pricing strategies under various market structures and types of organization. (Same as MBA 5513. Credit cannot be earned for both ECO 5023 and MBA 5513.) Differential Tuition: $387.

ECO 6013. Microeconomic Theory. (3-0) 3 Credit Hours.
Prerequisite: ECO 6113 or doctoral standing. A rigorous introduction to the microeconomic theory of individuals, households, firms, and markets, that covers models of optimizing behavior by consumers and producers, choice under risk, partial equilibrium in competitive and imperfectly competitive markets, general equilibrium in exchange economies, and asymmetric information. Differential Tuition: $387.

ECO 6033. Macroeconomic Theory. (3-0) 3 Credit Hours.
Prerequisite: Consent of instructor. This course is an introduction to advanced macroeconomic theory and policy. Topics include indicators and measures of economic activity, growth, inflation, unemployment, and stabilization policies by monetary and fiscal authorities, with rigorous analysis using models of consumption, investment, trade, and the aggregate economy. Differential Tuition: $387.

ECO 6103. Econometrics I. (3-0) 3 Credit Hours.
Prerequisite: STA 6003 or STA 5093 or equivalent. This course is an introduction to the theory and application of linear regression. Topics include ordinary least squares, difference-in-differences, regression discontinuity, and instrumental variables. A strong emphasis is placed on policy analysis and using regression to answer real-world questions. Differential Tuition: $387.
ECO 6113. Mathematical Methods for Economic Analysis. (3-0) 3 Credit Hours.
Prerequisite: MAT 1133 or doctoral standing. This course is a survey of mathematical methods used in economic and business decision analysis, including functions of several variables, linear algebra, multivariable calculus, and static and dynamic optimization techniques. Differential Tuition: $387.

ECO 6203. Industrial Organization. (3-0) 3 Credit Hours.
Prerequisite: ECO 3013 (or equivalent) and MAT 1133 (or equivalent). Theoretical and empirical methods for the analysis of market structure, firm conduct, and economic performance, especially through the lens of strategic interactions amongst firms. Topics may include price and nonprice competition, collusive behavior, auctions, entry deterrence, location strategies, product differentiation, advertising, research, and development. Regulation and antitrust issues are also examined. Differential Tuition: $407.10.

ECO 6213. Public Economics. (3-0) 3 Credit Hours.
Prerequisite: An undergraduate microeconomics course. This course is a study of the rationale for collective action and government, including public goods, externalities and property rights, public and social choice, and regulation. Topics include incidence, equity, and distributional issues of taxation and public expenditure policies, and the economics of discrimination and segregation from theoretical and empirical perspectives. Differential Tuition: $407.10.

ECO 6303. Econometrics II. (3-0) 3 Credit Hours.
Prerequisite: ECO 6103. Advanced topics in econometrics and their applications. Topics include panel data, discrete and limited dependent variables, and nonlinear and dynamic models. Differential Tuition: $387.

ECO 6323. International Trade and Finance. (3-0) 3 Credit Hours.
Prerequisite: ECO 6013. This course provides an in-depth analysis of international trade, focusing on contemporary theories of trade and current global issues. Topics include the causes and consequences of international trade, trade practices under varying commercial policy approaches, and the effects of trade and globalization on the national economy. Differential Tuition: $387.

ECO 6403. Financial Economics. (3-0) 3 Credit Hours.
Foundations in modern financial economics. Applies economic analysis to financial issues. Analytical methods to be discussed include inter-temporal utility models and general equilibrium theory. Financial topics include mean-variance frontier, capital asset pricing model, and arbitrage pricing theory. Differential Tuition: $387.

ECO 6523. Labor Economics. (3-0) 3 Credit Hours.
Prerequisite: An undergraduate microeconomics course. This course is an application of economic theory to the market for labor. This course studies the determinants of employment and wages, with a special focus on the impacts of education, taxes, and welfare programs. Differential Tuition: $387.

ECO 6543. Healthcare Economics and Policy. (3-0) 3 Credit Hours.
The application of economic principles and modeling to the healthcare marketplace. Students will be given the opportunity to apply theoretical and empirical economic analysis to business and public policy issues in the healthcare industry. (Same as BOH 6543. Credit cannot be earned for both BOH 6543 and ECO 6543.) Differential Tuition: $387.

ECO 6553. Urban and Regional Economics. (3-0) 3 Credit Hours.
Prerequisite: An undergraduate microeconomics course. On economic aspects of urban regions and cities, including housing markets, non-market valuation of local public goods and (dis)amenities, transportation, education, land use, pollution, and public sector service delivery. Differential Tuition: $407.10.

ECO 6573. Game Theory and Business Strategy. (3-0) 3 Credit Hours.
Prerequisite: ECO 6013 or consent of instructor. This course is a study of strategic decision-making in interactive situations with an emphasis on economics and business applications, providing an introduction to the basic theory of static and dynamic games of complete and incomplete information, with particular consideration for the strategic roles of commitment, credibility, reputation, unpredictability, and pre-emption. Applications may include bargaining, pricing, advertising, signaling, and contracting. Differential Tuition: $387.

ECO 6583. Special Topics in Econometrics/Forecasting. (3-0) 3 Credit Hours.
Prerequisite: ECO 6103 or consent of instructor. This course explores advanced econometric or forecasting techniques. Possible topics include, but are not limited to, structural econometric modeling, panel data analysis, multiple time series analysis, forecast combinations, and big data economic forecasts with emphasis on practical applications. May be repeated for credit, but not more than 6 semester credit hours will apply to a Master's degree. Differential Tuition: $387.

ECO 6633. Economic Design of Markets and Platforms. (3-0) 3 Credit Hours.
Prerequisite: ECO 3013 (or equivalent) and ECO 3123 (or equivalent), or doctoral standing. A study of organized markets and online platforms, with particular focus on how the design and rules of operation affect incentives, efficiency, and equity. This course examines real-world markets such as online auctions, internet platforms, matching markets, or barter exchange through the multi-faceted lens of market design, featuring qualitative analysis of documented rules, game-theoretic modeling, quantitative empirical analysis, or experimental simulation and analysis. Differential Tuition: $387.

ECO 6713. Causal Inference and Machine Learning. (3-0) 3 Credit Hours.
Prerequisite: ECO 6013 or both ECO 3123 (or equivalent) and STA 6003 (or equivalent). An introduction to modern causal inference and machine learning methods with a focus on applications to economics and business. Topics may include the potential outcomes framework, randomized control trials, matching, regression discontinuity, instrumental variables, difference-in-difference, synthetic controls, bootstrapping, LASSO, random forests, and neural networks. Differential Tuition: $387.

ECO 6763. Data Analytics with Python. (3-0) 3 Credit Hours.
An introduction to data analytics with Python, including a selection of techniques for data munging and formatting, exploratory data analysis, data visualization, and econometrics/machine learning in problems of classification, regression, prediction, and forecasting. Differential Tuition: $387.

ECO 6943. Economics Internship. (0-0) 3 Credit Hours.
Prerequisites: Graduate standing, 15 semester credit hours of graduate work, and consent of instructor. Internship must be approved in advance by the Internship Coordinator and the student's Graduate Advisor of Record. Cannot count as an economics elective toward an M.B.A. with a concentration in Business Economics. Supervised full- or part-time off-campus work experience and training in economics. Individual conferences and written reports required. Differential Tuition: $387.
ECO 6951. Independent Study. (0-0) 1 Credit Hour.
Prerequisites: Graduate standing and permission in writing (form available) from the instructor and the student's Graduate Advisor of Record. Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work not normally or not often available as part of the regular course offerings. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the degree. Differential Tuition: $129.

ECO 6953. Independent Study. (0-0) 3 Credit Hours.
Prerequisites: Graduate standing and permission in writing (form available) from the instructor and the student's Graduate Advisor of Record. Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work not normally or not often available as part of the regular course offerings. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the degree. Differential Tuition: $387.

ECO 6961. Comprehensive Examination. (0-0) 1 Credit Hour.
Prerequisite: Approval of the appropriate Graduate Program Committee to take the Comprehensive Examination. Independent study course for the purpose of taking the Comprehensive Examination. May be repeated as many times as approved by the Graduate Program Committee. Enrollment is required each term in which the Comprehensive Examination is taken if no other courses are being taken that term. The grade report for the course is either "CR" (satisfactory performance on the Comprehensive Examination) or "NC" (unsatisfactory performance on the Comprehensive Examination). Differential Tuition: $129.

ECO 6973. Special Topics. (3-0) 3 Credit Hours.
Prerequisite: Consent of instructor. An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Topics courses may be repeated for credit when the topics vary, but not more than 6 hours, regardless of discipline, will apply to the degree. Differential Tuition: $387.

ECO 6983. Master's Thesis. (0-0) 3 Credit Hours.
Prerequisites: Permission of the Graduate Advisor of Record and thesis director. Thesis research and preparation. May be repeated for credit, but not more than 6 semester credit hours will apply to a Master's degree. Credit will be awarded upon completion of the thesis. Enrollment is required each term in which the thesis is in progress. Differential Tuition: $387.