

# Economics - Graduate Programs

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Economics examines how individuals, businesses, and societies interact. By studying economics, you gain a better understanding of the costs and benefits of alternative courses of action and thus make informed decisions. Decision-making skills are necessary in all areas of the economy including the government and business.

Economics teaches you to think critically and to solve problems, skills that are highly valued in the workplace. You learn not only how to find data, but how to work with that data and then logically explain insights gained from the analyses. Current research interests of economics faculty include topics in technology, telecommunications, behavioral economics, forecasting, environment, labor, health, international trade, and international finance. The diverse skills and interests of the economics faculty provide opportunities for learning and growth to the student in our modern economy.

## Admission Requirements

The focus of the MS in Economic Data Analytics program is quantitative data analysis using economic logic to interpret data. It is a 10-course, 30-hour program highly focused on developing expertise with empirical tools needed for successful data analysis and presentation.

Admission to the MS in Economic Data Analytics is based upon the completion of the general admission requirements of the Graduate Admissions Office. For admission to the MS Economics program a score on either the Graduate Management Admission Test (GMAT) or the Graduate Record Examination (GRE) and record of one's academic undergraduate performance are required. Students for whom English is not their native language must meet language standards set by UTA on the TOEFL or IELTS. International applicants who score below minimum acceptable levels on the verbal portion of entrance examinations may be admitted under the condition that they pass an English proficiency exam or complete UT Arlington's Graduate English Skills Program prior to beginning graduate coursework. Applicants are encouraged to submit with their application a resume that highlights professional and personal accomplishments, linguistic abilities, computer expertise, and leadership experience. A standardized test score (GMAT or GRE) will not be used as the sole criterion for admitting applicants or the primary criterion for denying admission to the MS in Economic Data Analytics program.

The GRE/GMAT test requirement for admissions to the M.S. in Economic Data Analytics program can, under extraordinary circumstances, be waived at the discretion of the department if the applicant already has been awarded a terminal graduate degree from a regionally or professionally accredited program. Waiver of this requirement is rare and will only be made at the discretion of the Department.

Multiple criteria are used to make admission decisions.

- a. A bachelor's degree from an accredited general or specific program.
- b. An acceptable undergraduate GPA as calculated by Graduate Admissions (approximately the last 60 hours), generally greater than a 3.0 on a 4.0 scale.
- c. An acceptable score on the GRE or GMAT. Successful students generally have a minimum score of 148 (600 old GRE scale) on the quantitative section and 150 (450 old GRE scale) on the verbal section of the GRE or a minimum score of 480 on the GMAT.
- d. Grades in specified undergraduate business and non-business courses (e.g., math, accounting, economics, statistics).
- e. For applicants whose native language is not English, see UT Arlington's requirements: <http://www.uta.edu/admissions/graduate/apply/how-to-apply.php>

## Unconditional Admission

Students receiving unconditional admission must have a bachelor's degree from an accredited program. Unconditional admittance will be granted to an applicant who meets one of these standards below:

- a. Unconditional admission will be granted if the applicant's composite total from the index (this index is derived by using a formula that multiplies the GPA by 200 and adds the resulting value to the GMAT score) must be 1080 or greater.
- b. Unconditional admittance will be granted if the applicant's scores 148 or higher on the Quantitative section and 150 or higher on the Verbal section of the GRE and the applicant's undergraduate GPA, as calculated by Graduate Admissions is at, or above 3.0 on a 4 point scale.

## Probationary Admission

If applicants do not meet the standards listed for unconditional admission, they may be considered for probationary admission after careful examination of their application materials. Probationary admission requires that an applicant earn a GPA of 3.0 or better in the two semesters of graduate coursework at UT Arlington.

## Deferred and Provisional Admission

A deferred application decision may be granted when a file is incomplete or when a denied decision is not appropriate. An applicant unable to supply all required documentation prior to the admission deadline but whom otherwise appears to meet admission requirements may be granted provisional admission.

## Denial of Admission

After a thorough review of the application file, a candidate may be denied admission if he or she has less than satisfactory performance on any two of the admission criteria. All applicant data will be carefully reviewed before an admission denial is made.

## Fellowships and Scholarships (<https://uta.academicworks.com/opportunities/15892/>)

Students admitted with no provisional conditions to satisfy are eligible for available scholarship and/or fellowship support. A limited number of merit-based scholarships and fellowships may be awarded to graduate students currently enrolled who meet the minimum requirements.

## Degree Requirements

### MS in Economic Data Analytics

The MS in Economic Data Analytics program focuses on the major growth area of data analytics. Hal Varian, chief economist at Google, has explained why the demand for data analysis is growing rapidly. Organizations have low-cost computer time, huge quantities of data, and access to software tools that allow data analysis. The problem in using these assets is a shortage of qualified empirical analysts. One must know how to find data, be critical of it, develop it by use of software packages, and explain what has been learned by analysis through the lens of economic theory. Advances in econometrics analysis allow us to better understand key issues, such as pricing and cost, inventory management, population trends, and other issues that impact business and government.

The focus of the MS in Economic Data Analytics program is on quantitative analysis based on economic logic. It is a 10-course, 30-hour program highly focused on development of relevant economic theory and empirical tools needed by successful analysts.

There are eight required courses and two electives as indicated in the list of courses:

ECON 5314	ECONOMIC ANALYSIS FOR BUSINESS DECISIONS	3
ECON 5336	APPLIED BUSINESS AND ECONOMICS DATA ANALYSIS I (*)	3
ECON 5342	ADVANCED BUSINESS AND ECONOMICS COMMUNICATION (3,0)	3
ECON 5327	MONETARY POLICY AND FINANCIAL SYSTEM ANALYSIS	3
ECON 5339	APPLIED BUSINESS AND ECONOMICS DATA ANALYSIS II	3
ECON 5341	ADVANCED BUSINESS AND ECONOMIC DATA ANALYTICS	3
ECON 5337	BUSINESS & ECONOMIC FORECASTING	3
ECON 5343	CAUSAL INFERENCE FOR BUSINESS DECISIONS	3
INSY 5336	PYTHON PROGRAMMING	3
or BUSA 5344	SAS TOOLS FOR BUSINESS AND ECONOMICS	
or BUSA 5345	R FOR BUSINESS AND ECONOMIC ANALYSIS	
or BUSA 5322	DATA ANALYTICS WITH PYTHON AND MACHINE LEARNING	

Electives: The student may select any economics course above the 5300 level excluding ECON 5311 and ECON 5313 and any specific ECON courses listed for the program. The student may also choose one elective course with permission of the graduate advisor. 3

### Total Hours

**30**

\* Course may be waived in favor of an elective if student has completed ECON 3318 and 4318 with a B or better. Must be approved by the graduate advisor.

Graduates of this program are expected to develop knowledge and competencies needed to contribute to data analysis in public policy and private/business fields. An economic theoretical framework is a key part of the program, but the coursework also focuses on the empirical skills required to effectively extract/scrape data from the web and various private and public sources, and carefully analyze it to uncover patterns/trends, and answer significant data-driven real-life questions, relevant to both local and global environments. The program provides our students with an understanding of issues involved in operating in any data environment and equips them with skills needed to analyze a variety of data and present research findings in reports.

The MS in Economic Data Analytics program participates in both the Fast Track and Facilitated Admission programs for UT Arlington undergraduates.