

BUSINESS ANALYTICS, M.S. (RESIDENTIAL)

Program Director: James Stamey Associate Dean for Graduate Programs
Programs: Patsy Norman

Objectives

This degree is intended to prepare students for careers as professional business analysts by:

- Learning the fundamentals of information technology and statistics
- Learning tools to understand and visualize data
- Learning fundamental skills in modeling and analysis of multivariate data
- Learning tools for predictive data analysis and forecasting
- Improving programming skills to the professional level for data analytics
- Providing a framework to examine ethical implications of collecting and managing big data.

The MSBA program is a STEM-designated 36 or 37 credit-hour degree that can be completed in one calendar year.

Admission

Students will have to submit a completed application, transcript for any degrees completed from an accredited institution in the US or proof of equivalent training at a foreign university, current resume, three letters of recommendation, and for those with less than four years of work experience, an acceptable score on the GMAT or GRE. Foreign national applicants are required to provide an acceptable score from the TOEFL, IELTS, or PTE Academic test. All applicants will need to demonstrate proficiency in Python and have completed at one course in statistics/ QBA.

Curriculum

Students will complete 27 required hours and 9 elective hours selected from content areas for a total of 36 hours.

| Code | Title | Hours |
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| Required Courses | | |
| MIS 5322 | Advanced Python for Analytics | 3 |
| MIS 5340 | Database Management Systems | 3 |
| MIS 5342 | Business Intelligence | 3 |
| MIS 5343 | Seminar in Data Visualization | 3 |
| MIS 5390 | Ethics in Data Analytics | 3 |
| STA 5300 | Statistical Methods (Summer) | 3 |
| STA 5384 | Multivariate Statistical Methods | 3 |
| STA 5V85 | Practice in Statistics | 3 |
| STA 5303 | Applied Regression Analysis | 3 |
| Select three courses from the following | | 9 |
| CSI 5352 | Advanced Object-Oriented Development | |
| CSI 5357 | Cloud Computing | |
| ECO 5347 | Econometric Theory and Methods | |
| ECO 5351 | Data Science I | |
| ECO 5352 | Data Science II | |

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| ECO 6V98 | Advanced Causal Inference |
| ECO 5349 | Causal Inference and Research Design |
| MKT 4360 | Customer Analytics |
| STA 4350 | Statistical Machine Learning |
| STA 5362 | Time Series Analysis |
| STA 5373 | Computational Statistical Methods |
| STA 5330 | SAS Programming for Data Analytics |
| STA 5371 | Methods in Data Mining and Management |
| Total Hours | 36 |