

BUSINESS ANALYTICS, M.S. (RESIDENTIAL)

Program Director: James Stamey **Associate Dean for Graduate 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
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	

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