

BUSINESS ANALYTICS MAJOR

Department: Management Information Systems (<https://catalog.bradley.edu/undergraduate/business/management-information-systems/>)

Business analytics is a multifaceted field that has evolved due to the development of technology associated with the creation and collection of large data sets. Not only is the volume of data increasing but the velocity of data analysis happens in real time and the variety of data has exploded including both structured (e.g. quantitative data) and unstructured (e.g. text and social media) data sets. Organizations have become much more data driven. For many firms, data is their business. The BA major teaches students how to manage this vital resource.

The Business Analytics major differs from the MIS concentration in business analytics in that it has a deeper focus on quantitative methodologies across a variety of fields such as the decision sciences and economics. The major offers students the opportunity to explore data science by requiring the development of programming languages for analytics and providing opportunities to explore data science fundamentals. Yet it differs from data science in that the emphasis is on learning and using the off-the-shelf tools of analytics to solve problems in a business context.

Requirements

To major in Business Analytics, a student must earn a minimum of 27 semester hours credit in courses with the following requirements:

Code	Title	Hours
Required Courses		
CS 141	Introduction to Python Programming	3.0
MIS 272	Business Analytics Tools and Techniques	3.0
MIS 374	Database Management and Administration	3.0
MIS 375	Business Systems Analysis and Design	3.0
MIS 471	Applied Machine Learning for Business	3.0
MIS 473	Data Visualization for Business Analytics	3.0
MIS 490	Capstone Project for Business Analytics	3.0
Elective Courses (choose two):		6
M L 356	Human Capital in Organizations	
CS 360	Fundamentals of Data Science	
ECO 419	Introduction to Econometrics	
Q M 426	Business Forecasting	
Q M 464	Decision Support Systems	
Course(s) approved by the Department Chair.		
Students must also complete the Foster College's business core.		
Total Hours		27