

Business Analytics

Overview

Organizations can make smarter decisions when they effectively harness the power of data. The business analytics concentration is designed to provide students with the analytical skills, techniques, and perspectives required to understand, analyze, and interpret datasets of various sizes and content. This knowledge and skill set can be used to help companies improve decision making in increasingly complex and interconnected business environments and create measurable improvements in business performance.

This concentration offers courses that cover the fundamentals of data analysis and management; information visualization; and descriptive, predictive, and prescriptive analytic techniques. These techniques are often based on artificial intelligence, machine learning, and data mining. Courses are grounded in relevant theory and principles but also explore how to apply these concepts to investigate realistic datasets by using a variety of innovative computational tools and programming languages. These may include Python, R, SQL, and Tableau. Students have the opportunity to develop technical and problem-solving skills that are in high demand by employers and to apply those skills through both classroom activities and co-ops focused on business analytics.

Analytics can be employed in many different parts of an organization. Therefore, students are encouraged to consider completing a dual concentration in business analytics and another area. Graduates of this program have a wide range of career paths to suit their interests. Professional options include business or information analyst, consultant, and project manager. Graduates may also become specialists within a specific department or functional area, such as financial services, accounting, marketing, or manufacturing.

Concentration Requirements

Concentration in Business Analytics

| Code | Title | Hours |
|--|---|-------|
| Only one course may double count between another concentration or minor. | | |
| Required Courses | | |
| MISM 2510 | Fundamentals of Information Analytics | 4 |
| MISM 3403 or MISM 3405 | Data Management for Business Data Wrangling for Business Analytics | 4 |
| MISM 3501 | Information Visualization for Business | 4 |
| Elective | | |
| Complete one of the following: | | 4 |
| MISM 3515 | Data Mining for Business | |
| MISM 3525 | Modeling for Business Analytics | |
| MISM 4983 | Special Topics in Management Information Systems | |