Master of Science in Information Systems
A STEM DEGREE

Business Analytics Career Track
MSIS Advising Sheet

Overview

Business analytics is the use of business strategy, data management, and statistical analysis to improve decision making throughout the organization. The MSIS program is an ideal degree from which to launch a career in business analytics because of its focus on these three core areas as well as related information systems and technology. The Business Analytics career track begins with the Business Core courses required for all MSIS students to develop a general understanding of business issues. It continues with data management and technology courses from the MSIS IS Technology requirement, and Analytics courses from the MSIS IS Analytics requirement. Students are then encouraged to select courses from the Business Analytics Career Track, which includes offerings from a variety of disciplines to further development their statistical analysis and statistical software competencies, and to learn the application of these skills across multiple domains. The MSIS business analytics career track is ideal for any graduate business student seeking a business analyst, business intelligence, or business analytics position, which involve collecting, managing, and otherwise working with data to inform decision-making. A Business Analytics career path can lead to executive positions such as Chief Data Officer, Chief Analytics Officer, Chief Strategy Officer, or Chief Information Officer.

MSIS Requirements

Business Core (9 units) (Waiveable)

1. B A 625. Financial and Management Accounting (3)
2. B A 627. Marketing (3)
3. B A 628. Operations and Supply Chain Management (3)

IS Technology (9 units – choose 3 of the following)

1. Recommended: MIS 686. Enterprise Data Management (3)
2. MIS 687. Business Data Communications (3)
3. MIS 691. Decision Support Systems (3)
4. MIS 695. Business Systems Analysis and Design (3)
5. MIS 697. Project Planning and Development (3)
6. MIS 752. Seminar in Supply Chain and Enterprise Resource Planning (3)

IS Management & Analytics (9 units – choose 3 of the following)

1. Recommended: B A 623. Statistical Analysis (3)
2. Recommended: MIS 748. Seminar in Applied Multivariate Analytics (3)
3. Recommended: MIS 749. Business Analytics (3)
4. MIS 688. Information Systems and Strategies in Organizations (3)
5. MIS 750. Strategic Project Management (3)
6. MIS 755. Information Systems Security Management (3)
MSIS Requirements - Continued

Thesis Option or Directed Readings with Examination (3 units)

1. B A 799A. Thesis Research (3)
2. MIS 790. Directed Readings in MIS (3)

Business Analytics Career Track (12 units – choose 4 of the following)

1. **Recommended**: MIS 620. Electronic Business and Big Data Infrastructures (3)
2. ECON 640. Econometrics (3)
3. LING 572. Python for Social Scientists (3)
4. LING 581. Introduction to Computational Linguistics (3)
5. P H 627. Advanced Statistical Methods in Public Health (3)
6. P H 628. Applications of Multivariate Statistics in Public Health (3)
7. STAT 551A. Probability and Mathematical Statistics (3)
8. STAT 551B. Probability and Mathematical Statistics (3)
9. STAT 575. Actuarial Modeling (3)
10. STAT 700. Data Analysis Methods (3) [Must complete MIS 749 prior to enrollment]
11. STAT 702. Data Mining Statistical Methods (3)
12. Other courses may be identified by working with an advisor.

Open Elective (3 Units)

Note: For students pursuing the Business Analytics Career Track, we recommend satisfying the 3 units of open elective by selecting an additional course from the Business Analytics courses listed above.

Advising

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The College of Business Administration is fully accredited by AACSB International – The Association to Advance Collegiate Schools of Business