Data Analytics - M.S.

Curriculum

The Data Analytics Master of Science degree program is designed to provide students with in-depth knowledge for applying statistical methods and tools to solve real-world problems using data. The program includes core courses in statistical topics as well as advanced applications of data analytics. Students delve into the areas of data mining, analytics, management and visualization, forecasting, modeling, and optimization and simulation which provide skills necessary to fill the current analytics gap and prepare students for both the technical and business challenges posed by big data.

Upon completion of the program, graduates are expected to:

- Integrate the knowledge of mathematics, statistics and computer science to collect, analyze and interpret data.
- Use data to drive organizational decisions and optimize performance.
- Conduct analysis for advanced data mining strategies to optimize model performance.
- Make recommendations based on the evaluation of the ethical, legal and political issues of data usage and its implications for a given application, market or population.

Data Analytics

Master of Science

Prerequisite Courses *		
FIT1040	Spreadsheet Design for Business Solutions (or passing grade on challenge exam)	3
Core Courses		
DATA5025	Tools for Data Analytics	3
DATA5050	Data Management	3
DATA5100	Statistical Analysis	3
DATA5150	Data Mining	3
DATA5200	Data Visualization	3
DATA5300	Big Data Analytics	3
DATA5350	Text & Web Mining Analytics	3
DATA5400	Introduction to Predictive Modeling	3
DATA5515	Advanced Topics in Predictive Analytics	3
DATA5550	Optimization Simulation	3
DATA5600	Research Methods in Data Analytics	3
DATA5700	Data Analytics Capstone	3
Total Credits		**36.0-39.0**

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Prerequisite courses must be completed prior to or concurrently with core courses.

Admissions Requirements

Please see a campus catalog for Admissions Requirements for this program.