Master of Science

Data Science and Analytics with a Concentration in Business Intelligence and Analytics (MS)

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This program will provide students with a foundation to use state-of-the-art programming tools and software packages to develop statistical models. Students will learn how to use data for identifying trends and patterns, solving problems, communicating results, and recommending optimal solutions.

Coursework for the business intelligence and analytics concentration focuses on providing students with the skills to gather, analyze, and use data to make informed decisions. Graduates will be prepared to enter business and organizations that need educated professionals to help make informed recommendations. This program is available on-campus and online.

Business Intelligence & Analytics Concentration

This concentration will prepare students for organizations looking for data-driven recommendations. The coursework addresses the use of tools to store, access, and analyze data to support making informed business recommendations. Students will learn how to retrieve data, gain insights, make decisions, and communicate solutions to various constituents in specific settings of data science and analytics. Students will select four courses in consultation with the faculty advisor.

Admission

1. A baccalaureate degree in computer science, electrical and/or computer engineering, mathematics, statistics, information system & technology, or a related field from a regionally-accredited institution or an equivalent institution outside the U.S.; students holding a bachelor's degree in an unrelated field will need competency in topics related to basic statistics and computer science.
2. GRE scores with a 50% or better attainment on quantitative reasoning (or waiver (http://catalog.odu.edu/graduate/data-science/data-science-analytics-business-intelligence-ms/GRE-Waiver.pdf))
3. Current scores on the Test of English as a Foreign Language (TOEFL) of at least 230 on the computer based TOEFL or 79 on the TOEFL iBT, or IELTS 6.5 overall.

Students with previously completed work at a regionally-accredited institution may submit a request for a maximum of 12 elective graduate credit hours to be transferred into the program. If approved by the admission committee, it will be added to the transcript.

Curriculum Requirements

The program requires 30 credit hours. The curriculum includes two concentrations: computational data analytics and, business intelligence and analytics. A capstone project is required.

Data Science & Analytics Core

Core Requirements		
DASC/CS 620	Introduction to Data Science and Analytics	3
CS 624	Data Analytics and Big Data	3
CS 625	Data Visualization	3
STAT 603	Probability Models for Data Science and Analytics	3
STAT 604	Statistical Tools for Data Science and Analytics	3
Total Credit Hours for Concentration		**12**
Capstone Course		**3**
Total Credit Hours		**30**

Business Intelligence & Analytics Concentration

Select two of the following:		6
BNAL 503	Data Visualization and Exploration	
BNAL 515	Advanced Business Analytics/Big Data Applications	
BNAL 721	Simulation Modeling for Business and Supply Chain Systems *	
Select two of the following:		6
IT 650	Database Management Systems	
IT 651	Business Intelligence	
IT 652	Information and Communications Technology for Big Data	
Total Credit Hours		**12**

* BNAL 576 may be substituted for BNAL 721 with permission of the concentration coordinator.