

BUSINESS ANALYTICS, MASTER OF SCIENCE

The Master of Science in Business Analytics will equip graduates with "Big Data" analytical skills that will allow them to help their respective companies sift through and analyze large data sets and uncover patterns and insights that will give their firms a valuable competitive advantage. Students with an undergraduate accounting degree should also be able to take sufficient accounting courses to become licensed as a CPA in the state of South Carolina.

The program goals are to:

1. Provide students with the knowledge of the three areas of data analytics: descriptive (data mining and data visualization), prescriptive (optimization and simulation), and predictive (forecasting and regression analysis).
2. Provide students with a practical experience with the popular analytics software tools and languages such as SAS and R.
3. Provide students with the necessary skills to design creative data analytics solutions to complex business problems.

Requirements

Code	Title	Hours
I. Required Courses		
MSBA U700	Introduction to Quantitative Analysis and Programming	3
MSBA U705	Data Mining and Management	3
MSBA U710	Predictive Analytics and Forecasting	3
MSBA U715	Principles of Business Analytics	3
MSBA U720	Data Visualization	3
MSBA U740	Prescriptive Analytics	3
MSBA U790	Analytics Practicum	3
II. Electives		
Select three of the following:		9
MSBA U730	Optimization	
MSBA U745	Financial Analytics	
MSBA U750	Accounting Analytics	
MSBA U760	Data Governance, Law, and Ethics	
MSBA U765	Business Process and Operations Analytics	
MSBA U770	Programming for Analytics	
MSBA U775	Web & Social Media Analytics	
MSBA U780	Marketing Analytics	
Master of Science in Nursing:		
NURS U705	Advanced Digital & Information Literacy for Nurses	
NURS U710	Advanced Evidence-Based Nursing Practice	
NURS U722	Data Analysis in the Healthcare System	
NURS U723	Evidence Based Practice Project I	
Master of Science in Informatics:		
Total Hours		30

Admissions Requirements

A Baccalaureate or higher degree from an accredited college or university with a strong GPA and demonstrated quantitative and statistics

preparedness through prior coursework, professional experience, or certifications. Applicants should have a GPA of 3.0 or above from an accredited university. Applicants with a GPA below 3.0 may be considered under exceptional circumstances. Applications are reviewed holistically.

Application Requirements

1. Application, application fee, residency form with all requested information and supporting documents.
2. Transcripts: Individuals seeking admission must provide official transcripts showing all post-secondary coursework attempted and an award of a baccalaureate degree from an accredited college or university. To be considered official, transcripts must be sent directly from the institution to USC Upstate or delivered in a sealed envelope bearing a Registrar's stamp.
3. Current CV or resume.

Non-Degree Seeking Students

Students wishing to take Johnson College of Business and Economics courses must meet the required prerequisites. Verification is required prior to approval.

International Students

Applicants who are citizens of a country other than the United States and who do not have permanent resident status are classified as international students. In addition to meeting the items in the preceding Admissions Requirements section, international student applicants are required to:

1. Submit application for admission with \$100 application fee.
2. Submit official school records (transcripts, diplomas, or certificates of study), translated to English. Applicants with foreign university work must submit a course-by-course evaluation with GPA from a NACES approved company. An admissions decision will not be made until the evaluation and all transcripts are on file.
3. Be academically and otherwise eligible to return to the last college attended.

Conditional Admission

Students may be admitted with Conditional Admission. When this is granted, students are required to:

1. Register for no more than three classes in the first semester.
 2. Earn a minimum grade of 3.0 in each class the first semester.
 3. Complete any other requirements defined by the Admissions Committee.
1. Demonstrate substantive knowledge of the three types of analytics and its applications to real-world problems.
 2. Demonstrate the ability to identify specific data needs and formats for a given problem; conduct data integration using large and small datasets; perform data cleaning and wrangling and use data mining to extrapolate patterns and insights.
 3. Students will demonstrate their understanding of best practices in visualization and ability to visualize complex data and create dashboards using leading visualization software and effectively communicate their insights to business audiences.

Suggested Course Sequence

Students should seek advice from advisor about sequencing

Fall		Hours
MSBA U700	Introduction to Quantitative Analysis and Programming	3
MSBA U705	Data Mining and Management	3
MSBA U715	Principles of Business Analytics	3
Elective		3
Hours		12
Spring		
MSBA U710	Predictive Analytics and Forecasting	3
MSBA U720	Data Visualization	3
MSBA U740	Prescriptive Analytics	3
Elective		3
Hours		12
Summer		
MSBA U790	Analytics Practicum	3
Elective		3
Hours		6
Total Hours		30