

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.

The student learning objectives are that upon completing the MSBA program, graduates will be able to:

1. Access, clean, and mine data.
2. Analyze, interpret, and visually display data.
3. Model, analyze, and determine an optimal solution to business problems.
4. Provide estimates about the likelihood of future values of a business metric.
5. Use popular analytics software tools and languages (e.g.: SAS and R).
6. Conduct analyses and communicate the results in a clear business language to inform business decisions.

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 U755	International Accounting and Consolidations	
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:	
HIMS U750	Health Services Research Methods and Analytics
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 between 2.5 and 3.0 from an accredited university may be considered for conditional admission. Applications are reviewed holistically. Personal statement and letters of reference are important contributors to the decision process. Test scores may be waived in exceptional circumstances.

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 registrars stamp.
3. Letter of recommendation: Two letters of recommendation are required. Letters should be from professionals knowledgeable about the student's academic or professional potential.
4. Current CV or resume.
5. Personal statement: Applicants are required to submit a one page personal statement that describes their career goals and how this degree will be utilized to help attain those goals.

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.

Suggested Course Sequence

Students should seek advice from advisor about sequencing

Course	Title	Hours
Fall		
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

2 Business Analytics Master of Science

Elective		3
	Hours	12
Summer		
MSBA U790	Analytics Practicum	3
Elective		3
	Hours	6
	Total Hours	30