BUSINESS ANALYTICS (MS)

Master of Science in Business Analytics
Unit: College of Business (http://business.louisville.edu/) (GB)
Program Website (https://business.louisville.edu/msba/degree-details/)

Academic Plan Code(s): BUANMS, BUANMS_O, BUANMS_AI, BUANMS_AIO, BUANMS_PTO

Program Information

The full-time Master of Science in Business Analytics (MSBA) is an accelerated, cohort-based 13-month, three-semester program. Students work both in teams and independently in completing the coursework.

The part-time Master of Science in Business Analytics (MSBA) is a 20-month, five-semester program. Students work both in teams and independently in completing the coursework.

The MSBA curriculum combines information systems technologies, data modeling, and analytics with business acumen and impactful communications to develop the skills necessary to become a successful data scientist with excellent potential for professional growth. The program is also designed and delivered in close collaboration with local businesses providing a strong business orientation, increasing your skill relevance in the marketplace upon graduation.

Admission Requirements

1. Completion of a graduate application (https://graduate.louisville.edu/admission/apply/) along with application fee
2. Provision of two letters of reference, a resume, and a personal statement
3. Completion of an undergraduate degree along with official transcripts
4. GMAT or GRE score: May be waived for applicants with significant work experience in the field of analytics or for applicants with significant academic exposure (e.g., major or minor) in a STEM or technical field

Program Requirements

The Master of Science in Business Analytics (MSBA) program requires a minimum of 30 credit hours for program completion. Currently, 22.5 credit hours are core and 7.5 credit hours are in electives.

Students also may enroll in up to three (3) additional credit hours in Analytics Internship courses spread across the program's three semesters.

Full-Time Program: Core Courses and Special Topics

Year 1		
Fall		**Hours**
MSBA 630	Modern Data Management	3.0
MSBA 605	Python for Analytics	3.0
MSBA 610	Data Visualization with Power BI	1.5
MSBA 615	R for Analytics	1.5
MSBA 620	Statistical Foundations of Business Analytics	3.0
	Hours	**12**
Spring		
MSBA 635	Predictive Analytics	3.0
MSBA 645	Applied Machine Learning	3.0
MSBA 650	Advanced Analytical Tools	3.0
MSBA 625	Storytelling with Data	1.5
	Hours	**10.5**
Summer		
MSBA 685	Analytics Internship (optional, spread across three semesters) [1]	1.0
MSBA 680	Special Topics in Business Analytics (Elective course) [2]	7.5
	Hours	**7.5**
	Minimum Total Hours	**30**

Sequence of courses is subject to change.

1. Optional internship, one (1) credit hour per semester completed.
2. Students in the Artificial Intelligence concentration will take their directed electives in this semester including MSBA 691, MSBA 692, MSBA 693, MSBA 694, and MSBA 695. This concentration is open to both on-campus and online MSBA students. However, four out of five courses are available in a on-campus format only.

Part-Time Program: Core Courses and Special Topics

Year 1		
Fall		**Hours**
MSBA 620	Statistical Foundations of Business Analytics	3.0
MSBA 605	Python for Analytics	3.0
	Hours	**6**
Spring		
MSBA 610	Data Visualization with Power BI	1.5
MSBA 635	Predictive Analytics	3.0
MSBA 625	Storytelling with Data	1.5
MSBA 615	R for Analytics	1.5
	Hours	**7.5**
Summer		
MSBA 680	Special Topics in Business Analytics (Elective course) [1]	6.0
	Hours	**6**
Year 2		
Fall		
MSBA 680	Special Topics in Business Analytics [1]	1.5
MSBA 630	Modern Data Management	3
	Hours	**4.5**
Spring		
MSBA 650	Advanced Analytical Tools	3
MSBA 645	Applied Machine Learning	3
	Hours	**6**
	Minimum Total Hours	**30**

Sequence of courses is subject to change.

1. Students in the Artificial Intelligence concentration will take their directed electives in this semester including MSBA 691, MSBA 692, MSBA 693, MSBA 694, and MSBA 695. This concentration is open to both on-campus and online MSBA students. However, four out of five courses are available in a on-campus format only.

Concentration in Artificial Intelligence

The Master of Science in Business Analytics (MSBA) program students can earn a concentration in Artificial Intelligence by taking five directed

electives. These five directed electives will replace the five required electives for the MSBA program. These directed electives are:

MSBA 691 Deep Learning

MSBA 692 Pipelines to Insights

MSBA 693 Advanced Analytics using PySpark

MSBA 694 Natural Language Processing

MSBA 695 Cloud Computing

This concentration is open to both Seated and Online MSBA students. However, four out of five directed courses required for the Artificial Intelligence concentration may only be available in a seated format.