

B.B.A. IN BUSINESS ANALYTICS

Overview

Major Area of Specialization in Business Analytics (STEM)

The Department of Management Science offers a major area of specialization in Business Analytics for students pursuing the Bachelor of Business Administration degree. Students who choose the major area of specialization in Business Analytics are trained to combine quantitative, statistical, and computational tools and techniques to help companies understand, predict, and act on large amounts of data, improving decision-making in increasingly complex and interconnected business environments.

Curriculum Requirements

In addition to satisfying the University General Education Requirements and Electives, students pursuing the BBA in Business Analytics must complete the BBA Business Core and the specific coursework for the Business Analytics major area of specialization as follows:

Code	Title	Credit Hours
General Education Requirements ^{1, 2}		
Written Communication Skills:		
WRS 105	First-Year Writing I	3
WRS 106 or ENG 106	First-Year Writing II ³ Writing About Literature and Culture	3
Quantitative Skills:		
MTH 161	Calculus I (fulfilled through the BBA business core)	
Areas of Knowledge:		
Arts and Humanities Cognate		9
People and Society Cognate		9
STEM Cognate (9 credits) (fulfilled through the major)		
Additional Requirements		
UMX 100	The University of Miami Experience	0
Electives		22
BBA Business Core Requirements ¹		
ACC 211	Principles of Financial Accounting	3
ACC 212	Managerial Accounting	3
BSL 212	Introduction to Business Law and Ethics	3
BTE 210	Fundamentals of Business Technology and Innovation	3
BUS 150	Business Analytics	3
BUS 300	Critical Thinking and Persuasion for Business ³	3
ECO 211	Principles of Microeconomics (Microeconomics)	3
ECO 212	Principles of Macroeconomics (Macroeconomics)	3
FIN 302	Fundamentals of Finance	3
MAS 201	Introduction to Business Statistics ⁴	3
MAS 202	Intermediate Business Statistics ⁴	3
MGT 100	Managing for Success in the Global Environment	3
MGT 199 or BUS 211	Professional Development and Success in the Workplace (or other approved Miami Herbert Business School career course) Professional Development for Finance and Accounting	1
MGT 303	Operations Management	3
MGT 304	Organizational Behavior	3
MGT 401	Strategic Management (taken in the final semester)	3
MKT 201 or MKT 301	Foundations of Marketing Marketing Foundations	3
MTH 161	Calculus I (or equivalent; fulfills Quantitative Skills Requirement) ⁴	4
Major Area of Specialization in Business Analytics ^{4, 5, 6}		
MAS 332	Data Acquisition, Preparation and Visualization	3

MAS 342	Introduction to Optimization and Decision Making	3
MAS 432	Data Analysis	3
Major Choice Courses - Select three courses (9 credit hours) from the following: ⁶		9
BTE 320	Python Programming: Fundamentals and Algorithms	
BTE 423	Database Management Systems	
MAS 352	Sports Analytics	
MAS 548	Machine Learning for Analytics	
MAS 549	Big Data Analytics	
Quantitative Choice Course - Select one course (3 credit hours) from the following: ⁶		3
ECO 430	Applied Econometrics	
ECO 444	Game Theory in Economic Applications.	
FIN 303	Intermediate Financial Management	
FIN 320	Investment and Security Markets	
MGT 445	Supply Chain Modeling and Analysis	
MGT 446	Supply Chain Strategy	
MKT 302	Marketing Research and Market Analysis	
MKT 387	Digital Marketing	
MKT 389	Digital Media Metrics	
Total Credit Hours		120

¹ **NOTE:** WRS 105 and WRS 106 or ENG 106 , or their equivalents, must be completed prior to attaining junior year classification, per the University General Education Requirements. Additionally, all 100 and 200-level Business Core courses must be completed by the end of the fifth semester of college work or during the semester in which the student is completing 75 credit hours.

² At least one course with an international focus must be completed within the degree requirements. The appropriateness of the course is determined by the Vice Dean for Undergraduate Business Education.

³ Students who do not earn at least a C- in WRS 106 or ENG 106 must either repeat WRS 106 or ENG 106 and earn at least a C- or complete WRS 230 with at least a C- before enrolling in BUS 300.

⁴ In order to declare the Business Analytics major, a BBA student needs to have earned a minimum A- (3.7) average for MTH 161, MAS 201, and MAS 202.

⁵ All specific coursework for the major area of specialization in Business Analytics must be completed with a grade of "C-" or higher. A minimum cumulative GPA of 2.5 is required for all specific coursework taken in the major area of specialization.

All courses must be taken within the current pre-requisite structure.

⁶ No course may double count in any other major, minor, or cognate.

Sample Plan of Study

This Sample Plan of Study represents one possible version of a new freshman Business student's 8-semester plan. The individual student's plan may vary depending upon the initial placement into English Composition and mathematics. Moreover, numerous plan variations are possible if a student enters the University with advanced college credits, wishes to participate in study abroad, chooses a special program option, or selects additional majors or minors.

Note that each major/minor at the University of Miami satisfies a particular "Area of Knowledge" within the general education requirements of the University. This means that it is possible to pursue two majors or a major and a minor within the Miami Herbert Business School and fulfill both the STEM and People and Society Areas of Knowledge; a separate cognate in these areas would not be required. The only remaining general education Area of Knowledge would be Arts and Humanities, which must be completed through a major, minor, or cognate outside of the Business School.

Students construct their individualized plans in collaboration with their assigned academic advisor.

Freshman Year		Credit Hours
Fall		
ECO 211	Principles of Microeconomics	3
MGT 100	Managing for Success in the Global Environment	3
MKT 201	Foundations of Marketing	3
MTH 161	Calculus I	4
WRS 105	First-Year Writing I	3

UMX 100	The University of Miami Experience	0
Credit Hours		16
Spring		
BSL 212	Introduction to Business Law and Ethics	3
BUS 150	Business Analytics	3
ECO 212	Principles of Macroeconomics	3
MAS 201	Introduction to Business Statistics	3
WRS 106 or ENG 106	First-Year Writing II or Writing About Literature and Culture	3
Credit Hours		15
Sophomore Year		
Fall		
ACC 211	Principles of Financial Accounting	3
BTE 210	Fundamentals of Business Technology and Innovation	3
BUS 300	Critical Thinking and Persuasion for Business	3
MAS 202	Intermediate Business Statistics	3
Arts and Humanities Cognate Course		3
Credit Hours		15
Spring		
ACC 212	Managerial Accounting	3
FIN 302	Fundamentals of Finance	3
MAS 432	Data Analysis	3
MGT 199	Professional Development and Success in the Workplace	1
MGT 303	Operations Management	3
Art and Humanities Cognate Course		3
Credit Hours		16
Junior Year		
Fall		
MAS 332	Data Acquisition, Preparation and Visualization	3
MAS 342	Introduction to Optimization and Decision Making	3
MGT 304	Organizational Behavior	3
Arts and Humanities Cognate Course		3
Elective		3
Credit Hours		15
Spring		
Major Choice Course		3
Quantitative Choice Course		3
People and Society Cognate Course		3
Elective		3
Elective		3
Credit Hours		15
Senior Year		
Fall		
Major Choice Course		3
People and Society Choice Course		3
Elective		3
Elective		3
Elective		3
Credit Hours		15
Spring		
MGT 401	Strategic Management	3
Major Choice Course		3

People and Society Cognate Course	3
Elective	3
Elective	1
Credit Hours	13
Total Credit Hours	120

Mission

- To develop innovative ideas and principled leaders that transform global business and society.

Goals

Students pursuing the Bachelor of Business Administration (BBA) degree with a major area of specialization in Business Analytics are trained to combine quantitative, statistical, and computational tools and techniques to help companies understand, predict, and act on large amounts of data, improving decision-making in increasingly complex and interconnected business environments.

Student Learning Outcomes

- BBA/BSBA graduates will be critical thinkers, able to select and apply appropriate models, tools, and techniques, and frameworks to enable them to render analytically sound business decisions.
- BBA/BSBA graduates will be able to identify, analyze and resolve ethical issues in business scenarios.
- BBA/BSBA graduates will demonstrate professional written communication skills.