

# B.B.A. IN SUPPLY CHAIN ANALYTICS

## Overview

Major Area of Specialization in Supply Chain Analytics (STEM)

The Department of Management offers a major area of specialization in Supply Chain Analytics for students pursuing the Bachelor of Business Administration degree.

The undergraduate major in Supply Chain Analytics is designed to give students an understanding of the modern supply chains and the decision tradeoffs, skills necessary to model supply chain problems as well as source and analyze supply chain data to create efficiency in the firms. Students who pursue the major in Supply Chain Analytics will be exposed to an understanding of predictive and prescriptive analytics to become a problem-solver in the complex supply chain systems; coursework that helps to broaden their understanding of how to help organizations to identify value-enhancing efficiencies; and hands-on experiences that explore actually analyzing modern real-world supply chains.

## Curriculum Requirements

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

Code	Title	Credit Hours
<b>General Education Requirements</b> <sup>1, 2</sup>		
Written Communication Skills:		
WRS 105	First-Year Writing I	3
WRS 106 or WRS 107 or ENG 106	First-Year Writing II <sup>3</sup> First-Year Writing II: STEM Writing About Literature and Culture	3
Quantitative Skills:		
MTH 161	Calculus I (fulfilled through the BBA Core Requirements)	
Areas of Knowledge:		
Arts and Humanities Cognate		9
People and Society Cognate		9
STEM Cognate (9 credits) (fulfilled through the major)		
<b>Other Degree Requirements</b>		
UMX 100	The University of Miami Experience	0
Electives		19
<b>BBA Business Core Requirements</b> <sup>1</sup>		
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 <sup>3</sup>	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 <sup>4</sup>	3
MAS 202	Intermediate Business Statistics <sup>4</sup>	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	Foundations of Marketing	3

or MKT 301	Marketing Foundations	
MTH 161	Calculus I (or equivalent; fulfills Quantitative Skills Requirement) <sup>4</sup>	4
<b>Major Area of Specialization in Supply Chain Analytics</b> <sup>4, 5, 6</sup>		
MGT 303	Operations Management (Taken as part of the Business Core)	
MAS 332	Data Acquisition, Preparation and Visualization	3
MAS 342	Introduction to Optimization and Decision Making	3
MAS 432	Data Analysis	3
MGT 445	Supply Chain Modeling and Analysis	3
MGT 446	Supply Chain Strategy	3
MGT 448	Global Sourcing	3
MGT 451	Supply Chain Analytics Practicum	3
Quantitative Choice Course - Select one course (3 credit hours) from the following: <sup>6</sup>		
BTE 320	Python Programming: Fundamentals and Algorithms	
BTE 423	Database Management Systems	
ISE 465	Inventory and Supply Chain Management	
ISE 568	Facilities Planning and Logistics	
MAS 548	Machine Learning for Analytics	
MAS 549	Big Data Analytics	
MKT 302	Marketing Research and Market Analysis	
MKT 369	Marketing Analytics	
<b>Total Credit Hours</b>		<b>120</b>

<sup>1</sup> **NOTE:** WRS 105 and WRS 106 or ENG 106, or WRS 107, 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.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> In order to declare the Supply Chain Analytics major, a BBA student needs to have earned a minimum 3.6 average for MTH 161, MAS 201, and MAS 202.

<sup>5</sup> All specific coursework for the major area of specialization in Supply Chain 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.

<sup>6</sup> 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
<b>Fall</b>		
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
<b>Credit Hours</b>		<b>16</b>
<b>Spring</b>		
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, 107, or ENG 106	First-Year Writing II or First-Year Writing II: STEM or Writing About Literature and Culture	3
<b>Credit Hours</b>		<b>15</b>
<b>Sophomore Year</b>		
<b>Fall</b>		
ACC 211	Principles of Financial Accounting	3
BTE 210	Fundamentals of Business Technology and Innovation	3
MAS 202	Intermediate Business Statistics	3
MGT 303	Operations Management	3
Arts and Humanities Cognate Course		3
<b>Credit Hours</b>		<b>15</b>
<b>Spring</b>		
ACC 212	Managerial Accounting	3
BUS 300	Critical Thinking and Persuasion for Business	3
FIN 302	Fundamentals of Finance	3
MAS 432	Data Analysis	3
MGT 199	Professional Development and Success in the Workplace	1
Art and Humanities Cognate Course		3
<b>Credit Hours</b>		<b>16</b>
<b>Junior Year</b>		
<b>Fall</b>		
MAS 332	Data Acquisition, Preparation and Visualization	3
MGT 304	Organizational Behavior	3
MGT 445	Supply Chain Modeling and Analysis	3
Arts and Humanities Cognate Course		3
Elective		3
<b>Credit Hours</b>		<b>15</b>
<b>Spring</b>		
MGT 446	Supply Chain Strategy	3
Quantitative Choice Course		3
People and Society Cognate Course		3
Elective		3
Elective		3
<b>Credit Hours</b>		<b>15</b>
<b>Senior Year</b>		
<b>Fall</b>		
MAS 342	Introduction to Optimization and Decision Making	3
MGT 448	Global Sourcing	3
People and Society Choice Course		3
Elective		3
Elective		3
<b>Credit Hours</b>		<b>15</b>

<b>Spring</b>			
MGT 401	Strategic Management		3
MGT 451	Supply Chain Analytics Practicum		3
People and Society Cognate Course			3
Elective			3
Elective			1
<b>Credit Hours</b>			<b>13</b>
<b>Total Credit Hours</b>			<b>120</b>

## 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 Supply Chain Analytics are trained to become data-driven decision-makers to help companies to understand trade-offs within their supply chain, and to improve decision-making in increasingly complex and interconnected operations and supply chains.

## Student Learning Outcomes

BBA graduates will be critical thinkers who:

- Demonstrate an understanding of operations and supply chain theories and their applications
- Demonstrate skill sets necessary to source and apply supply chain data, as well as interpret and communicate the results.
- Demonstrate skill sets necessary to model decision problems of a firm's supply chain.
- Demonstrate skill sets necessary to understand pressing challenges related to operations and/or supply chain and effectively resolve them.