

# B.S.B.A./M.S. IN BUSINESS ANALYTICS DUAL DEGREE

## Bachelor of Science in Business Administration in Business Analytics and Master of Science in Business Analytics

The dual BSBA and Master of Science in Analytics program is designed in such a way that students can expect to complete both their Bachelor's and Master's degree within four and a half years. This accelerated program is designed to assist highly-motivated undergraduate students seeking an efficient path and an expedient start to their professional careers without sacrificing quality of education.

Students enroll in up to twelve credits of graduate work in their senior year.\* Then, at least twenty credits of graduate work is completed in the fall semester after the senior year.

\*Students in this program will only be permitted to take graduate classes if they are within 30 credits of completing the baccalaureate degree and have a minimum GPA of 3.0.

## Admission Requirements

To qualify for admission to the BBA/BSBA-MSBA programs, a student must:

- Be within 30 credits of completing the baccalaureate degree with a cumulative grade point average of 3.0 or higher.

### Requirements for Admission

- Completed application for admission submitted through BusinessCAS
- Academic transcript(s)
  - An unofficial copy of your current transcript must be uploaded with your online application.
  - Request official evaluations of transcripts from all previously attended non-U.S. institutions to be sent to BusinessCAS.
- Statement of purpose and short-essay responses to the career goal and program-related questions in BusinessCAS
- A current resume
- At least one letter of recommendation (up to three allowed) may be submitted through the BusinessCAS portal by including recommender contacts within the Program Materials section of the application.

### QUESTIONS?

Connect with Miami Herbert Business School's graduate enrollment advisors at (305) 284-2510 or by email at [mba@miami.edu](mailto:mba@miami.edu)

## Curriculum Requirements

### For students who earn an A- or better in MAS 311, 332, and 342

Code	Title	Credit Hours
<b>BSBA IN BUSINESS ANALYTICS</b>		<b>120</b>
University General Education Requirements (24 credit hours) <sup>1, 2, 3</sup>		
Electives (16 credit hours)		
BSBA Business Core Requirements (62 credit hours) <sup>1, 3</sup>		
Business Analytics Major (18 credit hours) <sup>4</sup>		
<b>MS IN BUSINESS ANALYTICS</b>		<b>32</b>
<b>Required Courses</b>		
BUS 610	Communicating for Career Success	
MAS 637	Applied Regression Analysis I	
MAS 639	Data Acquisition, Preparation, and Visualization	
MAS 640	Applied Time Series Analysis and Forecasting	
MAS 646	Applied Regression Analysis II	
MAS 648	Machine Learning for Data Analytics I	
MAS 649	Big Data Analytics	
MAS 650	Business Analytics Internship <sup>5</sup>	
MAS 651	Machine Learning for Data Analytics II	

<b>Additional Required Courses</b>	
Electives <sup>6</sup>	
<b>Total Credit Hours</b>	<b>152</b>

**For students who do not earn an A- or better in MAS 311, 332, and 432**

Code	Title	Credit Hours
<b>BSBA IN BUSINESS ANALYTICS</b>		<b>120</b>
University General Education Requirements (24 credit hours) <sup>1, 2, 3</sup>		
Electives (16 credit hours)		
BSBA Business Core Requirements (62 credit hours) <sup>1, 3</sup>		
Business Analytics Major (18 credit hours) <sup>4</sup>		
<b>MS IN BUSINESS ANALYTICS</b>		<b>32</b>
<b>Required Courses</b>		
BUS 610	Communicating for Career Success	
MAS 627	Programming for Data Analytics	
MAS 631	Statistics for Managerial Decision Making	
MAS 632	Management Science Models for Decision Making	
MAS 637	Applied Regression Analysis I	
MAS 639	Data Acquisition, Preparation, and Visualization	
MAS 640	Applied Time Series Analysis and Forecasting	
MAS 646	Applied Regression Analysis II	
MAS 648	Machine Learning for Data Analytics I	
MAS 649	Big Data Analytics	
MAS 650	Business Analytics Internship <sup>5</sup>	
MAS 651	Machine Learning for Data Analytics II	
<b>Additional Required Courses</b>		
Electives <sup>6</sup>		
<b>Total Credit Hours</b>		<b>152</b>

<sup>1</sup> **NOTE:** ENG 105 and 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.

<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 academic advisor.

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

<sup>4</sup> 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.

<sup>5</sup> Students may take MAS 652 Capstone Project as a replacement of MAS 650 Management Science Internship if an internship cannot be obtained.

<sup>6</sup> Electives are based on class demand.

<sup>7</sup> MAS 627 is replaced with MAS 691 or BTE 601 for students who received an A- or better in MAS 332.

<sup>8</sup> MAS 631 is replaced with an approved elective for students who received an A- or better in MAS 311.

<sup>9</sup> MAS 632 is replaced with an approved elective for students who received an A- or better in MAS 342.

<sup>10</sup> MAS 637 is replaced with MAS 681 for students who received an A- or better in MAS 432.

<sup>11</sup> MAS 648 is replaced with an approved elective if students take MAS 681.

## For students who earn an A- or better in MAS 311, 332, and 342

<b>Freshman Year</b>		<b>Credit Hours</b>
<b>Fall</b>		
ECO 211	Principles of Microeconomics	3
ENG 105	English Composition I	3
MGT 100	Managing for Success in the Global Environment	3
MKT 201	Foundations of Marketing	3
MTH 161	Calculus I	4
UMX 100	The University of Miami Experience	0
<b>Credit Hours</b>		<b>16</b>
<b>Spring</b>		
BUS 150	Business Analytics	3
ECO 212	Principles of Macroeconomics	3
ENG 106	English Composition II	3
MTH 162	Calculus II	4
Arts and Humanities Cognate Course		3
<b>Credit Hours</b>		<b>16</b>
<b>Sophomore Year</b>		
<b>Fall</b>		
ACC 211	Principles of Financial Accounting	3
BSL 212	Introduction to Business Law and Ethics	3
BTE 210	Fundamentals of Business Technology and Innovation	3
MAS 311	Applied Probability and Statistics	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 312	Statistical Methods and Quality Control	3
Arts and Humanities Cognate Course		3
<b>Credit Hours</b>		<b>15</b>
<b>Junior Year</b>		
<b>Fall</b>		
MAS 332	Data Acquisition, Preparation and Visualization	3
MAS 342	Introduction to Optimization and Decision Making	3
MGT 304	Organizational Behavior	3
People and Society Cognate Course		3
Elective		3
Elective		3
<b>Credit Hours</b>		<b>18</b>
<b>Spring</b>		
BTE 320	Programming: Fundamentals and Algorithms	3
MAS 432	Data Analysis	3
MAS 442	Stochastic Models in Operations Research	3
People and Society Cognate Course		3
Elective		3
Elective		1
<b>Credit Hours</b>		<b>16</b>

<b>Senior Year</b>		
<b>Fall</b>		
MGT 303	Operations Management	3
Business Analytics Major Choice		3
People and Society Cognate Course		3
Elective		3
MAS 637	Applied Regression Analysis I	2
MAS 639	Data Acquisition, Preparation, and Visualization	2
MAS 648	Machine Learning for Data Analytics I	2
<b>Credit Hours</b>		<b>18</b>
<b>Spring</b>		
MGT 401	Strategic Management	3
Business Analytics Major Choice		3
Quantitative Choice Course		3
Elective		3
MAS 640	Applied Time Series Analysis and Forecasting	2
MAS 649	Big Data Analytics	2
MAS 651	Machine Learning for Data Analytics II	2
<b>Credit Hours</b>		<b>18</b>
<b>Year One</b>		
<b>Fall</b>		
BUS 610	Communicating for Career Success	2
MAS 646	Applied Regression Analysis II	2
MAS 650	Business Analytics Internship	2
Electives		14
<b>Credit Hours</b>		<b>20</b>
<b>Total Credit Hours</b>		<b>152</b>

## Sample Plan of Study

### For students who do not earn an A- or better in MAS 311, 332, and 432

<b>Freshman Year</b>		
<b>Fall</b>		<b>Credit Hours</b>
ECO 211	Principles of Microeconomics	3
ENG 105	English Composition I	3
MGT 100	Managing for Success in the Global Environment	3
MKT 201	Foundations of Marketing	3
MTH 161	Calculus I	4
UMX 100	The University of Miami Experience	0
<b>Credit Hours</b>		<b>16</b>
<b>Spring</b>		
BUS 150	Business Analytics	3
ECO 212	Principles of Macroeconomics	3
ENG 106	English Composition II	3
MTH 162	Calculus II	4
Arts and Humanities Cognate Course		3
<b>Credit Hours</b>		<b>16</b>
<b>Sophomore Year</b>		
<b>Fall</b>		
ACC 211	Principles of Financial Accounting	3
BSL 212	Introduction to Business Law and Ethics	3
BTE 210	Fundamentals of Business Technology and Innovation	3

MAS 311	Applied Probability and Statistics	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 312	Statistical Methods and Quality Control	3
Arts and Humanities Cognate Course		3
<b>Credit Hours</b>		<b>15</b>
<b>Junior Year</b>		
<b>Fall</b>		
MAS 332	Data Acquisition, Preparation and Visualization	3
MAS 342	Introduction to Optimization and Decision Making	3
MGT 304	Organizational Behavior	3
People and Society Cognate Course		3
Elective		3
Elective		3
<b>Credit Hours</b>		<b>18</b>
<b>Spring</b>		
BTE 320	Programming: Fundamentals and Algorithms	3
MAS 432	Data Analysis	3
MAS 442	Stochastic Models in Operations Research	3
People and Society Cognate Course		3
Elective		3
Elective		1
<b>Credit Hours</b>		<b>16</b>
<b>Senior Year</b>		
<b>Fall</b>		
MGT 303	Operations Management	3
Business Analytics Major Choice		3
People and Society Cognate Course		3
Elective		3
MAS 631	Statistics for Managerial Decision Making	2
MAS 637	Applied Regression Analysis I	2
MAS 648	Machine Learning for Data Analytics I	2
<b>Credit Hours</b>		<b>18</b>
<b>Spring</b>		
MGT 401	Strategic Management	3
Business Analytics Major Choice		3
Quantitative Choice Course		3
Elective		3
MAS 640	Applied Time Series Analysis and Forecasting	2
MAS 649	Big Data Analytics	2
MAS 651	Machine Learning for Data Analytics II	2
<b>Credit Hours</b>		<b>18</b>
<b>Year One</b>		
<b>Fall</b>		
MAS 627	Programming for Data Analytics	2
MAS 639	Data Acquisition, Preparation, and Visualization	2
MAS 646	Applied Regression Analysis II	2
MAS 650	Business Analytics Internship	2

BUS 610	Communicating for Career Success	2
Electives		10
	<b>Credit Hours</b>	<b>20</b>
	<b>Total Credit Hours</b>	<b>152</b>