

MASTER OF SCIENCE IN BUSINESS ANALYTICS

<https://herbert.miami.edu/graduate/find-and-compare-programs/business-analytics/index.html>

Overview

The Master of Science in Business Analytics program at Miami Herbert Business School is designed to develop well-trained business analysts who are adept at transforming abstract data into actionable insights. The program emphasizes how to predict consumer behavior and forecast revenue and expenses across various business models and industries.

Students may select an intensive, 10-month full-time, Regular Track or a 2-year part-time, Professional Track for those currently working in the industry, offering flexibility without compromising the depth of learning.

Detailed admission information for both tracks is available in the program brochure, which can be requested by contacting Graduate Business Admissions at 305-284-2510, by email at mba@miami.edu, or visiting the Miami Herbert Business School website (<https://herbert.miami.edu/graduate/find-and-compare-programs/business-analytics/>).

Admission Requirements

- Completed application for admission submitted through BusinessCAS
- A baccalaureate degree from a regionally accredited institution
 - Official academic transcripts from all previously attended post-secondary institutions must be submitted directly to BusinessCAS (<https://businesscas.org/apply/>).
 - International applicants must have their educational credentials from institutions outside of the United States verified by an approved international credentialing evaluation service such as World Education Services (<https://www.wes.org/>) to confirm degree equivalency and GPA calculation.
- Statement of purpose and short-essay responses to the career goal and program-related questions in BusinessCAS
- Current resume outlining your professional and/or academic achievements
- At least one letter of recommendation is required. Up to three may be submitted.
- Official GMAT (or GRE) score to be sent directly to the University of Miami Herbert Business School by using the institution code below.
 - GMAT Institution Code is 7NV-S1-00
 - GRE Institution Code is 5815
 - Between the GMAT and GRE, there is no preference between the two tests for specialized masters' admissions.
- An official TOEFL or IELTS score is required as proof of English proficiency for international applicants who did not receive a degree in the United States or a foreign country where English is the primary language. The following minimum score is required for admission to a graduate business degree program.
 - TOEFL - 94 or above, institution code is 5815
 - IELTS - 7.0 or above, institution code is 4861

If you do not yet have a GMAT or GRE score and/or TOEFL or IELTS score (international candidates only), you may complete and submit your application prior to taking the exam by indicating your approximate date within the Standardized Tests tab in the Academic History section. Select "Add Test Score" by the relevant test, then indicate that you have not yet taken the exam and add your estimated test date in the section provided.

GMAT/GRE waivers can be granted on a case-by-case basis. Should you wish to request a waiver, in your BusinessCAS application make sure to "opt-out" of submitting a test score. You will then need to upload a page summary of why you should be considered for a waiver.

We encourage candidates to upload unofficial transcripts and test scores (if required) with their BusinessCAS application in order to expedite the review of their file while official documents are processed.

QUESTIONS?

Connect with Miami Herbert Business School's graduate enrollment advisors at (305) 284-2510, by email at mba@miami.edu, or visit the Miami Herbert Business School website (<https://herbert.miami.edu/graduate/find-and-compare-programs/finance/>).

Curriculum Requirements

Regular and Professional Tracks

Code	Title	Credit Hours
Required Courses ¹		
BTE 601	Python Programming	2
BUS 610	Communicating for Career Success	2
MAS 631	Statistics for Managerial Decision Making	2
MAS 632	Management Science Models for Decision Making	2
MAS 637	Applied Regression Analysis I	2
MAS 639	Data Acquisition and Preparation	2
MAS 640	Applied Time Series Analysis and Forecasting	2
MAS 646	Applied Regression Analysis II	2
MAS 649	Big Data Analytics	2
MAS 648	Machine Learning for Data Analytics I	2
MAS 651	Machine Learning for Data Analytics II	2
MAS 652	Business Analytics Capstone Project	2
MGT 697	Graduate Business Career Connect Course	1
Electives ^{2 and 3}		8
At least four of the following:		
ACC 628	Introduction to Accounting Analytics	
ACC 670	Financial Reporting and Analysis	
BTE 612	Cloud Technologies	
BTE 623	Database Management Systems	
BTE 646	Product Management in the Digital Age	
MAS 627	Programming for Data Analytics	
MAS 629	SAS Programming for Business Analytics	
MAS 633	Introduction to Quality Management	
MAS 634	Administrative Systems for Quality Management	
MAS 636	Dashboard Tools for Visual Analytics	
MAS 638	Business Analytics Consulting - from Basics to AI	
MGT 642	Supply Chain Analytics	
MKT 675	Marketing Analytics	
Total Credit Hours		33

¹ Students must take at least two courses between MAS 640, MAS 646, MAS 649 & MAS 651.

² 16 credits of electives (approximately 8 courses) are required. Elective offerings are based on class demand.

³ List contains commonly taken electives but is not exhaustive.

The curriculum defines a common core of required courses (17 credits) and allows the selection of elective courses (16 credits). A minimum of 4 elective credits must be taken from MAS 640, MAS 646, MAS 649, or MAS 651.

Successful completion of a capstone project while concurrently enrolled in MAS 652 – Business Analytics Capstone is required for the Master of Science in Business Analytics degree. Capstone projects are established in partnership with MSBA faculty and industry partners. All capstone projects must be approved by the faculty director.

Sample Plan of Study

Regular Track

Year One		
Fall		Credit Hours
MAS 631	Statistics for Managerial Decision Making	2
Session I		
BTE 601	Python Programming	2
MAS 632	Management Science Models for Decision Making	2

MAS 637	Applied Regression Analysis I	2
MGT 697	Graduate Business Career Connect Course	1
Elective		2
Session II		
BUS 610	Communicating for Career Success	2
MAS 639	Data Acquisition and Preparation	2
MAS 648	Machine Learning for Data Analytics I	2
Elective		2
Credit Hours		19
Spring		
Session I		
MAS 652	Business Analytics Capstone Project	2
MAS 640	Applied Time Series Analysis and Forecasting	2
MAS 646	Applied Regression Analysis II	2
MAS 651	Machine Learning for Data Analytics II	2
Elective		2
Session II		
MAS 649	Big Data Analytics	2
Elective		2
Credit Hours		14
Total Credit Hours		33

Sample Plan of Study

Professional Track

Year One		
Fall		Credit Hours
Term 1		
MAS 631	Statistics for Managerial Decision Making	2
BTE 601	Python Programming	2
MAS 637	Applied Regression Analysis I	2
Term 2		
MAS 639	Data Acquisition and Preparation	2
MAS 648	Machine Learning for Data Analytics I	2
Credit Hours		10
Spring		
Term 1		
MAS 640	Applied Time Series Analysis and Forecasting	2
MAS 646	Applied Regression Analysis II	2
Term 2		
BTE 646, MAS 691, or MKT 675	Product Management in the Digital Age or Topics in Business Analytics or Marketing Analytics	2
Credit Hours		6
Year Two		
Fall		
Term 1		
MAS 632	Management Science Models for Decision Making	2
MGT 697	Graduate Business Career Connect Course	1
MAS 627 or 633	Programming for Data Analytics or Introduction to Quality Management	2
Term 2		
BUS 610	Communicating for Career Success	2

BTE 612, MAS 634, or MAS 636	Cloud Technologies or Administrative Systems for Quality Management or Dashboard Tools for Visual Analytics	2
Credit Hours		9
Spring		
Term 1		
MAS 652	Business Analytics Capstone Project	2
MAS 651	Machine Learning for Data Analytics II	2
BTE 623, MAS 638, or MGT 642	Database Management Systems or Business Analytics Consulting - from Basics to AI or Supply Chain Analytics	2
Term 2		
MAS 649	Big Data Analytics	2
Credit Hours		8
Total Credit Hours		33

Mission

- To develop individuals that are prepared to use the methods and technology of analytics and data science to impact global business and society.

Student Learning Outcomes

- Students will develop skills in acquiring, preparing and visualizing data.
- Students will develop and use data mining methods and software tools.
- Students will learn to use decision models.
- Student will develop and use predictive models.
- Student will demonstrate an understanding of career acceleration and lifelong learning strategies.