

# MASTER OF SCIENCE IN APPLIED BUSINESS ANALYTICS

The goal of this Master of Science in Applied Business Analytics (MS ABA) program is to address the growing demand for analytical capabilities in solving business problems that are demanded by a variety of employers within the United States. Research results from public and private sectors show that there are substantially fewer experts in the field of business analytics than there are opportunities for them.

This program prepares students not only to be able to analyze and interpret data, but also to translate this into effective decision-making for complex business problems. The program is a unique combination of one functional area of business and a breadth of courses in business analytics capped by a Master's thesis. In the Master's thesis, students are expected to study a research problem in depth and solve the problem and write an academic or scholarly paper or develop a teaching instrument such as case or game based on the research.

The Master of Science in Applied Business Analytics (M.S. ABA) degree can be earned by completing a minimum of 24 semester hours of required coursework at the 6000- level and a 6 credit hour Master's thesis in the College of Business and Innovation meeting the program requirements. Additional coursework at the 5000 level, of up to 12 hours, may be required to satisfy prerequisites. This is a STEM program.

All decisions regarding admissions to the M.S. program are made through the academic director of the M.S. ABA program.

The admission decision will be based on a composite profile of the applicant including test scores, academic background, grades, work experience, letters of reference, and also the statement of purpose. The typical admitted student in the M.S. program has at least a 2.8 undergraduate GPA and 480 on the GMAT or equivalent score in the GRE (minimum of 25 in verbal and 28 in quantitative reasoning is expected). Additional requirements include proficiency in spreadsheets and a programming language and a calculus course with C or better, both of which may be met by taking courses if necessary after a provisional admission. The following documents are required for admission to the program:

1. Official transcripts from each post-secondary institution attended.
2. Official GMAT scores sent directly from the Graduate Management Admissions Council (GMAC) or GRE score sent directly by educational testing service to the College of Graduate Studies. The minimum GMAT score is 480 (equivalent score in the GRE), must be no more than five years old.
3. Exceptionally qualified applicants who meet at least one of the following criteria may apply for a GMAT waiver. The decision on waiver is made by evaluating each applicant individually based on the following criteria:

- Very high Undergraduate or graduate GPA
- Recent graduates or post-graduates (3 years or less) with high GPA
- Possess significant, relevant work experience (deemed acceptable to the Program Chair for the applied business analytics)

4. Most recent resume or curriculum vitae including contact information for two references (name, title, place of employment, phone number and e-mail address).

5. A 400-word essay on statement of purpose.

In the case of students whose native language is not English, a score of 80 or above on the TOEFL IBT, PTE equal to 58 or above, Duolingo equal to 105 or above, or a 6.5 or above on the International English Language Testing System (IELTS) is mandatory.

Applications for admission are considered on a rolling basis. However, students are encouraged to submit their applications by the following dates:

Domestic students:

Fall Semesters	July 15th
Spring Semesters	November 15th
Summer Semesters	April 15th

International students:

Fall Semesters	May 1st
Spring Semesters	October 1st
Summer Semesters	March 1st

Final admissions decisions will be withheld until the application for admission is complete. No materials submitted to the University will be returned to the applicant. The MS admits students to the program on a rolling admissions basis.

## Required core

Code	Title	Hours
INFS 6150	Business Intelligence Management	3
INFS 6450	Data Mining	3
OSCM 6250	Essentials of Business Analytics	3
OSCM 6350	Prescriptive Analytics	3
OSCM 6550	Business Analytics and Cases	03

## required electives

Choose three courses (9 credit hours) from the same functional area of business (ACCT, FINA, INFS, MKTG, OSCM). If the BUAD course is taken, it must be in the same functional area of business as the other three electives chosen.

Code	Title	Hours
ACCT functional area		
BUAD 6100	Accounting For Decision Making	3
ACCT 6130	Advanced Financial Accounting	3

ACCT 6190	Contemporary Accounting Problems	3
ACCT 6210	Research In Accounting And Taxation	3
ACCT 6250	Corporate Taxation	3
ACCT 6330	Advanced Topics In Accounting Information Systems	3
ACCT 6430	Business Valuation And Analysis	3
ACCT 6600	Data Analytics for Accountants	3
FINA functional area		
BUAD 6200	Corporate Finance (FINA 5310 is a prerequisite)	3
FINA 6130	Advanced Corporate Finance	3
FINA 6140	Investments And Security Analysis	3
FINA 6150	Financial Institutions And Markets	3
FINA 6340	Derivative Securities	3
FINA 6750	Research In Finance <small>Instructor permission only</small>	3
INFS functional area		
BUAD 6800	Information Technology And E-Business	3
INFS 6560	Systems Analysis And Design	3
INFS 6610	Information Integration and Data Management	3
INFS 6710	Management of Information Systems Security	3
INFS 6790	ERP Systems Configuration and Integration	3
INFS 6930	Contemporary Topics Seminar	3
INFS 6810	Network Communications	3
MKTG functional area		
BUAD 6300	Strategic Marketing And Analysis	3
MKTG 6140	Customer Relationship Marketing	3
MKTG 6220	Integrated Marketing Communications	3
MKTG 6230	Digital Marketing Processes and Virtual Value Networks	3
MKTG 6240	Sales Force Leadership and Strategy	3
MKTG 6250	Global Sales and Strategic Customer Management	3
MKTG 6310	Managing Innovation and Product Commercialization	3
MKTG 6320	Strategic Brand Management	3
MKTG 6980	Special Topics	3
OSCM functional area		
BUAD 6600	Supply Chain Management	3
OSCM 6270	Simulation and Waiting Lines	3
OSCM 6680	Quality Management and Six Sigma	3
OSCM 6690	Supply Chain Resources Management	3
OSCM 6780	ERP Systems Process Management	3

3. Produce new knowledge by applying the tools and techniques of predictive and prescriptive analytics in the solving a business problem as codified in a Master's thesis.

## Required thesis

The program is capped by a required 6 credit hour Master's thesis.

Code	Title	Hours
OSCM 6960	Masters Thesis	1-6

1. Reasonable mastery of business analytics covering concepts in statistics and modeling in the analysis of data for business decision making
2. Mastery of one area of applied business area.