

BUSINESS ADMINISTRATION MAJOR, BUSINESS ANALYTICS CONCENTRATION (B.S.)

There is a tremendous amount and variety of data that is being created and stored. Properly exploited big data can provide businesses and governments with more precise and immediate information to make important decisions affecting critical issues. Business analytics is the set of tools and techniques that makes it possible to translate big data into insight and information for efficient decision making. Professionals who are proficient in business analytics are in serious short supply and are very valuable to their employers.

The undergraduate concentration in Business Analytics has been designed to provide the students with exactly these skills and make them competitive in this market. They will learn how to navigate the world of distributed storage and computing and learn how to use powerful statistical and mathematical techniques to arrive at implementable solutions to business problems. The emphasis of this concentration is on giving you practical skills. A capstone practicum will give the students an opportunity to apply the skills they have learned to a live business problem in a real company.

Program Requirements Overview

Code	Title	Credits
	General Education Requirements	30
	World Languages and Cultures Requirements	3-9
	Major Requirements	72
	Free Electives	15-9
	Total Credits	120

Major Requirements

Code	Title	Credits
Business Administration Required Core		
<i>Business Fundamentals</i>		
ACCT 204	Fundamentals of Accounting	3
BSLW 235	Legal, Ethical, and Global Environment of Business	3
BUGN 280	Strategic Business Communications	3
INBS 250	Introduction to International Business	3
INFO 290	Technology in Business	3
<i>Integrated Core</i>		
BUGN 295	Elements of Business	3
FINC 300	Integrated Core: Finance	3
INFO 300	Integrated Core: Operations Management	3
MGMT 300	Integrated Core: Management	3
MGMT 439	Applied Business Strategy	3
MKTG 300	Integrated Core: Marketing	3
Business Analytics Concentration		
<i>Required Courses</i>		
INFO 310	Database Management Systems	3
INFO 357	Programming for Business	3

INFO 365	Foundations of Business Analytics	3
INFO 366	Managing Big Data	3
INFO 367	Structured Data Analytics	3
INFO 368	Unstructured Data Analytics	3
INFO 400	Business Analytics Capstone Practicum	3

Selected Courses

Select two of the following: 6

INFO 351	Fundamentals of Project Management	
INFO 360	MIS Co-Op	
INFO 363	Inferential Statistical Methods with Business Applications	
INFO 364	Regression Modeling in Business	
INFO 369	Decision and Risk Analysis	
INFO 370	Pricing Analytics and Revenue Management	
INFO 414	Information Security System Management	
INFO 416	Business Process Analysis and Enterprise Systems	
INFO 440	Data Analysis and Visualization	
INFO 491	Independent Study in Information Systems	
INFO 492	Special Topics in Information Systems	

Business Administration Collaterals

ECON 101	Applied Macroeconomics	3
ECON 102	Applied Microeconomics	3
INFO 173	Spreadsheet Modeling for Business Decisions	3
INFO 240	Statistical Methods in Business	3

Business Administration Career Learning

BUGN 310	Campus to Career Transition I	0
BUGN 320	Campus To Career Transition II	0
BUGN 330	Campus To Career Transition III	0
BUGN 340	Campus To Career Transition IV	0

Total Credits 72

General Education Requirements

Click here for a list of courses that fulfill General Education categories. (<http://catalog.montclair.edu/undergraduate-graduate-degree-requirements/general-ed-ba-bs/>)

Code	Title	Credits
A. New Student Seminar		
	Complete a 1 credit New Student Seminar course.	1
C. Communication		
	1. Writing	3
	2. Literature	3
	3. Communication	3
D. Fine and Performing Arts		
	Complete a 3 credit Fine and Performing Arts course.	3
F. Humanities		
	1. Great Works and Their Influences	3
	2. Philosophical and Religious Perspectives	3
G. Computer Science		
INFO 173	Spreadsheet Modeling for Business Decisions (Fulfilled in the major.)	
H. Mathematics		

INFO 240	Statistical Methods in Business (Fulfilled in the major.)	
I. Natural Science Laboratory		
Complete a 4 credit Natural Science Laboratory course.		4
J. Physical Education		
Complete a 1 credit Physical Education course.		1
K. Social Science		
1. <i>American and European History</i>		3
2. <i>Global Cultural Perspectives</i>		3
3. <i>Social Science Perspectives</i>		
ECON 101	Applied Macroeconomics (Fulfilled in the major.)	
L. Interdisciplinary Studies		
ECON 102	Applied Microeconomics (Fulfilled in the major.)	
Total Credits		30

World Languages and Cultures Requirements

Click here for a list of courses that fulfill World Languages and Cultures categories. (<http://catalog.montclair.edu/undergraduate-graduate-degree-requirements/world-languages-cultures-requirement/>)

Code	Title	Credits
World Languages		3-6
World Cultures		0-3
Total Credits		3-9

Recommended Roadmap to Degree Completion

This recommended four-year plan is provided as an outline for students to follow in order to complete their degree requirements within four years. This plan is a recommendation and students should only use it in consultation with their academic advisor.

Course	Title	Credits
First Year		
Fall		
GENERAL EDUCATION: (A) New Student Seminar		1
GENERAL EDUCATION: (C1) Writing		3
GENERAL EDUCATION: (C3) Communication		3
ECON 102	Applied Microeconon	3
INFO 173	Spreadsheet Modeling for Business Decisions	3
MATH 100	Math for Business and Social Sciences (If needed) or Free Elective)	3
Credits		16
Spring		
GENERAL EDUCATION: (C2) Literature		3
GENERAL EDUCATION: (I) Natural Science Laboratory		4
ECON 101	Applied Macroecono	3

INFO 240	Statistical Methods in Business	3
INFO 290	Technology in Business	3
Credits		16

Second Year		
Fall		
GENERAL EDUCATION: (K1) Social Science – American and European History		3
World Language 1		3
ACCT 204	Fundamenta of Accounting	3
BUGN 280	Strategic Business Communications	3
BUGN 295	Elements of Business	3
Credits		15

Spring		
GENERAL EDUCATION: (F1) Humanities – Great Works and Their Influences		3
World Language 2		3
BSLW 235	Legal, Ethical, and Global Environment of Business	3
INBS 250	Introduction to International Business	3
INFO 310	Database Managemen Systems	3
Credits		15

Third Year		
Fall		
BUGN 310	Campus to Career Transition I	0
FINC 300	Integrated Core: Finance	3
INFO 300	Integrated Core: Operations Managemen	3
INFO 357	Programming for Business	3
MGMT 300	Integrated Core: Managemen	3
MKTG 300	Integrated Core: Marketing	3
Credits		15

Spring		
GENERAL EDUCATION: (F2) Humanities – Philosophical and Religious Perspectives		3
GENERAL EDUCATION: (K2) Social Science – Global Cultural Perspectives		3
BUGN 320	Campus To Career Transition II	0
INFO 365	Foundations of Business Analytics	3
Concentration Elective		3

Concentration Elective		3
	Credits	15
Fourth Year		
Fall		
World Cultures		3
BUGN 330	Campus To Career Transition III	0
INFO 366	Managing Big Data	3
INFO 367	Structured Data Analytics	3
INFO 368	Unstructured Data Analytics	3
MGMT 439	Applied Business Strategy	3
	Credits	15
Spring		
GENERAL EDUCATION: (D) Fine and Performing Arts		3
GENERAL EDUCATION: (J) Physical Education		1
BUGN 340	Campus To Career Transition IV	0
INFO 400	Business Analytics Capstone Practicum	3
Free Elective		3
Free Elective		3
	Credits	13
	Total	120
	Credits	