BUSINESS ANALYTICS (B.S.)

Business analytics is the set of tools and techniques that makes it possible to translate data into insight and information for efficient decision making. Business analytics
majors are in high demand in well-paying jobs.

The **Bachelor of Science in Business Analytics** major focuses on applying machine learning to business problems and opportunities. It provides a hands-on introduction to
state-of-the-art technologies and techniques, allowing the analysis of large and complex datasets to obtain business insights.

Admissions requirements: Students transferring into the major from the Business Administration or Accounting majors need a 2.7 GPA. Students transferring into the
major from other programs need a 3.0 GPA.

120 semester hours of coursework is required for the baccalaureate degree with a minimum 2.70 overall GPA, and a minimum 2.70 major GPA. Students in the degree
must also earn a grade of B- or better in INFO 240 – Statistical Methods in Business (or equivalent course taken at MSU or other institutions).

Degree Requirements Overview

Code	Title	Credits
SEEDS General Education Requirements		12-15
New Student Seminar		1
Major Requirements		63
Free Electives		44-41
Total Credits		**120**

Program Requirements

Code	Title	Credits
Major Core		
Business Fundamentals		
INFO 173	Spreadsheet Modeling for Business Decisions	3
BCOM 280	Strategic Business Communications	3
INFO 290	Technology in Business	3
ACCT 204	Fundamentals of Accounting	3
ECON 101	Applied Macroeconomics	3
ECON 102	Applied Microeconomics	3
INFO 240	Statistical Methods in Business	3
MGMT 201	Business Ethics and Social Impact	3
Integrated Core		
FINC 300	Integrated Core: Finance	3
INFO 300	Integrated Core: Operations Management	3
MGMT 300	Integrated Core: Management	3
MKTG 300	Integrated Core: Marketing	3
Business Analytics Core		
INFO 210	Database Systems	3
INFO 257	Programming for Business	3
INFO 265	Foundations of Business Analytics and Artificial Intelligence	3
INFO 266	Data Analysis and Visualization	3
INFO 367	Introduction to Data Mining	3
INFO 495	Business Analytics Capstone Practicum	3
Collateral Course		
WRIT 105	College Writing I	3
Career Learning		
BUGN 310	Campus to Career Transition Course I: Prepare for Your Career	0
BUGN 320	Campus to Career Transition Course II: On the Job Success	0
Major Electives		
Complete 6 credits from the list below. Students in the combined B.S./M.S. Business Analytics program will complete INFO 574 and INFO 589 in place of undergraduate electives.		6
Total Credits		**63**

Electives

Code	Title	Credits
INFO 302	Business Analytics and Artificial Intelligence: Ethical and Legal Issues	3
INFO 303	Prompt Engineering	3
INFO 360	MIS Co-Op	3
INFO 366	Managing Big Data and Cloud Computing	3
INFO 390	Digital Transformation	3
INFO 395	Business Analytics and Artificial Intelligence Strategy	3
INFO 401	Text Mining	3
INFO 416	Business Process Analysis and Enterprise Systems	3
INFO 470	Electronic Commerce: Creating Business Value Using Information Technology	3
INFO 491	Independent Study in Information Systems	3
INFO 492	Special Topics in Information Systems	1-3

New Student Seminar

Code	Title	Credits
Students in the Adult Learner program must take GNED 100.		
Complete one course from the following. Some courses may be restricted by major. Consult with an academic advisor.		1
ADVS 198	Pathways to Success	
CHEM 190	Freshman Seminar in Chemistry	
FYS 100	First Year Seminar	
GNED 100	Adult Academic Success Seminar	
GNED 199	New Student Seminar	
HPEM 199	Freshman Seminar in Health and Physical Education	
IDS 155	Pathways to Adult Learning	
JUST 199	New Student Seminar	
MATH 102	New Student Experience for Mathematical Sciences	
MUGN 199	Freshman Seminar for Music Majors	
NURS 199	Introduction to Nursing	
POLS 199	Freshman Seminar in Political Science and Law	

SEEDS General Education Requirements

Click here for a list of courses that fulfill the SEEDS requirements. (http://catalog.montclair.edu/programs/seeds-general-education-requirements/)

Code	Title	Credits
Foundations		
Effective Writing I		
Fulfilled by WRIT 105 in the major.		
Effective Writing II		
Fulfilled by BCOM 280 in the major.		
Interactive Communication		
Complete one Interactive Communication course.		3
Quantitative Reasoning		
Fulfilled by INFO 240 in the major.		
Political and Civic Life		
Fulfilled by ECON 102 in the major.		
World Language		
Complete two sequential classes in one World Language when starting at the Beginner I or Beginner II level. Complete one class when starting at the Intermediate/Advanced Level.		3-6
Exploration		
Complete one course from four different Exploration categories		6
Analyzing Cultures and Societies		
Fulfilled by ECON 101 in the major.		
Creative Expression		
Ethical Inquiry		
Fulfilled by MGMT 201 in the major.		
Historical Thinking		
Literary and Artistic Analysis		
Scientific Reasoning		
Total Credits		**12-15**

Recommended Roadmap to Degree Completion

This recommended degree plan is provided as an outline for students to follow in order to complete their degree requirements within four years and 120 credits. This plan is a recommendation and MUST be used in consultation with their academic advisor. Important note: Students should be aware this plan assumes no pre-requisite coursework is required. If pre-requisite coursework is needed, students may have additional requirements to fulfill which do not appear on the plan.

First Year

Fall	Credits	Spring	Credits
New Student Seminar	1	BCOM 280 (Fulfills SEEDS: Effective Writing II)	3
WRIT 105 (Fulfills SEEDS: Effective Writing I)	3	INFO 240 (Fulfills SEEDS: Quantitative Reasoning)	3
ECON 102 (Fulfills SEEDS: Political and Civic Life)	3	ECON 101 (Fulfills SEEDS: Exploration – Analyzing Cultures and Societies)	3
INFO 173	3	ACCT 204	3
MGMT 201 (Fulfills SEEDS: Exploration - Ethical Inquiry)	3	INFO 290	3
MATH 100 (if needed, or Free Elective)	3		
	16		**15**

Second Year

Fall	Credits	Spring	Credits
INFO 210	3	INFO 300	3
INFO 257	3	MGMT 300	3
INFO 265	3	MKTG 300	3
SEEDS: Interactive Communication	3	FINC 300	3
BUGN 310	0	INFO 266	3
Free Elective	3	BUGN 320	0
	15		**15**

Third Year

Fall	Credits	Spring	Credits
SEEDS: World Language I	3	SEEDS: World Language II	3
INFO 367	3	Free Elective	3
Free Elective	3	Free Elective	3
Free Elective	3	Free Elective	3
Free Elective	3	Free Elective	3
	15		**15**

Fourth Year

Fall	Credits	Spring	Credits
SEEDS: Exploration	3	SEEDS: Exploration	3
Major Elective	3	INFO 495	3
Free Elective	3	Major Elective	3
Free Elective	3	Free Elective	3
Free Elective	3	Free Elective	2
	15		**14**

Total Credits 120