

INFORMATICS (B.S.) - BLOOMFIELD COLLEGE

The Informatics program at Bloomfield College of Montclair State University prepares students for applied, user-centered careers in technology by integrating computer science with interdisciplinary problem-solving. Grounded in the College's mission, the program emphasizes community engagement, collaboration, and the responsible use of technology to improve lives locally and globally. Students study the structure, behavior, and interactions of systems that store, process, and communicate information, with coursework spanning information sciences, human-computer interaction, systems analysis and design, statistics, and psychology. Unlike traditional computer science programs that prioritize theory and research, Informatics at Bloomfield focuses on real-world applications, user experience, and technological innovation that supports and empowers diverse communities.

For details about this program, including program description, admission requirements, and contact information, click here (<https://www.montclair.edu/academics/programs/bs-informatics/>).

Unless otherwise noted, 120 credits of coursework is required for a baccalaureate degree with a minimum 2.0 overall GPA, and a minimum 2.0 major GPA.

Degree Requirements Overview

Code	Title	Credits
	New Student Seminar	3
	SEEDS General Education Requirements	9-12
	Major Requirements	74
	Free Electives	34-31
Total Credits		120

Program Requirements

Code	Title	Credits
Major Core		
CAT 130	Introduction to Data Visualization	3
CMP 100	Introduction to Informatics	3
CMP 108	Spreadsheet Essentials	3
CMP 120	Cyber Crime	3
CMP 126	Programming I	3
CMP 226	Programming II	3
CMP 228	Data Structures	3
CMP 300	Systems Analysis and Design	3
CMP 330	Database Management	3
CMP 333	Selected Topics in Informatics	3
CMP 342	Management Information Systems	3
CMP 460	Applied Systems Development Project	3
MTH 161	Precalculus	4
MTH 200	Applied Statistics I	4
MTH 221	Calculus I	4
MTH 332	Discrete Mathematics	3
PSY 100	Introduction to Psychology	3
PSY 224	Industrial/Organizational Psychology	3

PSY 317	Organizational Behavior	4
WRT 105	Argumentative and Analytic Writing	4
WRT 109	Synthesis and Research Writing	3
WRT 205	Communication in the Workplace	3
PHIL 281	Ethics and Technology	3
Total Credits		74

Bloomfield College of Montclair State University New Student Seminar

Code	Title	Credits
FYS 100	First Year Seminar	3
Total Credits		3

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		
	<i>Effective Writing I</i>	
	Fulfilled by WRT 105 in the major.	
	<i>Effective Writing II</i>	
	Fulfilled by WRT 109 in the major.	
	<i>Interactive Communication</i>	
	Fulfilled by WRT 205 in the major.	
	<i>Quantitative Reasoning</i>	
	Fulfilled by MTH 221 in the major.	
	<i>Political and Civic Life</i>	
	Complete one Political and Civic Life course.	3
	<i>World Language</i>	
	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.	3
	<i>Analyzing Cultures and Societies</i>	
	Fulfilled by PSY 100 in the major.	
	<i>Creative Expression</i>	
	<i>Ethical Inquiry</i>	
	Fulfilled by PHIL 281 in the major.	
	<i>Historical Thinking</i>	
	<i>Literary and Artistic Analysis</i>	
	<i>Scientific Reasoning</i>	
	Fulfilled by CMP 100 in the major.	
Total Credits		9-12

Recommended Roadmap to Program of Study Completion

This recommended degree plan is provided as an outline for students to follow in order to complete their program of study 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
WRT 105	4 WRT 109 (Fulfills SEEDS: Effective Writing II)	3
FYS 100	3 PSY 100 (Fulfills SEEDS: Exploration 2 - Analyzing Cultures and Societies)	3
CMP 100 (Fulfills SEEDS: Exploration 1 - Scientific Reasoning)	3 CMP 108	3
MTH 161	4 MTH 221 (Fulfills SEEDS: Quantitative Reasoning)	4
	Free Elective	3
	14	16

Second Year

Fall	Credits Spring	Credits
CMP 126	3 CMP 226	3
PSY 224	3 PSY 317	4
MTH 200	4 MTH 332	3
SEEDS: Exploration 3	3 World Language 2 or Free Elective	3
World Language 1	3 Free Elective	2
	16	15

Third Year

Fall	Credits Spring	Credits
CMP 228	3 CMP 300	3
PHIL 281 (Fulfills SEEDS: Exploration 4 - Ethical Inquiry)	3 CMP 120	3
Free Elective	3 CAT 130	3
SEEDS: Political and Civic Life	3 WRT 205 (Fulfills SEEDS: Interactive Communication)	3
Free Elective	3 Free Elective	3
	15	15

Fourth Year

Fall	Credits Spring	Credits
CMP 342	3 CMP 460	3
CMP 330	3 CMP 333	3
Free Elective	3 Free Elective	3
Free Elective	3 Free Elective	3
Free Elective	2 Free Elective	3
	14	15

Total Credits 120