INFORMATION TECHNOLOGY (B.S.)

This major focuses on working with designing, implementing and maintaining information systems.

120 credits of coursework is required for the baccalaureate degree.

2.8 overall GPA required for Information Technology major.

Students in the Computer Science or Information Technology majors must also successfully complete the following courses with a C- or higher by the end of their second semester in the major: CSIT 104, CSIT 111, and MATH 111 or MATH 122 or AMAT 120.

Please note: The above majors have a retention policy. Students must maintain a minimum 2.60 cumulative GPA during their first three semesters.

Program Requirements Overview

Code	Title	Credits
General Education		36
World Languages and Cultures		3-9
Major Requirements		61
Free Electives		20-14
Total Credits		**120**

Major Requirements

Code	Title	Credits
Core Courses		
CSIT 104	Python Programming I	3
CSIT 111	Fundamentals of Java Programming	3
CSIT 112	Fundamentals of Programming II	3
CSIT 212	Data Structures and Algorithms	3
CSIT 230	Computer Systems	3
CSIT 231	Systems Programming	3
CSIT 335	Introduction to Human-Computer Interaction (HCI)	3
CSIT 337	Internet Computing	3
CSIT 340	Computer Networks	3
CSIT 355	Database Systems	3
CSIT 416	IT Project Management	3
CSIT 432	Systems Administration	3
CSIT 460	Computer Security	3
Complete for 3 credits:		3
CSIT 491	Cooperative Education in Computer Science and Information Technology	
Electives		
Complete 9 credits from the list below.		9
Required Math Courses		
CSIT 170	Discrete Mathematics	3
AMAT 120	Applied Calculus A	4
or MATH 122	Calculus I	
STAT 230	Data Science and Statistics	3
Total Credits		**61**

Electives

Code	Title	Credits
CSIT 256	Introduction to Data Science	3
CSIT 357	Artificial Intelligence	3
CSIT 359	Data Visualization	3
CSIT 360	Advanced Techniques in Data Science	3
CSIT 365	Information Assurance and Security	3
CSIT 379	Computer Science Theory	3
CSIT 429	Parallel and Distributed Computing	3
CSIT 431	Introduction to Robotics	3
CSIT 437	Web Services	3
CSIT 440	Principles of Data Mining	3
CSIT 451	Mobile Computing	3
CSIT 495	Special Topics in Undergraduate Computer Science	1-3
CSIT 497	Undergraduate Research I	1-3
CSIT 498	Undergraduate Research II	3

General Education Requirements

Click here for a list of courses that fulfill General Education categories. (http://catalog.montclair.edu/programs/general-education-requirements-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		
CSIT 111	Fundamentals of Java Programming (Fulfilled in the major.)	
H. Mathematics		
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. American and European History		*3*
2. Global Cultural Perspectives		*3*
3. Social Science Perspectives		*3*
L. Interdisciplinary Studies		

Complete a 3 credit Interdisciplinary Studies course.	3
Total Credits	**36**

World Languages and Cultures Requirements

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

Code	Title	Credits
World Languages		
Based on language placement exam, complete one or two sequential courses in the same language. **Requirement is automatically fulfilled by language major courses.**		3-6
World Cultures		
Requirement may be fulfilled by course selected in General Education - Social Science: Global Cultural Perspectives. Requirement may also be fulfilled by major coursework. See list of courses.		0-3
Total Credits		**3-9**

Recommended Roadmap to Degree Completion

This 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.

First Year

Fall	Credits	Spring	Credits
GENERAL EDUCATION: (A) New Student Seminar	1	GENERAL EDUCATION: (C2) Literature	3
GENERAL EDUCATION: (C1) Writing	3	GENERAL EDUCATION: (D) Fine and Performing Arts	3
World Language 1	3	GENERAL EDUCATION: (F1) Humanities – Great Works and Their Influences	3
CSIT 104	3	World Language 2	3
AMAT 120 or MATH 122	4	CSIT 111	3
	14		**15**

Second Year

Fall	Credits	Spring	Credits
GENERAL EDUCATION: (C3) Communication	3	GENERAL EDUCATION: (F2) Humanities – Philosophical and Religious Perspectives	3
GENERAL EDUCATION: (K3) Social Science – Social Science Perspectives	3	GENERAL EDUCATION: (K2) Social Science – Global Cultural Perspectives	3
GENERAL EDUCATION: (L) Interdisciplinary Studies	3	CSIT 212	3
CSIT 112	3	CSIT 230	3
CSIT 170	3	CSIT 231	3
	15		**15**

Third Year

Fall	Credits	Spring	Credits
CSIT 335	3	GENERAL EDUCATION: (I) Natural Science Laboratory	4
CSIT 340	3	World Cultures	3
CSIT 355	3	CSIT 337	3
STAT 230	3	CSIT 432	3
Free Elective	3	Free Elective	3
	15		**16**

Fourth Year

Fall	Credits	Spring	Credits
CSIT 416	3	GENERAL EDUCATION: (J) Physical Education	1
CSIT 460	3	GENERAL EDUCATION: (K1) Social Science – American and European History	3
Major Elective	3	CSIT 491	3
Free Elective	3	Major Elective	3
Free Elective	3	Major Elective	3
		Free Elective	2
	15		**15**

Total Credits 120