Computer Science

Associate in Science

DIVISION OF SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

This program enables students to practice developing larger applications and study computer architecture and operating systems. Students learn object-oriented and modular programming techniques, including the use, design, and analysis of data structures and associated algorithms. This program prepares students for transfer to a four-year institution so they may pursue a baccalaureate degree in computer science.

Upon successful completion, the Associate in Science Degree in Computer Science is awarded.

PROGRAM FOOTNOTES

Humanities Electives:
Art, Communication, English (EN 103 or higher), Film, Foreign Language, Humanities, Literature, Music, Oral Communication, Philosophy, Photography, Sign Language, Theater Arts

Social Science Electives:
Anthropology, Economics, Geography, Government, History, Law, Psychology, Sociology

Program Electives: CS 141 Linux System Management, CS 213 Data Management Systems I, CS 180 Introduction to Operating Systems, CS 241 Web Site Development, CS 242 Computer Networks

Competency in mathematics is a MassBay graduation requirement. Prior to graduation, students must demonstrate competency at 100-level math. This may be accomplished by an appropriate placement test score or completion of any 100-level mathematics course or higher, except mathematics courses with a MAC prefix.

This program qualifies as an Alternative Transfer Agreement (MassTransfer) with select public institutions in Massachusetts. For more information, visit www.mass.edu/masstransfer.

COURSE	COURSE TITLE	CREDITS
First Year	*Semester 1*	
CS 120	Programming I	4
CS 205	Introduction to Computation	4
EN 101	Freshman English I	3
MA 200	Calculus I	4
	credits:	15
First Year	*Semester 2*	
CS 200	Programming II	4
CS 214	Computer Architecture and Assembly Language	4
EN 102	Freshman English II	3
MA 201	Calculus II	4
	credits:	15
First Year	*Semester 1 or 2*	
CT 100	Critical Thinking	3
	Social Science Elective	3
	credits:	6
Second Year	*Semester 1*	
CS 208	Data Structures	4
CS 212	Systems Programming with C	4
PY 103	Engineering Physics I	4
	Humanities Elective	3
	credits:	15
Second Year	*Semester 2*	
CS 225	Software Design	3
MA 210	Introduction to Linear Algebra	4
PY 104	Engineering Physics II	4
	Program Elective	3/4
	Humanities Elective	3
	or	
	Social Science Elective	3
	credits:	15/18
	Total Credits:	68/69