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), ESL (ES 100 or higher; up to 6 credits), Film, Foreign Language, Humanities, Literature, Music, Oral Communication, Philosophy, Photography, Sign Language, Theater Arts

Social Science Electives:
Anthropology, Economics, Geography, Government, History, Law and Society (LA 230), Psychology, Sociology

Program Electives: CS 141 Linux System Management, CS 116 Fundamentals of Cybersecurity, CS 123 Python Programming, CS 213 Data Management Systems I, CS 180 Introduction to Operating Systems, CS 241 Web Site Development, CS 242 Computer Networks, ET 211 iCREAT II

Quantitative skills are a MassBay graduation competency for associate degree programs. Prior to graduation, students must demonstrate this competency by completing a 100-level math course (not MAC); or placing into a 200-level mathematics course.

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	English Composition 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	English Composition 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**