


# Computer Science

## Associate in Science

 MassBay courses are offered days, evenings, weekends, and online. View the complete list of online courses at [www.massbay.edu/uploadedFiles/online.pdf](http://www.massbay.edu/uploadedFiles/online.pdf). Check current course availability at [www.massbay.edu/courses](http://www.massbay.edu/courses)

### **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, Communications, 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 213 Data Management Systems I, CS 241 Web Site Development, CS 242 Computer Networks

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

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