


Biotechnology

Associate in Science

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DIVISION OF SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

Our Biotechnology program is internationally renowned and offers exciting, hands-on, and research-based study in this rapidly expanding scientific area. Through participation in national research collaborations, students are trained in the scientific disciplines most in demand by the biotechnology industry and government laboratories, including recombinant DNA technology, mammalian cell culture, and chromatography with special emphasis on High Performance Liquid Chromatography. Biotechnology students intern at some of the most prestigious research institutions in the world, such as Dana Farber (Boston), Boston Medical Center, The University of Edinburgh (Scotland), Moscow State University (Russia), University of the Amazon (Brazil), and the University of Quebec at Trois-Rivières (Canada).

Upon successful completion, the Associate in Science Degree in Biotechnology 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

A grade of C or higher is required for all Biotechnology (BT) courses.

*Pre-Calculus Mathematics (MA 104) may substitute.

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
<i>First Year</i>	<i>Semester 1</i>	
BI 110	Principles of Biology I	4
BT 101	Introduction to Biotechnology and Laboratory	2
CH 110	Principles of Chemistry I	4
EN 101	Freshman English I	3
MA 102 *	College Algebra	3
	credits:	16
<i>First Year</i>	<i>Semester 2</i>	
BI 120	Principles of Biology II	4
	or	
BI 240	Forensic Microbiology	4
BT 201	Cell Culture	3
CH 120	Principles of Chemistry II	4
CS 100	Computers and Technology	3
EN 102	Freshman English II	3
	credits:	17
<i>First Year</i>	<i>Summer</i>	
CT 100	Critical Thinking	3
	Social Science Elective	3
	credits:	6
<i>Second Year</i>	<i>Semester 1</i>	
BI 210	Molecular Biology	4
BT 211	Independent Research: Protein Purification/Nucleic Acid Analysis	3
CH 201	Organic Chemistry I	4
	Humanities Elective	3
	credits:	14
<i>Second Year</i>	<i>Semester 2</i>	
BI 220	Immunology	4
CH 202	Organic Chemistry II	4
CH 210	Biochemistry I	4
	Humanities Elective	3
	or	
	Social Sciences Elective	3
	credits:	15
<i>Second Year</i>	<i>Summer</i>	
BT 240	Biotechnology Internship	4
	Total Credits:	72