

Microbiology Option: Environmental Microbiology Track

Freshman Year	Credits
BIOB 160 - Principles of Living Systems	4
CHMY 141 - College Chemistry I (& CHMY 142) or CHMY 151 and CHMY 152	4
CHMY 143 - College Chemistry II (& CHMY 144) or CHMY 153 - Honors College Chemistry II	4
Math requirements*	6-7
University Core and Electives (see list below)	11-12
Year Total:	30
Sophomore Year	Credits
CHMY 321 - Organic Chemistry I (& CHMY 322) or CHMY 331 and CHMY 332	4
CHMY 323 - Organic Chemistry II (& CHMY 324) or CHMY 333 and CHMY 334	4
BIOM 360 - General Microbiology	5
PHSX 205 - College Physics I or PHSX 220 - Physics I with Calculus	4
PHSX 207 - College Physics II or PHSX 222 - Physics II with Calculus	4
Microbiology Electives**	
University Core and Electives	9
Year Total:	30
Junior Year	Credits
BCH 380 - Biochemistry or BCH 441 and BCH 442	5
BIOM 410 - Microbial Genetics	3
BIOM 430 - Applied and Environmental Microbiology or BIOM 415 - Microbial Diversity, Ecology, and Evolution	3-4
Microbiology Electives**	
University Core and Electives	18
Year Total:	30
Senior Year	Credits
BIOM 450 - Microbial Physiology	3
BIOM 494 - Seminar/Workshop (take twice for two credits total)	2
Microbiology Electives**	
University Core and Electives	25
Year Total:	30
Total Program Credits:	120

Math Requirements *

Choose one of the following sequences of two courses:

M 161Q Survey of Calculus
& BIOB 318 and Biometry (or STAT 216)

M 171Q Calculus I
& BIOB 318 and Biometry (or STAT 216)

M 171Q Calculus I
& M 172Q and Calculus II

M 181Q Honors Calculus I
& M 182Q and Honors Calculus II

M 165Q Calculus for Technology I
& M 166Q and Calculus for Technology II

Microbiology Electives **

Choose five additional courses:

BIOM 405	Host-Associated Microbiomes	3
BIOM 452	Soil & Environmental Microbiology	3
BIOM 460	Infectious Diseases Ecology and Spillover	3
BIOM 457R	Research Methods in Immunology	4
BIOM 419	Programming for Biologists (Programming for Biologists)	3
BIOM 421	Concepts of Plant Pathology	3
BIOM 465	Plant-Pathogen Interactions	3
AGSC 450	Plant Disease Control	3
ENSC 353	Environmental Biogeochemistry	3
ENSC 460	Soil Remediation	3
BIOE 370	General Ecology	3
BIOB 375	General Genetics	3
BIOB 420	Evolution	3
BCH 441	Biochemistry of Macromolecules	3
BCH 444R	Biochemistry & Molecular Biology Methods	3

A minimum of 120 credits is required for graduation; 42 of these credits must be in courses numbered 300 and above.