

# BIOCHEMISTRY MAJOR, BS

**Campus:** NYC, Westchester

*In addition to the courses listed below, students are required to complete two courses with the Anti-Racism Education attribute attached. These courses may be taken during any semester of their education. See advisor for more information.*

Course	Title	Credits
<b>First Year</b>		
<b>Fall</b>		
ENG 110	Composition	3
BIO 101	General Biology I	0-4
CHE 111	General Chemistry I	0-4
MAT 131	Calculus I	0-4
UNV 101	First-Year Seminar: Introduction to University Community (STEM Major section)	1
<b>Credits</b>		<b>4-16</b>
<b>Spring</b>		
ENG 120	Critical Writing	4
BIO 102	General Biology II	0-4
CHE 112	General Chemistry II	0-4
MAT 132	Calculus II	0-4
CIS 101	Introduction to Computing	0-3
<b>Credits</b>		<b>4-19</b>
<b>Second Year</b>		
<b>Fall</b>		
CHE 223	Organic Chemistry I	0-5
PHY 111	General Physics I	0-4
BIO 264	Microbiology (or Take any one remaining Area of Knowledge course)	0-4
First Second Language Course. See Advisor for guidelines		3
<b>Credits</b>		<b>3-16</b>
<b>Spring</b>		
CHE 200	Mathematical Methods for Physical Chemistry	4
CHE 224	Organic Chemistry II	0-5
PHY 112	General Physics II (Counts for Analysis of Human, Social, and Natural Phenomena (AOK5))	0-4
Second Language Course, if applicable		3
<b>Credits</b>		<b>7-16</b>
<b>Third Year</b>		
<b>Fall</b>		
CHE 221	Analytical Methods and Techniques	0-4
CHE 301	Physical Chemistry I: Quantum Mechanics and Spectroscopy	0-4
CHE 392	Chemistry Seminar I	1
ENG 201	Writing in the Disciplines	3-4
Take any one remaining Area of Knowledge course (Learning Community (LC))		3
<b>Credits</b>		<b>7-16</b>
<b>Spring</b>		
CHE 331	Instrumental Analysis	0-4
CHE 302	Physical Chemistry II: Thermodynamics, Molecular Interactions and Kinetics	0-4
BIO 231	Genetics (or Any one remaining Area of Knowledge course)	0-4
CHE 326	Biochemistry	0-4
<b>Credits</b>		<b>0-16</b>

**Fourth Year****Fall**

CHE 328	Advanced Biochemistry	3
CHE 340	Polymer Chemistry	3
CHE 492	Chemistry Seminar II	1
CHE 480	Research in Chemistry	3
Take any one remaining Area of Knowledge course		4
<b>Credits</b>		<b>14</b>

**Spring**

CHE 333	Advanced Organic Chemistry	3
CHE 330	Advanced Inorganic Chemistry	0-4
CHE 329	Advanced Biochemistry Laboratory	0-2
FOR 505	Molecular Biology	3
Take any one remaining Area of Knowledge course		3
<b>Credits</b>		<b>9-15</b>
<b>Total Credits</b>		<b>48-128</b>