

CHEMISTRY MAJOR, BS

Campus: NYC, Westchester

General Track

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
First Year		
Fall		
ENG 110	Composition	3
BIO 101	General Biology I ¹	4
CHE 111	General Chemistry I ¹	4
MAT 131	Calculus I	4
UNV 101	First-Year Seminar: Introduction to University Community (STEM Major section)	1
Credits		16
Spring		
ENG 120	Critical Writing	4
BIO 102	General Biology II ¹	4
CHE 112	General Chemistry II ¹	4
MAT 132	Calculus II	4
Credits		16
Second Year		
Fall		
CHE 223	Organic Chemistry I ^{1,2}	4
PHY 111	General Physics I ¹	4
First Second Language course. See Advisor for guidelines		3
CIS 101	Introduction to Computing ¹	3
Credits		14
Spring		
CHE 224	Organic Chemistry II ^{1,2}	4
PHY 112	General Physics II (Analysis of Human, Social, and Natural Phenomena (AOK5)) ¹	4
CHE 200 or MAT 253	Mathematical Methods for Physical Chemistry (in NYC. Take MAT 253 in PLV in) or Differential Equations	4
Second Language Course, if applicable		3
Credits		15
Third Year		
Fall		
CHE 221	Analytical Methods and Techniques ^{1,2}	3
CHE 301	Physical Chemistry I: Quantum Mechanics and Spectroscopy ¹	4
COM 200	Public Speaking	3
ENG 201	Writing in the Disciplines	3
Credits		13
Spring		
CHE 302	Physical Chemistry II: Thermodynamics, Molecular Interactions and Kinetics ¹	4
CHE 331	Instrumental Analysis ¹	4
CHE 326	Biochemistry (Writing Enhanced (WE) course) ¹	4
AOK I (CE) and AOK II - V ³		3
Credits		15

Fourth Year**Fall**

CHE 310	Green Chemistry ¹	3
CHE 480	Research in Chemistry	3
AOK II to IV (LC or INT) (take two linked 3-credit LCs or one 6-credit INT)		3
AOK II to IV (LC or INT)		3
AOK V (MAT 141 recommended)		3-4
Credits		15-16

Spring

CHE 330	Advanced Inorganic Chemistry ¹	4
CHE 333	Advanced Organic Chemistry (in NYC. Take CHE 370 Advanced Biophysical Chemistry in PLV.)	3
CHE 392	Chemistry Seminar I	1
AOK II to V (take a remaining AOK requirement)		3
Open Elective		3
AOK II - IV		3
Credits		17
Total Credits		121-122

¹ Take credit-bearing lecture and lab in the same semester

² Reduced credits (effective from Spring 2025) shown

³ Must take a CE course. Many AOK II - IV courses also count as CE.