



HUDSON COUNTY COMMUNITY COLLEGE

Associate of Science
Medical Science Pre-Professional

NEW JERSEY CITY UNIVERSITY

Bachelor of Science
Chemistry

AY 2025-2026

Course Number	Course Name	Credits	Course Number	Course Name	Credits	Notes
Complete The Following Courses for Gen Ed Requirements:						
CSS100	College Student Success	1	= INTD101	Orientation to College	1	
ENG101	College Composition I	3	= ENGL101	English Composition I	3	
ENG102	College Composition II	3	= ENGL102	English Composition II	3	
ENG112	Speech	3	= ENGL147	Effective Speaking	3	
MAT 110	Precalculus	4	= MATH175	Precalculus	4	
CSC100	Intro to Computers and Computing	3	= CS107	Computers & Information Systems	3	
BIO111	Anatomy and Physiology I	4	= BIOL236	Anatomy and Physiology I	4	
PSY101	Introduction to Psychology	3	= PSYC110	Introduction to Psychology	3	
1 Humanities Elective		3	= TBD		3	
1 Diversity Elective		3	= TBD		3	
1 Humanities or Social Science Elective		3	= TBD		3	
Complete The Following Courses for Major Requirements:						
BIO211	Anatomy and Physiology II	4	= BIOL237	Anatomy and Physiology II	4	
BIO115	Principles of Biology I	4	= BIOL130	Principles of Biology I	4	
HLT210	Medical Law and Ethics	3	= HLTH2XX	Health Sciences Elective Credits	3	
BIO116	Principles of Biology II	4	= BIOL131	Principles of Biology II	4	
Complete 1 of the Following Courses:						
BIO250	Microbiology	4	= BIOL303	Microbiology	4	
PHY113	Physics I	4	= PHYS140+1140	Principles of Physics I	4	NJCU Recommends
Complete 1 Group of Courses for Electives:						
Pre-Medicine/Pharmacy:						
CHP111	College Chemistry I	4	= CHEM 105+1105	General Chemistry I Lecture and Recitation/Labatory	4	NJCU Recommends
CHP211	College Chemistry II	4	= CHEM 106+1106	General Chemistry II Lecture and Recitation/Labatory	4	NJCU Recommends

Total Credits Transferred

60

General Education Waiver Awarded

Remaing NJCU Courses

Course Number	Course Name	Credits	Notes
Required Core Courses:		34	
CHEM 105	General Chemistry I Lecture	0	This will be satisfied with transfer
CHEM 1105	General Chemistry I Recitation/Laboratory	0	This will be satisfied with transfer
CHEM 106	General Chemistry II Lecture	0	This will be satisfied with transfer
CHEM 1106	General Chemistry II Recitation/Laboratory	0	This will be satisfied with transfer
CHEM 207	Organic Chemistry I	3	
CHEM 2207	Organic Chemistry I Laboratory	1	
CHEM 208	Organic Chemistry II	3	
CHEM 2208	Organic Chemistry II Laboratory	1	
CHEM 205	Analytical Chemistry Lec	3	Fall Only
CHEM 2205	Analytical Chemistry Laboratory	2	Fall Only
CHEM 316	Instrumental Analysis, Lecture	3	Spring Only
CHEM 3316	Instrumental Methods of Analysis, Laboratory	2	Spring Only
CHEM 305	Physical Chemistry I	3	Fall Only
CHEM 306	Physical Chemistry II, Lecture	3	Spring Only
CHEM 3306	Physical Chemistry II Recitation/Laboratory	2	Spring Only
CHEM 307	Biochemistry I	4	
CHEM 405	Seminar	1	Fall Only
CHEM 416	Inorganic Chemistry	3	Spring Only
Chemistry Elective Courses (Select Two Courses)		5-8	
CHEM 220	Environmental Chemistry	4	
CHEM 308	Biochemistry II	4	
CHEM 430	Spectroscopic Identification of Organic Compounds	3	
CHEM 401	Medicinal Chemistry	3	
CHEM 420	Food Chemistry	4	
CHEM 412	Inorganic Chemistry Laboratory	2	
CHEM 414	Advanced Organic Chemistry	3	
CHEM 425	Nanomaterial and Microelectronic Fabrication	3	
CHEM 435	Materials Chemistry	3	
Required Math, Physics, and Computer Science Courses		15-19	
MATH 192	Calculus and Analytic Geometry I	4	
MATH 193	Calculus and Analytic Geometry II	4	
PHYS 140	Principles of Physics I - Lecture	0-3	This may be satisfied with transfer
PHYS 1140	Principles of Physics I - Laboratory and recitation	0-1	This may be satisfied with transfer
PHYS 141	Principles of Physics II - Lecture	3	
PHYS 1141	Principles of Physics II - Laboratory and Recitation	1	
INTD 180	Computer Tools For Science and Mathematics	3	
Free Elective Courses		0-6	
Minimum Total Credits To Graduate		120	