BACHELOR OF SCIENCE (B.S.) AND MASTER OF SCIENCE (M.S.) IN CHEMISTRY DUAL DEGREE

At Seton Hall, students can earn a Bachelor of Science (B.S.) in Chemistry and Master of Science (M.S.) in Chemistry simultaneously, offering students an expedited route to earn both STEM degrees.

The five-year (3+2) dual-degree program combines the foundational skills students obtain during their undergraduate studies with advanced, fundamental knowledge of physical and organic chemistry – preparing students for careers in scientific leadership positions in industry, government or academia.

After finishing the program, students will receive American Chemical Society (ACS) certification for their B.S. in Chemistry, which is considered the gold standard for bachelor-level chemistry degrees in the United States.

An ACS-certified program, beyond a resume booster, offers students a broad-based and intellectually challenging education. The additional rigor and requirements of a certified degree are valued by potential employers, as they can help students be better prepared for technical employment.

Through key industry partnerships, students benefit from both internships and research opportunities – all on top of the hands-on research experience they will already receive working alongside faculty across various specializations.

Plus, attaining both degrees in a short timeframe helps to save on tuition costs, advance career progression and opens doors to other advancement opportunities such as presenting at conferences or publishing research results.

Link to College Core requirement (http://catalogue.shu.edu/undergraduate/college-arts-sciences/core-curriculum/).

Code	Title	Hours
Core Courses		
CHEM 1107 & CHEM 1108	Principles of Chemistry I and Principles of Chemistry II	8-9
or CHEM 1123 & CHEM 1124 & CHEM 1125 & CHEM 1126	General Chemistry I and General Chemistry II and General Chemistry Lab I and General Chemistry II Lab	
CHEM 2313 & CHEM 2314	Organic Chemistry I and Organic Chemistry II	8-10
or CHEM 2321 & CHEM 2322 & CHEM 2315 & CHEM 2316	Organic Chemistry I and Organic Chemistry II and Organic Chemistry I-Lab and Organic Chemistry II-Lab	
CHEM 2216	Analytical Chemistry II	4
CHEM 3612	Inorganic Chemistry	5
CHEM 3512	Elements of Biochemistry	4
CHEM 3415	Physical Chemistry I	4
or CHEM 3416	Physical Chemistry II	
PHYS 1705 & PHYS 1706 & PHYS 1811 & PHYS 1812	Principles of Physics I and Principles of Physics II and Physics Laboratory I and Physics Laboratory II	8
or PHYS 1701 & PHYS 1702 & PHYS 1811 & PHYS 1812	General Physics I and General Physics II and Physics Laboratory I and Physics Laboratory II	
MATH 1501	Calculus I - Math - Phys Sci	4
MATH 1511	Calculus II - Math - Phys Sci	4
CHEM 6204	Spectrochem Meth-Analy	3
or CHEM 6205	Modern Separation Tech	
CHEM 6301	Theoretical Organic Chem I	3
or CHEM 6303	Synthetic Organic Chemistry	
CHEM 6401	Chemical Thermodynamics	3
CHEM 6403	Quantum Chemistry	3
CHEM 6404	Surface Chemistry	3
or CHEM 6405	Princ Colloid - Interface Chem	
CHEM 6501	General Biochemistry I	3
or CHEM 6502 & CHEM 6601	Bio-Organic Chemistry and Advanced Inorganic Chem I	
Additional graduate lecture course		3
CHEM 6712	Chemistry Seminar	1
Select minimum six:		18
CHEM 8831	Introduction to Research	
CHEM 8832	Introduction to Research	
CHEM 8833	Introduction to Research	
CHEM 8834	Introduction to Research	
CHEM 8835	Introduction to Research	
CHEM 8836	Introduction to Research	
CHEM 8837	Introduction to Research	
CHEM 8838	Introduction to Research	
CHEM 8839	Introduction to Research	
CHEM 8840	Introduction to Research	
Electives		
Select one: three credit class in any 6000 or 7000 level course		3
Total Hours		**92-95**