

Chemistry

BACHELOR OF SCIENCE



Where It Can Take You

A society driven by technology needs more scientists, and you can forge a path into careers in industry, education, and government. Many students choose to pursue graduate studies in chemistry and other fields such as medical/health professions, environmental protection, law, forensic sciences, and nutrition. Wherever you go, you'll be in the driver's seat.

Become a Leader

analytical, quality control, production chemist
art conservation
chemical/pharmaceutical/instrumentation sales, manufacturing, marketing
chemical engineer
chemical waste and safety inspector
clinical laboratory technician
cosmetic chemist
Department of Agriculture
Department of Energy
education
Environmental Protection Agency
Food and Drug Administration
forensic criminologist/scientist
industrial chemist
medical, environmental, patent law
pharmacist, physician, dentist, ophthalmologist, assistant anesthesiologist, nutritionist
research and development
scientific, technical writer

Learn More
cnso.nova.edu

B.S. in Chemistry

Find your future in the applied field of chemistry. Along with classmates who will become doctors, pharmacists, and other specialists, at Nova Southeastern University (NSU) you can choose your pathway within the broad spectrum of modern science.

What you'll study

Beyond extensive training in chemistry, you'll gain fundamental knowledge in calculus, physics, and biology. Choose the American Chemical Society (ACS) track or the non-ACS track, depending on your goals.

How you'll learn more

With most health related fields represented, you'll gain exposure to the application of chemistry in health care. Earn credits in guided laboratory research and present your own research at conferences. The exceptional lab facilities at NSU put cutting edge technology in your hands.

Unique Opportunities

- Undergraduate Student Symposium and Film Festival: present your research or analytical work; awards presented
- local and national conferences: attend or present your work based on your interests
- clinic exploration program: shadow health professionals at one of NSU's health clinics
- lab facilities: gain hands-on experience with chemical instrumentation and equipment used in industry/research facilities
- climate-sustainability lecture series: learn about the science, technology, and policies relating to climate change and sustainable development
- NSU Chemistry Club (ACS undergraduate chapter)
- national honor societies: join based on your academic achievement



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Chemistry Major Curriculum 2017–2018

Students are required to complete 30 credit hours as part of the General Education Program. Freshmen starting in fall 2016 or later are required to successfully complete the First-Year Seminar (UNIV 1000) in their first semester at NSU.

CHEMISTRY MAJOR REQUIREMENTS (67–68 Credits) (non-ACS track)

Core Courses (58–59 credits)

Credits

BIOL 1500	Biology I/Lab	4
CHEM 1300	General Chemistry I/Lab	4
OR		
CHEM 1300H	General Chemistry I/Lab Honors	4
CHEM 1310	General Chemistry II/Lab	4
OR		
CHEM 1310H	General Chemistry II/Lab Honors	4
CHEM 2400	Organic Chemistry I/Lab	4
OR		
CHEM 2400H	Organic Chemistry I/Lab Honors	4
CHEM 2410	Organic Chemistry II/Lab	4
OR		
CHEM 2410H	Organic Chemistry II/Lab Honors	4
CHEM 3050	Chemical Literature and Seminar	3
CHEM 3460	Quantitative Analysis/Lab	4
CHEM 4005	Inorganic Chemistry I	3
CHEM 4101	Senior Chemistry Seminar	1
MATH 2100	Calculus I	4
OR		
MATH 2100H	Calculus I Honors	4
MATH 2200	Calculus II	4
OR		
MATH 2200H	Calculus II Honors	4
PHYS 2400	Physics I/Lab	4
PHYS 2500	Physics II/Lab	4
Select one of the following course groupings:		
BIOL 1510	Biology II/Lab	4
OR		
BIOL 1510H	Biology II/Lab Honors	4
CHEM 3400	Biophysical Chemistry	3
CHEM 3410	Biophysical Chemistry II/Lab	4
OR		
CHEM 3700	Physical Chemistry I/Lab	4
CHEM 3710	Physical Chemistry II/Lab	4
MATH 3200	Calculus III	4
OR		
MATH 3400	Ordinary Differential Equations	3

Major Electives (9 Credits)

Select 3 courses from the following list.

Credits

CHEM 3150	Environmental Chemistry	3
CHEM 3215	Survey of Rational Drug Design	3
CHEM 3650	Biochemistry/Lab	4
CHEM 4010	Inorganic Chemistry II/Lab	4
CHEM 4150	Chemical Instrumentation	5

CHEM 4200	Plant Drug Analysis	3
CHEM 4300	Clinical Chemistry	3
CHEM 4900	Special Topics in Chemistry	3*
CHEM 4950	Internship in Chemistry	3*
CHEM 4990	Independent Study in Chemistry	3*

*Only one of these courses can be used for a maximum of 3 credits.

Note: CHEM 3700 and CHEM 3710 are recommended if pursuing a career in chemistry or graduate studies in chemistry.

Chemistry Major Requirements

ACS track: (74–75 Credits)

Core Courses (74–75 credits)

Credits

BIOL 1500	Biology I/Lab	4
CHEM 1300	General Chemistry I/Lab	4
OR		
CHEM 1300H	General Chemistry I/Lab Honors	4
CHEM 1310	General Chemistry II/Lab	4
OR		
CHEM 1310H	General Chemistry II/Lab Honors	4
CHEM 2400	Organic Chemistry I/Lab	4
OR		
CHEM 2400H	Organic Chemistry I/Lab Honors	4
CHEM 2410	Organic Chemistry II/Lab	4
OR		
CHEM 2410H	Organic Chemistry II/Lab Honors	4
CHEM 3050	Chemical Literature and Seminar	3
CHEM 3460	Quantitative Analysis/Lab	4
CHEM 3650	Biochemistry/Lab	4
CHEM 3700	Physical Chemistry I/Lab	4
CHEM 3710	Physical Chemistry II/Lab	4
CHEM 4005	Inorganic Chemistry I	3
CHEM 4010	Inorganic Chemistry II/Lab	5
CHEM 4101	Senior Chemistry Seminar	1
CHEM 4150	Chemical Instrumentation	4
CHEM 4990	Independent Study in Chemistry	3
OR		
CHEM 4950	Internship in Chemistry	3
MATH 2100	Calculus I	4
OR		
MATH 2100H	Calculus I Honors	4
MATH 2200	Calculus II	4
OR		
MATH 2200H	Calculus II Honors	4
MATH 3200	Calculus III	4
OR		
MATH 3400	Ordinary Differential Equations	3
PHYS 2400	Physics I/Lab	4
PHYS 2500	Physics II/Lab	4

This publication should not be viewed as a substitution for official program requirements and outcomes. A student is responsible for meeting the curriculum and program requirements in the *Undergraduate Student Catalog* that are in effect when the student enters the program.

Nova Southeastern University admits students of any race, color, sexual orientation, and national or ethnic origin. ■ Nova Southeastern University is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award associate's, baccalaureate, master's, educational specialist, doctorate, and professional degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Nova Southeastern University. 11-012-17_03PGA

Admissions

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admissions@nsu.nova.edu



NOVA SOUTHEASTERN
UNIVERSITY

Halmos College of Natural
Sciences and Oceanography