

# CHEMISTRY MAJOR – B.A. WITH TEACHING OPTION

This program prepares students for initial New York State certification to teach at the secondary school (7-12) level.

## Summary

Code	Title	Credits
	Chemistry and Science Content Area Requirements	58
	Core Education Requirements	41-47
	Integrative Core Curriculum <sup>1</sup>	17-29
	Electives	0-4
	<b>Total Credits</b>	<b>120</b>

<sup>1</sup> See Integrative Core Curriculum requirements, with information about the H&S CLA requirement. (<https://catalog.ithaca.edu/undergrad/schools/school-humanities-sciences/#integrativecorecurriculumicctext>)

## Degree Requirements

Code	Title	Credits
<b>COURSES IN CHEMISTRY</b>		
CHEM 12100 & CHEM 12200 or CHEM 12300	Principles of Chemistry and Principles of Chemistry Laboratory Principles of Chemistry - Enriched Section	4
CHEM 12400	Experimental Chemistry I	2
CHEM 22100	Organic Chemistry I	3
CHEM 22200	Organic Chemistry II	3
CHEM 22500	Experimental Chemistry II	2
CHEM 23200	Quantitative Chemistry	3
CHEM 32400	Experimental Chemistry III	3
CHEM 32500	Experimental Chemistry IV	4
CHEM 33100	Physical Chemistry: Thermodynamics and Kinetics	3
CHEM 33200	Physical Chemistry: Quantum Chemistry and Spectroscopy	3
CHEM 34200	Inorganic Chemistry	3
CHEM 39100 or CHEM 39200	Research in Chemistry Research in Chemistry	1
CHEM 44000	Inquiry and the Nature of Science for the Science Teacher	3
CHEM 48700	Chemistry Seminar	1
<b>ADDITIONAL REQUIREMENTS IN THE SCIENCES</b>		
BIOC 35300	Biochemistry: Protein Structure & Function	3
EDUC 34100	Science, Technology, and Society	1
PHYS 11700	Principles of Physics I: Mechanics	4
PHYS 11800	Principles of Physics II: Electricity and Magnetism	4
MATH 11100	Calculus I	4
MATH 11200	Calculus II	4
<b>CORE EDUCATION REQUIREMENTS</b>		
EDUC 10200	Reading Foundations	2

EDUC 20200	Literacy Across the Disciplines for Middle and Secondary Education	2
EDUC 20100	Technology for the Middle/Secondary School Teacher	2
EDUC 21010	Educational Psychology	3
EDUC 21800	Introduction to Pedagogy and Practice	3
EDUC 21910	Early Field Experience: Theory and Practice	3
EDUC 22900	Second Language Acquisition: Its Nature and Meaning for Educators	2
EDUC 23900	Educating Students with Special Needs in Diverse Classrooms	3
EDUC 34000	Social and Cultural Foundations of Education	3
EDUC 40800	Professional Development Seminar	0
EDUC 41010	Pedagogy and Practice for the Science Teacher	3
EDUC 41210	Seminar in Reflective Practice	3
EDUC 49810	Professional Semester in Education	12
EDUC 19210	Child Abuse Identification and Prevention	0
EDUC 19220	Drug and Alcohol Abuse: Identification and Prevention	0
EDUC 19230	School Violence Prevention	0
EDUC 19240	Harassment, Bullying, and Discrimination in Schools: Prevention and Intervention	0
	Foreign Language Proficiency	0-6
	<b>Total Credits</b>	<b>99-105</b>

## Additional Education Requirements

- All teaching-option students must successfully complete a year of college-level study in a language other than English or demonstrate equivalent proficiency.
- All teaching-option students must successfully complete a writing course numbered WRTG 10600 or above.
- All teaching-option students must maintain a minimum overall G.P.A. of 3.0 as well as a G.P.A. of 3.0 in their subject area coursework.
- Students must earn a grade of B or better in all EDUC courses in the Education Core to qualify for student teaching. A grade of B- does not qualify.
- EDUC 49810 and EDUC 41210 constitute a full course load during the student-teaching semester. No additional courses may be taken nor can teacher candidates participate in extra-curricular activities that have the potential to affect time for teaching and preparation.
- During the semester of student teaching, the student may not play a college sport.
- All candidates for initial certification must successfully complete all New York State Certification tests or performance assessments required by the state for the applicant's intended teaching certificate (type, grade levels, and subject areas).
- The department chair and the coordinator of teacher education in the subject area must approve any exceptions to the above requirements.
- The All-College Teacher Education Unit at Ithaca College requires teacher education students, regardless of program area, to be reviewed at four programmatic transition points during their course of study. Continuation in a teacher education major is contingent upon

the student successfully meeting the requirements of each transition point review; therefore, admission into one of the Ithaca College Teacher Education Program majors at admission or upon transfer to the College does not guarantee that a student will be allowed to complete the program required for teaching certification. Further information can be found in the Unit-Wide Assessment Systems section of the main Department of Education catalog page.