

**B.S. CHEMISTRY ADOLESCENT EDUCATION**

The State University of New York at Fredonia is committed to doing our part to provide each student a clear path to graduation. This four-year degree plan is a sample map for fulfilling requirements in the major, the College Core Curriculum (CCC), and other supporting courses. The pathway that you take to your degree may differ somewhat from this illustration, depending on where you start and the detours and side trips you may take along the way. If you are committed to completing your degree in four years, we encourage you to consider signing up for the Fredonia in 4 program. For complete information about this degree program, please consult the university catalog at [fredonia.smartcatalogiq.com](http://fredonia.smartcatalogiq.com)

FIRST YEAR					
Fall Semester			Spring Semester		
Course		Credits	Course		Credits
CHEM 115	General Chemistry I	3	CHEM 116	General Chemistry II	3
CHEM 125	General Chemistry I Lab	1	CHEM 126/130	General Chemistry II Lab	1
MATH 122	University Calculus I	4	MATH 123	University Calculus II	4
ENGL 100	English Composition	3	PHYS 230	University Physics I	4
CCC	American History	3	PHYS 232	University Physics I Lab	1
CHEM 100	First Year Seminar	1	SCED 105/106	Intro. to Contemp. Education	3
EDU 301	Child Abuse/Abduction Prevention	1	EDU 302	Alcohol/Tobacco/Drug Abuse	1
		<b>TOTAL</b>			<b>TOTAL</b>
		<b>16</b>			<b>17</b>

**Chemistry**  
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**The State University**  
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SECOND YEAR					
Fall Semester			Spring Semester		
Course		Credits	Course		Credits
CHEM 215	Organic Chemistry I	3	CHEM 216	Organic Chemistry II	3
CHEM 225	Organic Chemistry I Lab	1	CHEM 226	Organic Chemistry II Lab	1
PHYS 231	University Physics II	4	CHEM 317	Analytical Chemistry	3
PHYS 233	University Physics II Lab	1	CHEM 327	Analytical Chemistry Lab	1
EDU 224	Adolescent Development	3	CHEM 295	Introduction to Research	1
EDU 250	Introduction to the Exceptional Learner	3	CCC	Foreign Language	3
CCC	Foreign Language	1	SCED 276	Literacy & Tech. for Science & Math	3
		<b>TOTAL</b>			<b>TOTAL</b>
		<b>18</b>			<b>15</b>

**The B.S. Chemistry Adolescent Education** degree prepares students to teach Chemistry to middle and high school students, and leads to New York State certification. While at Fredonia, degree candidates take courses in Chemistry and Education. Education courses include field experiences in local public schools and the final semester is spent as a student teacher in two different schools.

THIRD YEAR					
Fall Semester			Spring Semester		
Course		Credits	Course		Credits
CHEM 315	Introduction to Physical Chemistry I	3	CHEM 316	Advanced Physical Chemistry	3
CHEM 325	Physical Chemistry Lab I	1	CHEM 326	Physical Chemistry Lab II	1
CHEM 318	Instrumental Analysis	3	CHEM 462	Inorganic Chemistry	3
CHEM 328	Instrumental Analysis Lab	2	CCC	Western Civilization	1
SCED 305	Diversity in the Teaching of Science & Math	3	CCC	Other World Civilizations	3
SCED 313	Field Experience	3	EDU 303	SAVE/DASA/Fire and Arson	1
		<b>TOTAL</b>			<b>TOTAL</b>
		<b>15</b>			<b>15</b>

FOURTH YEAR					
Fall Semester			Spring Semester		
Course		Credits	Course		Credits
CHEM 4XX	Advanced Chemistry Elective	3	CHEM 496	Chemistry Seminar	1
SCED 419	Secondary Methods	3	EDU 430	Student Teaching	15
CHEM 495	Seminar	1	EDU 303	Assessment of Inquiry Based Learning	3
CCC	Humanities	3			
CCC	Art	3			
CCC	Social Science	3			
		<b>TOTAL</b>			<b>TOTAL</b>
		<b>16</b>			<b>19</b>
		<b>2016-2017</b>			<b>GRAND TOTAL</b>
					<b>131</b>

[fredonia.edu](http://fredonia.edu)

## Why Study Teacher Education at Fredonia?

Education is a field of study that deals with the methods of teaching and learning in schools.

### Begin your career path on Day 1

- You can declare a major and enroll in education classes right away.
- You'll receive field placements every semester, starting as a freshman — all the way until your senior year student teaching placement.
- Fredonia's Office of Field Experiences makes sure you're always on track, providing you feedback every step of the way.

### Becoming 'classroom ready' makes you marketable

- 96% of Fredonia graduates from the Class of 2014 report being employed in their field of study or pursuing an advanced degree.
- You'll complete at least three field-based experiences in schools with a cooperating teacher prior to student teaching, and work as an instructional assistant in a classroom.
- Placements are available in more than 180 schools in nearly 60 districts. You can even student teach in New York City.

### What can you do with a degree in Education?

- Teach in public and private schools or community colleges.
- Serve as a superintendent or other administrator at school districts.
- Become an educator with museums, zoos and other cultural entities.
- Work as education writers/beat reporters for newspapers and other publications.
- Become a staff trainer for employees at companies of all sizes.
- Become a marketing representative or writer for an educational text book company.



### Exceptional professors

- You're taught by faculty who aren't just academics — they're experienced P-12 teachers.
- Fredonia's faculty remain active in local school districts by volunteering in classrooms and working with teachers on curricular and instructional innovations.
- Many courses are taught onsite in local schools.
- Fredonia's classes are typically fewer than 25 students, giving you plenty of contact with professors who challenge you as you grow and give you valuable support and feedback.

### Awards and Scholarships

- Fredonia has nearly 30 awards and scholarships available exclusively for Education majors. Students can apply to as many as are appropriate in any given year.

### Accomplished Education alumni

- Thousands of teachers, superintendents and other school administrators are proud Fredonia graduates — in every state, and countries around the world — providing you with a powerful, influential network of alumni throughout your career.

You're ready for the challenge.  
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