

Chemistry Education

Department Information

- **Department Location:**
Katherine Kilbourne Burgum Family Life, 4-H Center
- **Department Phone:**
701-231-7921
- **Department Web Site:**
www.ndsu.edu/education/
- **Credential Offered:**
B.S.; B.A.
- **Official Program Curriculum:**
bulletin.ndsu.edu/undergraduate/program-curriculum/chemistry-education/

Chemistry involves the study of the composition, structure, properties and interactions of matter. Chemistry is often considered a central or enabling science, because it is foundational to understanding other scientific disciplines.

The Program

Candidates in the chemistry education major are prepared to teach a diverse curriculum to a diverse student population. The chemistry education student should work closely with their advisor to be sure that the general education courses taken will provide a strong foundation for advanced courses in the major.

Professional Education Courses

Students may enroll in the 300-level professional education courses before being formally admitted to the School of Education (SOE). Prior to enrolling in the 400-level courses, students must complete the application for admission to the SOE; attain a minimum of a 2.75 grade point average overall in their course work, education courses, and teaching specialty courses; and pass the Core Academic Skills for Educators exam(s). Requirements for admission can be found on the School of Education website (<https://www.ndsu.edu/education>).

Student Teaching

Student teaching is the culmination of the teaching program. Students have the opportunity to apply skills acquired in college courses under the supervision of an experienced chemistry educator.

Student Advisement

Students will be assigned individual advisors who will work closely in program planning and in other ways to advise and assist them. Students are encouraged to seek their advisors' help whenever needed.

Certification

Upon completing this program, students are eligible for certification to teach French in most states. The program is accredited by the National Council for Accreditation of Teacher Education (NCATE).

Career Opportunities

Students who major in chemistry education get hired to teach physical science and chemistry at the high school level. To expand their choices, students can elect to double major in chemistry education and chemistry or add coursework in other science disciplines to increase teacher licensure areas. One can also work in industry with the chemistry major.

Please note this is a sample plan of study and not an official curriculum. Actual student schedules for each semester will vary depending on start year, education goals, applicable transfer credit, and course availability. Students are encouraged to work with their academic advisor on a regular basis to review degree progress and customize an individual plan of study.

First Year		
Fall	Credits Spring	Credits
CHEM 121 or 150 (Must be matching lab with lecture)	3 CHEM 122 or 151 (Must be matching lab with lecture)	3
CHEM 121L or 160 (Must be matching lab with lecture)	1 CHEM 122L or 161 (Must be matching lab with lecture)	1
ENGL 110	4 COMM 110	3

GEOL 105	3	ENGL 120	3
GEOL 105L	1	GEOL 106	3
MATH 165	4	GEOL 106L	1
	16		14

Second Year

Fall	Credits	Spring	Credits
BIOL 124	3	CHEM 342	3
BIOL 124L	1	CHEM 342L	1
BIOL 150	3	EDUC 322	3
BIOL 150L	1	ENGL 324	3
CHEM 341	3	STAT 330	3
CHEM 341L	1	Humanities & Fine Arts Gen Ed	3
EDUC 321	3		
undefined			
	15		16

Third Year

Fall	Credits	Spring	Credits
CHEM 364	3	EDUC 481	3
EDUC 451	3	EDUC 489	3
EDUC 489	3	CHEM 365	3
PHYS 211	3	Humanities & Fine Arts Gen Ed	3
PHYS 211L	1	Social & Behavioral Science Gen Ed	3
Social & Behavioral Science/Cultural Diversity Gen Ed	3		
	16		15

Fourth Year

Fall	Credits	Spring	Credits
BIOC 460	3	EDUC 485	1
CHEM 425	3	EDUC 487	9
CHEM 431	3	EDUC 488	3
CHEM 431L	2		
EDUC 486	3		
Wellness Gen Ed	2		
Apply for Student Teaching			
Complete PLT (grades 7-12) Exam			
Complete Subject Area Assessment Exam			
	16		13

Total Credits: 121