Chemistry Education

Department Information

• Department Web Site:
  www.ndsu.edu/education/ (http://www.ndsu.edu/education/)

• Credential Offered:
  B.S.; B.A.

• Sample Program Guide:
  catalog.ndsu.edu/programs-study/undergraduate/chemistry-education/#planofstudytext (http://catalog.ndsu.edu/programs-study/undergraduate/chemistry-education/#planofstudytext)

Major Requirements

Major: Chemistry Education

Degree Type: B.A. or B.S.
Minimum Degree Credits to Graduate: 136

University Degree Requirements

1. Satisfactory completion of all requirements of the curriculum in which one is enrolled.
2. Earn a minimum total of 120 credits in approved coursework. Some academic programs exceed this minimum.
3. Satisfactory completion of the general education requirements as specified by the university.
4. A minimum institutional GPA of 2.00 based on work taken at NDSU.
5. At least 30 credits must be NDSU resident credits. Resident credits include credits registered and paid for at NDSU.
6. At least 36 credits presented for graduation must be in courses numbered 300 or higher.
7. Students presenting transfer credit must meet the NDSU residence credits and the minimum upper level credit. Of the 30 credits earned in residence, a minimum of 15 semester credits must be in courses numbered 300 or above, and 15 semester credits must be in the student’s curricula for their declared major.

For complete information, please refer to the Degree and Graduation Requirements (http://catalog.ndsu.edu/academic-policies/undergraduate-policies/degree-and-graduation/) section of this Bulletin.

University General Education Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENGL 110</td>
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<td>ENGL 120</td>
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<tr>
<td>COMM 110</td>
<td>Fundamentals of Public Speaking</td>
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<tr>
<td></td>
<td>Upper Division Writing †</td>
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<td></td>
<td>Quantitative Reasoning (R) †</td>
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<td>Science and Technology (S) †</td>
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<td>Humanities and Fine Arts (A) †</td>
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<td>Social and Behavioral Sciences (B) †</td>
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<td>Wellness (W) †</td>
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<td>Cultural Diversity (D) †</td>
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<td>Global Perspectives (G) †</td>
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* May be satisfied by completing courses in another General Education category.

† General education courses may be used to satisfy requirements for both general education and the major, minor, and program emphases, where applicable. Students should carefully review major requirements to determine if specific courses can also satisfy these general education categories.
A list of university approved general education courses and administrative policies are available here (http://catalog.ndsu.edu/academic-policies/undergraduate-policies/general-education/#genedcoursestext).

**Major Requirements**

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<tr>
<th>Code</th>
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<tr>
<td>BIOC 260</td>
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<td>BIOL 150</td>
<td>General Biology I</td>
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<td>&amp; 121L</td>
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<td></td>
<td>CHEM 122</td>
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<td></td>
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<td></td>
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<td></td>
<td>CHEM 151</td>
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<td>&amp; CHEM 161</td>
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<td>CHEM 341</td>
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<td>CHEM 342</td>
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<td>CHEM 425</td>
<td>Inorganic Chemistry I</td>
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<td>&amp; 431L</td>
<td>and Analytical Chemistry I Laboratory</td>
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<td>CHEM 431</td>
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<td>&amp; 431L</td>
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<td>CHEM 465</td>
<td>Survey of Physical Chemistry</td>
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<td>Calculus I</td>
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<td>GEOL 105</td>
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<tr>
<td>PHYS 211</td>
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<td>PHYS 212</td>
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<td>&amp; 251L</td>
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**Professional Education Requirements**

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<tr>
<td>EDUC 321</td>
<td>Introduction to Teaching</td>
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<td>EDUC 322</td>
<td>Educational Psychology</td>
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<td>EDUC 451</td>
<td>Instructional Planning, Methods and Assessment</td>
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<td>EDUC 475</td>
<td>Reading in the Content Area</td>
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<td>Classroom Practice Methods of Teaching I: (Science)</td>
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<tr>
<td>EDUC 482</td>
<td>Classroom Practice/Methods of Teaching II: (Science)</td>
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<td>EDUC 485</td>
<td>Student Teaching Seminar</td>
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<td>EDUC 486</td>
<td>Classroom Management for Diverse Learners</td>
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<td>EDUC 487</td>
<td>Student Teaching</td>
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<td>EDUC 488</td>
<td>Applied Student Teaching</td>
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<tr>
<td>EDUC 489</td>
<td>Teaching Students of Diverse Backgrounds</td>
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**Total Credits** 98-102

**Degree Requirements and Notes**

- See School of Education (https://www.ndsu.edu/education/) for admission requirements.
- Courses taken P/F may not be used to satisfy any requirements.
- A grade of 'C' or better is required in all professional education courses.
- To be placed in student teaching, a 2.75 cumulative GPA and a 2.75 GPA in professional education coursework is required.
- To exit the program, a 2.75 cumulative GPA and a 2.75 GPA in professional education coursework is required as well as completing the Praxis Subject test and the Principles of Learning and Teaching test.