PROFESSIONAL CHEMIST'S COMPREHENSIVE, BACHELOR OF SCIENCE

Offered by Department of Chemistry (http://catalog.unk.edu/undergraduate/departments-programs/chemistry)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**General Studies**

*Foundational Core (Written, Math, Oral, Democracy)*

Foundational Core courses (http://catalog.unk.edu/undergraduate/general-studies/general-studies-courses)

Including:  
- MATH 115 Calculus I with Analytic Geometry

**Portal**

Select one course numbered 188 (http://catalog.unk.edu/undergraduate/general-studies/general-studies-courses/portal-course)

**Distribution**

ENG 101 Introduction of Academic Writing

*If ENG 101 is not taken as a prerequisite for ENG 102 then additional hours may be required to meet the 27 credit hour minimum in the Distribution Area of General Studies.*

Aesthetics (http://catalog.unk.edu/undergraduate/general-studies/general-studies-courses/aesthetics)

Humanities (http://catalog.unk.edu/undergraduate/general-studies/general-studies-courses/humanities)

Social Sciences (http://catalog.unk.edu/undergraduate/general-studies/general-studies-courses/social-sciences)

Natural Sciences (http://catalog.unk.edu/undergraduate/general-studies/general-studies-courses/natural-sciences)

Including:

- CHEM 160 General Chemistry
- CHEM 160L General Chemistry Laboratory
- PHYS 275 General Physics I (Calculus)
- PHYS 275L General Physics I (Calculus) Laboratory

**Analytical and Quantitative Thought**

(http://catalog.unk.edu/undergraduate/general-studies/general-studies-courses/analytical-quantitative-thought)

**Wellness**

(http://catalog.unk.edu/undergraduate/general-studies/general-studies-courses/wellness)

**Capstone**

Select one course numbered 388 (http://catalog.unk.edu/undergraduate/general-studies/general-studies-courses/capstone-course)

**BS Science-related course requirements**

MATH 202 Calculus II with Analytic Geometry

PHYS 276 General Physics II (Calculus)

PHYS 276L General Physics II (Calculus) Laboratory

**Major Option**

Complete all required courses

**Unrestricted electives**

Needed to reach 120 credit hour minimum

Total Credit Hours 120

### Major Option

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Chemistry Major Foundation Requirements**

- CHEM 161 General Chemistry 3
- CHEM 161L General Chemistry Laboratory 1
- CHEM 269 Sophomore Seminar in Chemistry 1
- CHEM 301 Analytical Chemistry 3
- CHEM 301L Analytical Chemistry Lab 1
- CHEM 351 Biochemistry 3
- CHEM 351L Biochemistry Lab 1
- CHEM 360 Organic Chemistry 4
- CHEM 360L Organic Chemistry Laboratory 1
- CHEM 369 Junior Seminar in Chemistry 1
- CHEM 430 Inorganic Chemistry 3
- CHEM 480 Physical Chemistry 3
- CHEM 490L Advanced Chemistry Laboratory I 2

**Chemistry In-Depth Courses**

- CHEM 352 Biochemistry II 3
- CHEM 352L Biochemistry II Lab 1
- CHEM 361 Organic Chemistry 4
- CHEM 361L Organic Chemistry Laboratory 1
- CHEM 469 Senior Seminar in Chemistry 1
- CHEM 475 Instrumental Analysis 3
- CHEM 481 Physical Chemistry II 3
- CHEM 491L Advanced Chemistry Laboratory II 2

Select 1 credit hour of the following:

- CHEM 499L Problems in Chemistry 1

**Professional Chemist’s Supporting Course Requirements**

- MATH 260 Calculus III 5

Select 7 credit hours of the following:

- MATH 305 Differential Equations
- MATH 440 Linear Algebra
- CHEM 300 · CHEM 499L 2
- PHYS 300 · PHYS 499 3

Total Credit Hours 58

1 Students without sufficient preparation will also need to take the following courses, increasing the total credit hours needed:

- MATH 102
- MATH 103

2 Except CHEM 388

3 Except PHYS 388