Bachelor of Science in Chemistry (non-comprehensive)

This is a model four-year graduation plan. Your path to graduation may vary slightly based on factors such as college credit you earned while in high school and your choice of general education electives. This degree program can be completed in eight semesters.

### Bachelor of Science Degree Requirements

#### College of Natural and Applied Sciences

<table>
<thead>
<tr>
<th>First Semester (Fall)</th>
<th>Second Semester (Spring)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEP 101 First Yr. Foundations</td>
<td>CHM 170 Gen. Chem. II</td>
</tr>
<tr>
<td>ENG 110 Writing I</td>
<td>CHM 171 Gen. Chem. II Lab</td>
</tr>
<tr>
<td>CHM 160 Gen. Chem. I</td>
<td>MTH 280 or 288 Anal. Geo./Calc. II</td>
</tr>
<tr>
<td>CHM 161 Gen. Chem. I Lab</td>
<td>COM 115 Fundamentals in Public Speaking</td>
</tr>
<tr>
<td>MTH 261 or 287(^1) Anal. Geom./Calc. I</td>
<td>PLS 101 American Democracy/Citizenship</td>
</tr>
<tr>
<td>Total Hours 13-15 hrs</td>
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</tbody>
</table>

#### Third Semester (Fall)

| CHM 342 Organic Chem. I                                                          | PHY 123 Intro. to Physics I                      |
| ENG 210 Writing II                                                               | CHM 343 Organic Chem. II                         |
| CHM 302 Intro to Analytical Chemistry                                            | Course for Minor                                 |
| Human Cultures: Soc./Behav. Sciences                                              | CHM 398 Chemical Symposium                       |
| Total Hours 16 hrs                                                               | Natural World: Life Sciences                     |
|                                                                                  | Total Hours 16-17 hrs                            |

#### Fourth Semester (Spring)

| PHY 123 Intro. to Physics I                                                      | CHM 505\(^2,3\) Physical Chem.                   |
| COM 115 Fundamentals in Public Speaking                                          | Chemistry Electives*                             |
| PLS 101 American Democracy/Citizenship                                           | Course for Minor                                 |
| CHM 398 Chemical Symposium                                                       | Human Cultures: Humanities elective              |
| Natural World: Life Sciences                                                     | Human Cultures: The Arts elective                 |
| Total Hours 18 hrs                                                               | Total Hours                                      |

#### Fifth Semester (Fall)

| Intro. to Physics II                                                            | CHM 505\(^2,3\) Physical Chem.                   |
| Inorganic Chemistry                                                             | Chemistry Electives*                             |
| Course for Minor                                                                | Course for Minor                                 |
| HST 121 or 122 U.S. History                                                     | Human Cultures: Humanities elective              |
| Public Affairs: Cultural Competence elective                                     | Human Cultures: The Arts elective                 |
| CHM 399 Undergraduate Investigations                                             | Total Hours 18 hrs                               |
| Total Hours 17 hrs                                                              |                                                  |

#### Sixth Semester (Spring)

| CHM 502\(^1\) Instrumental Analysis                                             | Charity Electives*                               |
| Chemistry Electives*                                                            | Human Cultures: Soc./Behav. Sciences              |
| Course for Minor                                                                | Public Affairs: Public Issues elective            |
| Public Affairs: Cultural Competence elective                                     | Course for Minor                                 |
| CHM 498 Chemistry Careers                                                       | Human Cultures: Humanities elective              |
| Total Hours 16 hrs                                                              | CHM 492 Program Assessment                       |
|                                                                                  | Total Hours 15 hrs                               |

*Chemistry electives: CHM 352, 376, 399 or 499 (2-3 hr), 452, 453, 460 or 461, 462, 509, 552, 553.

GPA Requirements include: 2.0 in major and minor fields (Chemistry and Mathematics).

Other Requirements include: 40 hours must be in upper level courses (300 level or above).

\(^1\)Courses offered only in the Fall.

\(^2\)Courses offered only in the Spring.

\(^3\)CHM 505 may be substituted for CHM 506, 507 and 508.
Requirements for Non-Comprehensive Chemistry Major (BS)

- General Education Requirements (43–54 hours)
- Chemistry Requirements (42–43 hours)
- Other Requirements (24 hours)
- Chemistry Electives (8–10 hours)
- Minor required
- Total Hours - 125
- See sample schedule on back
- Undergraduate Catalog - gives more general information and course information for Missouri State University undergraduates

Major Requirements

- General Chemistry - CHM 160, 161, 170 and 171
- Organic Chemistry - CHM 342 and 343
- Introduction to Analytical Chemistry - CHM 302
- Inorganic Chemistry - CHM 375
- Physical Chemistry - CHM 506, 507 and 508 or CHM 505
- Techniques of Instrumental Analysis - CHM 502
- Seminar Classes - CHM 398 and 498
- Independent Project - CHM 397, 399 or 499

Emphasis Requirements

- Basic Option - CHM 352, 376, 399 or 499 (2-3 hours), 460 or 461, 509
- Environmental Option - CHM 460, 461, 462
- Biochemistry Option - CHM 452, 453, 552, 553

Related Requirements

- Mathematics - MTH 261 and 280 or MTH 261 and 288 or MTH 287 and 288
- Physics - PHY 123 and 124 or PHY 203 and 204
- A minor is required

Chemistry Courses

CHM 160 - General Chemistry I
CHM 161 - General Chemistry I Lab
CHM 170 - General Chemistry II
CHM 171 - General Chemistry II Lab
CHM 302 - Intro to Anal. Chem.
CHM 342 - Organic Chemistry I
CHM 343 - Organic Chemistry II
CHM 352 - Introduction to Biochemistry
CHM 375 - Inorganic Chemistry
CHM 376 - Inorganic Preparation
CHM 398 - Chemical Symposium
CHM 399 - Undergraduate Investigations
CHM 452 - Biochemistry I
CHM 453 - Biochemistry Lab I
CHM 460 - Environmental Chemistry I
CHM 461 - Environmental Chemistry II
CHM 462 - Environmental Chemistry Laboratory
CHM 498 - Chemistry Careers
CHM 499 - Advanced Undergraduate Research
CHM 502 - Techniques of Instrumental Analysis
CHM 505 - Fundamentals of Physical Chemistry
CHM 506 - Physical Chemistry I
CHM 507 - Physical Chemistry II
CHM 508 - Beginning Physical Chemistry Lab
CHM 509 - Physical Chemistry Lab II
CHM 552 - Biochemistry II
CHM 553 - Advanced Biochemistry Lab

Chemistry Advisors Contact Information:

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