# Bachelor of Science in Chemistry (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.

<table>
<thead>
<tr>
<th>First Semester (Fall)</th>
<th>Second Semester (Spring)</th>
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<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>
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<tr>
<td>CHM 161 Gen. Chem. I Lab</td>
<td>COM 115 Fund. in Public Speaking</td>
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<tr>
<td>MTH 261 or 287 Anal. Geom./Calc. I</td>
<td>PLS 101 American Democracy/Citizenship</td>
</tr>
<tr>
<td>Total Hours 15 hrs</td>
<td>Natural World: Life Sciences elective 3-4 hrs</td>
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<td>Total Hours 16-19 hrs</td>
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<thead>
<tr>
<th>Third Semester (Fall)</th>
<th>Fourth Semester (Spring)</th>
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<tbody>
<tr>
<td>CHM 342 Organic Chem. I</td>
<td>CHM 343 Organic Chem. II</td>
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<tr>
<td>CHM 375 Inorganic Chem.</td>
<td>CHM 302 Intro to Analytical Chem.</td>
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<tr>
<td>PHY 123 or 203 Physics I</td>
<td>PHY 124 or 204 Physics II</td>
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<tr>
<td>Human Cultures: Soc./Behav. Sciences</td>
<td>HST 121 or 122 Survey of History</td>
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<tr>
<td>Total Hours 14-16 hrs</td>
<td>Total Hours 17-18 hrs</td>
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<tr>
<th>Fifth Semester (Fall)</th>
<th>Sixth Semester (Spring)</th>
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<tbody>
<tr>
<td>CHM 398 Chemical Symposium</td>
<td>CHM 507 Physical Chem. II</td>
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<tr>
<td>CHM 506 Physical Chemistry I</td>
<td>Chemistry electives* 3-6 hrs</td>
</tr>
<tr>
<td>CHM 508 Physical Chemistry I Lab</td>
<td>Human Cultures: Social Sciences elective 3 hrs</td>
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<tr>
<td>ENG 210 Writing II</td>
<td>Human Cultures: The Arts elective 3 hrs</td>
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<tr>
<td>Public Affairs: Cultural Competence elective</td>
<td>General Education or Electives 3 hrs</td>
</tr>
<tr>
<td>Human Cultures: Humanities elective</td>
<td>Total Hours 15-18 hrs</td>
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<tr>
<td>Total Hours 15 hrs</td>
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<table>
<thead>
<tr>
<th>Seventh Semester (Fall)</th>
<th>Eighth Semester (Spring)</th>
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<tbody>
<tr>
<td>CHM 502</td>
<td>CHM 498</td>
</tr>
<tr>
<td>CHM 452</td>
<td>CHM 575</td>
</tr>
<tr>
<td>Chemistry Electives*</td>
<td>Chemistry Electives*</td>
</tr>
<tr>
<td>Public Affairs: Public Issues elective</td>
<td>General Education or Electives 6 hrs</td>
</tr>
<tr>
<td>Total Hours 12-15 hrs</td>
<td>Total Hours 12-16 hrs</td>
</tr>
</tbody>
</table>

GPA Requirements include: 2.0 in major field. Other Requirements include: 40 hours must be in upper level courses (300 level or above).

1Courses offered only in the Fall.
2Courses offered only in the Spring.
3Chemistry electives: CHM 376, 397, 399 or 499 (1-3 hr), 453, 509, 514, 542, 552, 553.
Requirements for Comprehensive Chemistry Major (BS)

- General Education Requirements (44-49 hours)
- Chemistry Requirements (47 hours)
- Other Requirements (14-20 hours)
- Chemistry Electives (10-22 hours)
- No minor required
- Total Hours - 125
- See sample schedule on back
- Undergraduate Catalog - gives more general information and course information for Missouri State University university graduates

Major Requirements

- General Chemistry - CHM 160, 161, 170 and 171
- Organic Chemistry - CHM 342 and 343
- Analytical Chemistry - CHM 302 and 502
- Inorganic Chemistry - CHM 375 and 575
- Biochemistry - CHM 452
- Physical Chemistry - CHM 506, 507 and 508
- Seminar Classes - CHM 398 and 498
- Independent Project - CHM 397, 399 and 499

Emphasis Requirements

- Graduate School - CHM 376, 499 (1-3 hours), 509. Select one: CHM 514, 542, 552.
- Industrial - CHM 376, 509, 514 or 542, and 4 hours from 397, 399 or 499.
- Biochemistry - CHM 399 or 499, 453, 552, 553, BIO 121, 235, 320.

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.

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 375 - Inorganic Chemistry
CHM 376 - Inorganic Preparation
CHM 397 - Cooperative Education in Chemistry
CHM 398 - Chemical Symposium
CHM 399 - Undergraduate Investigations
CHM 498 - Chemistry Careers
CHM 499 - Advanced Undergraduate Research
CHM 502 - Advanced Analytical Methods
CHM 452 - Biochemistry I
CHM 453 - Biochemistry Lab I
CHM 506 - Physical Chemistry I
CHM 507 - Physical Chemistry II
CHM 508 - Beginning Physical Chemistry Lab
CHM 509 - Physical Chemistry Lab II
CHM 514 - Polymer Chemistry
CHM 542 - Advanced Organic Chemistry
CHM 552 - Biochemistry II
CHM 553 - Advanced Biochemistry Lab
CHM 575 - Advanced Inorganic Chemistry

Chemistry Advisors

Contact Information:

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