BACHELOR OF SCIENCE DEGREE
CHEMISTRY
COORDINATE MAJOR

FOR ADDITIONAL INFORMATION, PLEASE CONTACT THE DEPARTMENT OF CHEMISTRY

(1) UNIVERSITY REQUIREMENTS

Writing Requirement
Tier I: LB 133 4
Tier II: Satisfied by completing the Lyman Briggs College History, Philosophy and Sociology of Science and Senior requirements listed below.

Integrative Studies in Arts & Humanities (IAH)
IAH 201-210* 4
IAH 211-241** 4

Integrative Studies in Social, Behavioral & Economic Sciences (ISS)
ISS 200-level course* 4
ISS 300-level course*** 4

*National, International, & Multicultural Diversity
Students must include at least one “N” course and one “I” course in their Integrative Studies programs. A “D” course may meet either an “N” or an “I” requirement, but not both.

†Beginning Summer 2013, LB 331, 333, and 336 will fulfill the IAH “B” university requirement (IAH 211 or higher). Please consult your LBC advisor for specific details for your program.

‡Beginning Summer 2013, LB 332, 334, and 335 will fulfill the ISS 300-level university requirement. Please consult your LBC advisor for specific details for your program.

Mathematics, Biological and Physical Sciences
Satisfied by the Lyman Briggs College requirements in Mathematics, Biological and Physical Sciences (see below).

Minimum number of credits required: 120
Minimum cumulative and major grade point average: 2.0

(2) LYMAN BRIGGS COLLEGE REQUIREMENTS

Biological Sciences (9 cr.)
Complete ONE of the following groups of courses
(1) LB 144 & 145 9
(2) BS 161, 162, 171, & 172 9

Chemistry (8-9 cr.)
Complete ONE of the following groups of courses
(1) LB 171, 171L, 172, & 172L 9
(2) CEM 151, 152, 161 & 162 9

Physics (8 cr.)
Complete ONE of the following groups of courses
(1) LB 273, 274* 8
(2) PHY 183, 184, 191, & 192* 10

Mathematics (6-7 cr.)
Complete ONE of the following groups of courses
(1) LB 118 & 119* 8
(2) MTH 132 & 133* 7

History, Philosophy & Sociology of Science (11-12 cr.)
LB 133 4
LB 330-336, 355, 490E; ENG 473A; HST 425; SOC 368 7-8

Senior Seminar (4 cr.)
LB 492 4

*Physics and Mathematics courses also meet graduation requirements for major
[3] MAJOR REQUIREMENTS

Complete ALL of the following courses (43 cr.)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>LB 220</td>
<td>Calculus III</td>
<td>4*</td>
</tr>
<tr>
<td>MTH 235</td>
<td>Differential Equations</td>
<td>3</td>
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<tr>
<td>CEM 262</td>
<td>Quantitative Analysis</td>
<td>3†</td>
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<tr>
<td>CEM 351</td>
<td>Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CEM 352</td>
<td>Organic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CEM 355</td>
<td>Organic Chemistry Lab I</td>
<td>2</td>
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<tr>
<td>CEM 356</td>
<td>Organic Chemistry Lab II</td>
<td>2</td>
</tr>
<tr>
<td>CEM 395</td>
<td>Analytical/Physical Chemistry Lab</td>
<td>2</td>
</tr>
<tr>
<td>CEM 411</td>
<td>Inorganic Chemistry</td>
<td>4</td>
</tr>
<tr>
<td>CEM 415</td>
<td>Advanced Synthesis Lab</td>
<td>3</td>
</tr>
<tr>
<td>CEM 434</td>
<td>Advanced Analytical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CEM 435</td>
<td>Analytical Chemistry Lab</td>
<td>2</td>
</tr>
<tr>
<td>CEM 483</td>
<td>Quantum Chemistry</td>
<td>3</td>
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<tr>
<td>CEM 484</td>
<td>Molecular Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>CEM 495</td>
<td>Molecular Spectroscopy</td>
<td>2</td>
</tr>
</tbody>
</table>

* MTH 234 can be substituted for LB 220
† If taking both CEM 185H and 186H, then do not need to take CEM 262

Choose ONE option below (4-6 cr.)

1. Complete the following course (4 cr.)
   - BMB 401 Basic Biochemistry | 4 |

2. Complete ALL of the following courses (6 cr.)
   - BMB 461 Advanced Biochemistry I | 3 |
   - BMB 462 Advanced Biochemistry II | 3 |

IMPORTANT: These guidelines are presented for planning purposes only. Students MUST consult a department advisor for confirmation of major requirements.