BS in Biochemistry

Program Codes:
20FT0318BS

Degree Requirements
To earn a Bachelor of Science in Biochemistry degree from UIC, students need to complete university, college, and department degree requirements. The degree requirements for the Department of Biological Sciences and the Department of Chemistry are outlined below. Students should consult the College of Liberal Arts and Sciences section for additional degree requirements and college academic policies.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Requirements for the Curriculum</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td>120</td>
</tr>
</tbody>
</table>

Requirements for the Curriculum
The requirements for the curriculum include the courses necessary to complete the General Education and Writing-in-the-Discipline requirements described in the College of Liberal Arts and Sciences section.

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

Foreign language (the equivalent of two years of a single language at the college level) 0-16
Exploring World Cultures course a 3
Understanding the Creative Arts course a 3
Understanding the Individual and Society course a 3
Understanding the Past course a 3
Understanding U.S. Society course a 3
MATH 180 Calculus I b,c 4
MATH 181 Calculus II c 4
Select one of the following sequences in physics: 8
PHYS 141 General Physics I (Mechanics) c
PHYS 142 General Physics II (Electricity and Magnetism) c
OR
PHYS 131 Introductory Physics for Life Sciences I c
PHYS 132 Introductory Physics for Life Sciences II c
BIOS 110 Biology of Cells and Organisms c 4
BIOS 120 Biology of Populations and Communities c 4
BIOS 220 Genetics 3
Select one of the following sequences in general and analytical chemistry: 10-14

Recommended Plan of Study
Students who are not ready to take MATH 180 and CHEM 122/CHEM 123 in the first year should expect to take summer session courses and/or take longer than four years to graduate.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 160</td>
<td>Academic Writing I: Writing in Academic and Public Contexts</td>
<td>3</td>
</tr>
</tbody>
</table>

a Students should consult the General Education section of the catalog for a list of approved courses in this category.
b MATH 180 fulfills the LAS Quantitative Reasoning requirement.
c This course is approved for the Analyzing the Natural World General Education category.
d Each of the following pairs will be considered one course in meeting the LAS General Education requirements: CHEM 122/CHEM 123 and CHEM 124/CHEM 125.
e Students who wish to use the CHEM 342/CHEM 343/CHEM 346 option to satisfy the physical chemistry requirement will also need to choose PHYS 141/PHYS 142 to satisfy their physics requirement and will need to take MATH 210 as a corequisite for CHEM 342.
f CHEM 343 fulfills the LAS Writing-in-the-Discipline requirement.
BS in Biochemistry

BIOS 110 or BIOS 120  Biology of Cells and Organisms or Biology of Populations and Communities  4

Select one of the following:  5

CHEM 116 Honors and Majors General and Analytical Chemistry  1,2
CHEM 122 Matter and Energy  3
CHEM 123 Foundations of Chemical Inquiry I  1,3

General Education Requirement course  3

Spring Semester
ENGL 161 Academic Writing II: Writing for Inquiry and Research  3
MATH 180 Calculus I  4

Select one of the following:  5

CHEM 118 Honors and Majors General and Analytical Chemistry  1,2
CHEM 124 Chemical Dynamics  3
CHEM 125 Foundations of Chemical Inquiry II  1,3

General Education Requirement course  3

Fall Semester
CHEM 232 Structure and Function  3
MATH 181 Calculus II  4
BIOS 110 or BIOS 120 Biology of Cells and Organisms or Biology of Populations and Communities  4

General Education Requirement course  3

Spring Semester
CHEM 233 Synthesis Techniques Laboratory  2
CHEM 234 Chemical Synthesis  3
BIOS 220 Genetics  3

Select one of the following:  4

PHYS 131 Introductory Physics for Life Sciences I  3
PHYS 141 General Physics I (Mechanics)  3

General Education Requirement course  3

Fall Semester
CHEM 452 Biochemistry I (Same as BIOS 452)  4
CHEM 222 Analytical Chemistry  4
or Elective
Foreign Language  4

Select one of the following:  4

PHYS 132 Introductory Physics for Life Sciences II  3
PHYS 142 General Physics II (Electricity and Magnetism)  3

Spring Semester
Select one of the following:  3

CHEM 340 Physical Chemistry for Biochemists I  4
CHEM 342 Physical Chemistry I  4

Foreign Language  4

CHEM 454 Biochemistry II (Same as BIOS 454)  4
CHEM 455 Biochemistry Laboratory  3

General Education Requirement course  3

Fall Semester
CHEM 314 Inorganic Chemistry  4
BIOS Elective at the advanced level  4
Foreign Language  4

General Education Requirement course  3

Elective  2

Total Hours  120

a. This course has been approved for the Analyzing the Natural World General Education category.
b. Students who take CHEM 116 and CHEM 118 to fulfill the general chemistry requirement do not need to take CHEM 122.
c. Each of the following pairs will be considered one course in meeting the LAS General Education requirements: CHEM 122/ CHEM 123 and CHEM 124/ CHEM 125.
d. MATH 180 fulfills the LAS Quantitative Reasoning requirement.
e. Students who wish to use the CHEM 342/ CHEM 343/ CHEM 346 option to satisfy the physical chemistry requirement will need to also choose PHYS 141/ PHYS 142 to satisfy their physics requirement and will need to take MATH 210 as a corequisite for CHEM 342.
f. CHEM 343 fulfills the LAS Writing-in-the-Discipline requirement.