# Chemistry B.S.CHEM (Concentration in Biochemistry)

## Degree Requirements: 126 Credit Hours

*See Core Curriculum for required courses in Area A1 through Area E.*

<table>
<thead>
<tr>
<th>Area</th>
<th>Credit Hours</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td><strong>Area A1 - Communication Skills</strong></td>
<td>6</td>
<td>Select 6 credit hours from Area A1 of the Core Curriculum</td>
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<tr>
<td><strong>Area A2 - Quantitative Skills</strong></td>
<td>3</td>
<td>Select 3 credit hours from Area A2 of the Core Curriculum</td>
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<tr>
<td><strong>Area B - Global Engagement</strong></td>
<td>4</td>
<td>Select 4 credit hours from Area B of the Core Curriculum</td>
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<tr>
<td><strong>Area C - Humanities, Fine Arts, and Ethics</strong></td>
<td>6</td>
<td>Select 6 credit hours from Area C of the Core Curriculum</td>
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</table>
| **Area D - Natural Sciences, Mathematics, and Technology** | 13          | CHEM 1145 Principles of Chemistry I and Principles of Chemistry II (Recommended) 1  
& CHEM 1146 Select 1 lecture/lab course from Area D2 Environmental Science of the Core Curriculum 4  
| **Area E - Social Sciences**         | 12           | Select 12 credit hours from Area E of the Core Curriculum            |
| **Area F - Courses Appropriate to Major** | 20          | MATH 1441 Calculus I 4  
MATH 2242 Calculus II 4  
PHYS 2211 Principles of Physics I 4  
PHYS 2212 Principles of Physics II 4  
Math, Computer Science, Science Course approved by advisor - may include carryover from Area A2 (1) and/or Area D (1) 2  
| **Health and Physical Education Activities** | 2            | HLTH 1520 Healthful Living 2  
Physical Education Activities 2  
| **Orientation**                     | 2            | FYE 1220 First-Year Seminar 2  
| **Specific Requirements**           |              | BIOL 2107 Principles of Biology I 3  
BIOL 2107L Principles of Biology I Laboratory 1  
BIOL 2108 Principles of Biology II 3  
BIOL 2108L Principles of Biology II Laboratory 1  
CHEM 2030 Principles of Chemistry Research 3  
CHEM 2242 Analytical Chemistry 4  
| **Major Requirements**              |              | CHEM 3140 Advanced Inorganic Chemistry 4  
CHEM 3341 Organic Chemistry I 4  
CHEM 3342 Organic Chemistry II 4  
CHEM 3441 Chemical Kinetics & Thermodynamics 4  
CHEM 3442 Introduction to Quantum Chemistry 4  
CHEM 5541 Biochemistry I 4  
CHEM 5542 Biochemistry II 4  

Students must complete 4 additional hours of upper-level chemistry coursework (3000-level and above), not to include CHEM 3530 Principles of Biochemistry 2  
Students must also complete 6 credit hours of Advisor-approved upper-level (3000-level and above) Biology coursework.  

**Electives**  
Select 7 credit hours of Electives (At least 3 credit hours must be outside Chemistry) 7  

**Total Credit Hours** 126

1. The listed courses are recommended in Area D as prerequisites for major courses.  
2. a maximum of 4 cr hrs of CHEM 4890 Chemical Research Experience and/or CHEM 4790 Chemistry Internship, and only 1 cr hr of CHEM 3790 Teaching Internship in Chemistry, may be counted toward the upper-level chemistry coursework.

## Program Admission Criteria

- Students who wish to change their major to Chemistry must have a total institution GPA of 2.0 or better in all course work completed at Georgia Southern.  
- Transfer students from other institutions who wish to major in Chemistry must have a GPA of 2.0 or better on all credit hours attempted at other institutions as well as those hours attempted at Georgia Southern.

## Other Program Requirements

- Chemistry majors must maintain a “C” average in all major coursework which applies toward graduation.

## Honors in Chemistry

To graduate with Honors in Chemistry, a student must:  
- be admitted to the University Honors Program  
- complete a capstone project equivalent to three credit hours with a measurable outcome approved by the Department of Chemistry  
- maintain a 3.3 overall GPA, including a minimum GPA of 3.5 in all major courses applied toward graduation

This degree is certified by the American Chemical Society (ACS).

## Advisement

COSM Advisement Center, Engineering Building, Room 1116, (912) 478-0649