# Biochemistry B.S.

## Degree Requirements: 124 Credit Hours

### General Requirements (Core A - E) 42 Credit Hours

**Area A2** -- Must take MATH 1112, MATH 1113 or MATH 1441

**Area DII** -- Must take MATH 1441 if not taken in Area A2 above

### Additional Requirements 4 Credit Hours

**Area F - Courses Appropriate to Major** 20 Credit Hours

- **CHEM 1211** or **CHEM 1211K**
  - Principles of Chemistry I
  - Principles of Chemistry I Laboratory

- **CHEM 1212** or **CHEM 1212K**
  - Principles of Chemistry II
  - Principles of Chemistry II Laboratory

- **MATH 2242**
  - Calculus II

- **PHYS 2211K**
  - Principles of Physics I (if not taken in Area D1)

- **PHYS 2212K**
  - Principles of Physics II (if not taken in Area D1)

If any of the above courses are taken in Area D, students should take additional Area D or advisor-approved chemistry, biology, or computer science courses (below 3000-level) to complete Area F.

### Major Specific Requirements

Carry over from MATH 1441 Calculus I in Area A or Area D

Carry over from CHEM 2211K/CHEM 2212K Principles of Chemistry I/II in Area F

- **BIOL 1107**
  - Principles of Biology I
  - Principles of Biology I Laboratory (may count in Area D or F, if needed)

- **BIOL 1108**
  - Principles of Biology II
  - Principles of Biology Laboratory II (may count in Area D or F, if needed)

### Major Requirements 34-36 Credit Hours

- **BCHM 2910** Introduction to Biochemical Research
- **BCHM 3100** Bioinstrumental Chemistry
- **BCHM 3310** Bioinorganic Chemistry
- **BCHM 3510** Biophysical Chemistry
- **BCHM 5201** Biochemistry I
- **BCHM 5202** Biochemistry II
- **BIOL 3134** Cell and Molecular Biology
- **CHEM 2100** Analytical Chemistry
- **CHEM 3401** Organic Chemistry I
- **CHEM 3402** Organic Chemistry II

Select two credit hours from the list below:

- **BCHM 3310L** Bioinorganic Laboratory
- **BCHM 3511L** Biophysical Laboratory
- **BCHM 4991** Advanced Biochemical Research

Students must complete 3 additional hours of upper level (BCHM 3000 and above) biochemistry coursework.

### Elective

Select additional elective courses

Must include at least 2 hours of upper-division (3000-level and above) coursework

Total Credit Hours 124

---

1. While CHEM 1211K/1212K Principles of Chemistry I/II are 4 credit hours, only 3 credit hours will be counted toward Area F. The remaining credit hour of each will be applied toward Major Specific Requirements.

2. May not include BCHM 3200 Principles of Biochemistry

## Program Admission Criteria

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

## Other Program Requirements

- Biochemistry majors must maintain a "C" average in all major coursework which applies toward graduation.

## Honors in Biochemistry

To graduate with Honors in Biochemistry, 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 & Biochemistry
- 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) as well as the American Society for Biochemistry and Molecular Biology (ASBMB).