Biochemistry B.S.

Degree Requirements: 124 Credit Hours

General Requirements (Core A - E) 42
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

Area F - Courses Appropriate to Major
CHEM 1211 & 1211L Principles of Chemistry I and Principles of Chemistry I Laboratory 4
or CHEM 1211K Principles of Chemistry I

CHEM 1212 & 1212L Principles of Chemistry II and Principles of Chemistry II Laboratory
or CHEM 1212K Principles of Chemistry II

MATH 2242 Calculus II 4
PHYS 2211K Principles of Physics I (if not taken in Area D1) 4
PHYS 2212K Principles of Physics II (if not taken in Area D1) 4

Additional hours of chemistry, biology, or computer science (if needed)

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 & 1107L Principles of Biology I and Principles of Biology I Laboratory (may count in Area F, if needed) 4

BIOL 1108 & 1108L Principles of Biology II and Principles of Biology Laboratory II (may count in Area F, if needed) 4

Major Requirements
BIOL 3134 Cell and Molecular Biology 3
CHEM 2100 Analytical Chemistry 4
BCHM 2910 Introduction to Biochemical Research 1-3
CHEM 3401 Organic Chemistry I 4
CHEM 3402 Organic Chemistry II 4
BCHM 3100 Bioinstrumental Chemistry 4
BCHM 3310 Bioinorganic Chemistry 3
BCHM 3510 Biophysical Chemistry 3
BCHM 5201 Biochemistry I 4
BCHM 5202 Biochemistry II 4

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

Students must complete 3 additional hours of advisor-approved upper level (BIOL 3000 and above) biology 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 hours 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).