MAJOR REQUIREMENTS for a BACHELOR OF SCIENCE in CHEMISTRY (BIOCHEMISTRY)

MATH 2554 Calculus I
MATH 2564 Calculus II

PHYSICS (2 courses • 8 hours)
PHYS 2013/2011L College Physics I
PHYS 2033/2031L College Physics II
or
PHYS 2054 University Physics I
PHYS 2074 University Physics II

Note: These mathematics and physics prerequisite requirements are substantial, and these courses and their prerequisites should be scheduled early in the student’s program.

BIOLOGY (4 courses • 15 hours)
BIOL 1543/1541L Principles of Biology
BIOL 2013/2011L General Microbiology
BIOL 2533/2531L Cell Biology
or
BIOL 2323 General Genetics
or
BIOL 4233 Genomics and Bioinformatics

CHEMISTRY WRITING REQUIREMENT
Satisfied by the formal research/analytical reports required in Physical Chemistry Laboratory—CHEM 3451L or CHEM 3512L—or by completing an honors thesis.

CHEMISTRY (38 hours minimum)
CHEM 1203/1201L Chemistry for Majors I
CHEM 1223/1221L Chemistry for Majors II
or
CHEM 1103/1101L University Chemistry I
CHEM 1123/1121L University Chemistry II
CHEM 3453/3451L Elements of Physical Chemistry
or
CHEM 3504 Physical Chemistry I (fall only)
(pre-requisite: CHEM 2263 & PHYS 2074; pre or co-requisite: MATH 2564)
CHEM 3514/3512L Physical Chemistry II
CHEM 4813H Honors Biochemistry I (same as CHEM 5813)
CHEM 4843H Honors Biochemistry II (same as CHEM 5843)
or
CHEM 3813 Elements of Biochemistry
(pre-requisite: CHEM 3613/3611L)
CHEM 4723 Experimental Methods in Organic Chemistry (fall only)
(pre-requisite: CHEM 3613/3611L)
CHEM 4213/4211L Instrumental Analysis (spring only)
(pre-requisite: CHEM 2263/2261L & CHEM 3613/3611L)
or
CHEM 4123 Advanced Inorganic Chemistry I (fall only)
(pre-requisite: CHEM 3453)
CHEM 4853 Biochemical Techniques (spring only)
(pre-requisite: CHEM 3813 or CHEM 4843H)
or
Completion of a senior thesis based on independent research wherein at least one credit hour is earned in CHEM 400V (chemistry research) and/or CHEM 498V (senior thesis) during each of three different semesters.

Note: anytime a “for majors” course option is completed, it will suffice to complete the “not for majors” pre-requisite listed above.