

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

MINIMUM DEGREE CREDIT HOURS REQUIRED TO GRADUATE = 120 (CORE + MAJOR + GENERAL ELECTIVES)

MATHEMATICS (2 courses • 8 hours)

- 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
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- 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
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- CHEM 2263/2261L Analytical Chemistry
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- CHEM 3703/3702L Organic Chemistry for Majors I
 - CHEM 3713/3712L Organic Chemistry for Majors 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.