

Emphasis - Biochemistry

- [B.S. in Chemistry](#)
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B.S. in Chemistry **Description**

The B.S. in chemistry provides a rigorous foundation in the principal areas of basic chemistry. This program is designed for students who intend to pursue advanced studies leading to the M.S. or Ph.D. degrees in the chemical or biochemical sciences, or who wish to obtain employment as entry-level professional chemists in industrial or government laboratories. Students who intend to seek admission to combined M.D.-Ph.D. programs are advised to consider this degree program.

To enroll in the **B.S. in chemistry**, students must have successfully completed [Chem 105](#) or meet the prerequisites for [Chem 105](#).

Minimum Total Credit Hours: 120

General Education Requirements

See the 'General Education/Core Curriculum' for the College of Liberal Arts.

Course Requirements

A major in chemistry for the B.S. degree consists of the following 50 hours of chemistry courses: Chem 105, 106, 115, 116; 221, 222, 225, 226; 314; 331, 332, 337; 401, 402; 423, 469, 471, two semesters of 463 (for a total of 4 hours), and two advanced courses chosen from 512, 514, 519, 527, 528, 529, 530, 531, 532, 534, 536, 544, 563, or 593.

Also required are Phys 211, 212, 221, 222; Math 261, 262, 263, 264 as well as one course chosen from Math 319, 353, or 375. Students seeking the B.S. degree in chemistry who have already completed Phys 213/214 instead of Phys 211/212 must complete one calculus-based physics course chosen from Phys 303, 315, 319, or 321.

The following courses may not be used for major credit: Chem 101, 103, 104, 113, 114, 121, 201, 202, 271, 293, 381, 382, 383, or 393.

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To enroll in the B.S. in chemistry, students must have successfully completed Chem 105 or be eligible to register for Chem 105, which requires a score of 25 on the mathematics portion of the ACT or a 580 on the ma

Course Requirements

A major in chemistry for the B.S. degree with an emphasis in biochemistry consists of the following 46 hours of chemistry courses: Chem 105, 106, 115, 116; 221, 222, 225, 226; 314; 331, 332, 337; 401, 402; 469, 471, 472, 473, and two semesters of 463 (for a total of 4 hours).

Also required are Phys 211, 212, 221, 222; Math 261, 262, 263, 264 as well as one course chosen from Math 319, 353, or 375; and one advanced course chosen from Chem 580, 581 or Bisc 333, 336. Students seeking the B.S. degree in chemistry with a biochemistry emphasis who have already completed Phys 213/214 instead of Phys 211/212 must complete one calculus-based physics course chosen from Phys 303, 315, 319 or 321.

Other Academic Requirements

To enroll in the B.S. in chemistry, students must have successfully completed Chem 105 or be eligible to register for Chem 105, which requires a score of 25 on the mathematics portion of the ACT or a 580 on the mathematics portion of the SAT.

