

BA in Chemistry with concentration in Biological and Biomedical Chemistry

Below is a sample 4-year plan for students pursuing the BA in Chemistry with concentration in Biological and Biomedical Chemistry. To view the list of courses approved to fulfill Core 34, please visit the KU Core 34 page (<https://catalog.ku.edu/core34/>).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104 prior to freshman year, fall semester.

Freshman

Fall	Hours Spring	Hours
MATH 115 (Core 34: Math and Statistics (SGE)) ^{030*}	3 MATH 116 (Major Pre-requisite)	3
Core 34: English (SGE) ⁰¹⁰	3 Core 34: English (SGE) ⁰¹⁰	3
CHEM 170, 130, or 190 (Core 34: Natural and Physical Sciences (SGE)) ^{040*,1}	5 CHEM 175, 135, or 195 (Major Requirement)	5
Core 34: Social and Behavior Science (SGE) ⁰⁵⁰	3 BIOL 150 ²	3
CHEM 180 (Major Requirement) ⁴	0.5	
	14.5	14

Sophomore

Fall	Hours Spring	Hours
1st Semester Language (BA Second Language)	5 2nd Semester Language (BA Second Language)	5
PHSX 114	4 Core 34: Communications (SGE) ⁰²⁰	3
CHEM 201 (Major Requirement) ⁴	1 PHSX 115	4
CHEM 330 or 380	3 CHEM 335 or 385 (Major Requirement)	3
CHEM 331 (Major Requirement)	2 CHEM 336 (Major Requirement)	2
	15	17

Junior

Fall	Hours Spring	Hours
CHEM 400	3 Chemistry Elective/Second Area of Study/Degree/Junior-Senior Hours ⁷	3
CHEM 401	2 4th Semester Language, or 1st semester of Another Language, unless req for mjr (BA Second Language) ⁸	3
BIOL Elective 300+ (Major Requirement)	3 Core 34: Arts and Humanities (SGE) ⁰⁶⁰	3
3rd Semester Language (BA Second Language)	3 Core 34: US Culture (SGE) ⁰⁷⁰	3

Core 34: Arts and Humanities (SGE) ⁰⁶⁰	3 Core 34: Social and Behavioral Science (SGE) ⁰⁵⁰	3
	14	15
Senior		
Fall	Hours Spring	Hours
CHEM 510 ⁴	3 BIOL 638 (Major Requirement) ⁴	4
CHEM 511 ⁴	2 CHEM 635 ^{4,5}	2
BIOL 636 ⁴	4 CHEM 636, 698, or 699 (Capstone Requirement) ^{4,5}	3
CHEM 695 (Major Requirement) ⁴	0.5 Chemistry Elective/Second Area of Study/Degree/Junior-Senior Hours ⁷	3
Core 34: Global Culture (SGE) ⁰⁷⁰	3 Chemistry Elective/Second Area of Study/Degree/Junior-Senior Hours ⁷	3
Chemistry Elective/Second Area of Study/Degree/Junior-Senior Hours ⁷	3	
	15.5	15

Total Hours 120

- CHEM 170 requires eligibility for MATH 115 in order to enroll.
- BIOL 150 or BIOL 151 is a pre-requisite for the elective courses needed to fulfill the Biological and Biomedical Chemistry concentration elective requirement.
- Choose from a list of electives approved to count for the Biological and Biomedical Chemistry elective requirement. See the degree requirements (<http://catalog.ku.edu/liberal-arts-sciences/chemistry/ba/#requirements>) tab for a list of courses.
- CHEM 180, CHEM 201, CHEM 400, CHEM 401, CHEM 510, CHEM 511, CHEM 530, and CHEM 695 are Fall only courses. CHEM 635 and CHEM 636 are Spring only courses. BIOL 636 is a fall only course. BIOL 638 is a spring only course.
- Students can elect to enroll in 3 hours of research or CHEM 636 Instrumental Methods of Analysis Laboratory to fulfill the Capstone requirement. 3 hours of CHEM 698 or CHEM 699 can alternatively be used to satisfy the Capstone requirement. Students that elect CHEM 636 must also take CHEM 635 Instrumental Methods of Analysis as the co-requisite.
- Visit this page (<https://catalog.ku.edu/liberal-arts-sciences/#ba-quantitative-reasoning>) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
- Hour requirements (incl. 45 jr/sr hrs) are typically met through Core 34, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
- For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

*Courses with a * designate courses that are degree requirements but can also be taken to fulfill the KU Core 34 requirement. If another course is used to fulfill the Core 34 requirement, the course listed is still required as a degree requirement.

Notes:

* - This course is a Required major course and is also part of Core 34: Systemwide General Education. If this course is not taken to fulfill the Core 34:SGE requirement, it must be taken in place of elective hours.

** - This course is a Recommended Core 34: Systemwide General Education course. This specific course is not required but is recommended by the program's faculty.

*** - This course is a Required Core 34: Systemwide General Education course. This program is approved by the Kansas Board of Regents to require this specific Core 34: Systemwide General Education course. If a student did not take this course it must be taken in addition to other degree requirements.