

Advising Roadmap - Recommended Course Sequence

Biochemistry, B.S.

4-Year Plan, Effective Fall 2024

| Fall | Units | Spring | Units |
|----------------------------------|-------|-------------------------------|------------|
| Year One - 30 units | | | |
| MATH 2110 | 4 | MATH 2120 | 4 |
| CHEM 1100 | 5 | CHEM 1110 | 5 |
| LD GE Block A1 | 3 | LD GE Block A2/A3 | 3 |
| NSS 1001 | 3 | LD GE Block A2/A3 | 3 |
| TOTAL | 15 | TOTAL | 15 |
| Year Two - 31 units | | | |
| BIOL 1100 | 5 | BIOL 1200 | 5 |
| CHEM 2200 | 4 | CHEM 3200 | 4 |
| CHEM 2201 | 1 | CHEM 2211 | 1 |
| LD GE Block AM/C1/C2/D/E/F | 3 | CHEM 3100 ^a | 3 |
| LD GE Block AM/C1/C2/D/E/F | 3 | CHEM 2300 | 2 |
| TOTAL | 16 | TOTAL | 15 |
| Year Three - 28 units | | | |
| CHEM 4310 | 3 | CHEM 4320 | 3 |
| CHEM 4311 | 2 | CHEM 4321 | 2 |
| CHEM 3500 | 4 | PHYS 2200 | 4 |
| PHYS 2100 | 4 | LD GE Block AM/C1/C2/D/E/F | 3 |
| | | LD GE Block AM/C1/C2/D/E/F | 3 |
| TOTAL | 13 | TOTAL | 15 |
| Year Four - 31 units | | | |
| CHEM 3600 | 4 | CHEM 4420 | 3 |
| CHEM UD elective ^b | 3 | CHEM 4890 ^{c,d} | 3 |
| LD GE Block AM/C1/C2/D/E/F | 3 | CHEM UD Elective ^b | 3 |
| LD GE Block AM/C1/C2/D/E/F | 3 | CHEM UD Elective ^b | 3 |
| UD GE Block C/D | 3 | UD GE Block C/D | 3 |
| TOTAL | 16 | TOTAL | 15 |
| TOTAL UNITS FOR THE MAJOR | | | 120 |

Notes

- a. This course must be taken before CHEM 4311 and CHEM 4890. You must earn a C or better to satisfy the university GWAR writing requirement.
 - b. Students must take a minimum of 2 units of coursework listed under Chemistry and a minimum of 2 units of coursework listed under Biology or Microbiology totaling 9 units.
 - c. Prerequisites: Completion of Blocks A and B4, an additional course from Block B, and at least one course each from blocks C and D, and CHEM 3100
 - d. GE "double counting": This roadmap already incorporates double counting, so if you follow this roadmap, you won't be taking unnecessary general education courses. CHEM 4890 is required and satisfies your UD GE B requirement, saving you 3 more units of UD GE coursework.
- A total of 9 units of UD CHEM/ BIOL electives, which may include a maximum of 3 unit of CHEM 4990. Typically, CHEM 4900 students enroll in one unit each semester and repeat multiple times.

Advising Roadmap - Recommended Course Sequence

Biochemistry, B.S.

2 Year Transfer Plan, Effective Fall 2024

| Assuming completed prior to transfer: 60 | | | |
|--|-------|---------------------------------|-----------|
| LD GE Block A | 9 | BIOL 1100, BIOL 1200 | 10 |
| LD GE Block C1, C2 | 6 | CHEM 1100, CHEM 1110 | 10 |
| LD GE Block D | 3 | CHEM 2200, CHEM 2201 | 5 |
| Any transferrable course | 1 | MATH 2110, MATH 2120 | 8 |
| | | PHYS 2100, PHYS 2200 | 8 |
| Fall | Units | Spring | Units |
| Junior Year: 30 units | | | |
| GE American History | 3 | CHEM 3100 ^b | 3 |
| CHEM 2211 | 1 | CHEM 3500 | 4 |
| CHEM 2300 | 2 | CHEM 4420 | 3 |
| CHEM 3200 | 4 | UD GE Block C | 3 |
| CHEM 3600 | 4 | UD GE Block D | 3 |
| | TOTAL | TOTAL | 16 |
| Senior Year: 30 units | | | |
| GE American Government | 3 | CHEM 4320 | 3 |
| CHEM 4310 | 3 | CHEM 4321 | 2 |
| CHEM 4311 | 2 | CHEM 4890 | 3 |
| CHEM UD Elective 1 ^c | 3 | CHEM UD Elective ^{d,e} | 3 |
| CHEM UD elective 2 ^c | 3 | GE Block F ^c | 3 |
| Free Elective | 2 | | |
| | TOTAL | TOTAL | 14 |
| TOTAL RESIDENCE UNITS | | | 60 |

Notes a summary of what courses are prerequisites to others is found in a separate document

a. Transfer students must meet additional admissions criteria, listed here: <http://www.calstatela.edu/admissions/major-specific-criteria>.

b. This course must be taken before CHEM 4311 and CHEM 4890. You must earn a C or better to satisfy the university GVAR requirement.

c. Students must take a minimum of 2 units of coursework listed under Chemistry and a minimum of 2 units of coursework listed under Biology or Microbiology totaling 9 units.

d. Prerequisites: Completion of Blocks A and B4, an additional course from Block B, and at least one course each from blocks C and D, and CHEM 3100

e. GE "double counting": This roadmap already incorporates double counting, so if you follow this roadmap, you won't be taking unnecessary general education courses. CHEM 4890 is required and satisfies your UD GE B requirement, saving you 3 more units of UD GE coursework.

Additional GE requirements: One GE course must have an "re" designation (race/ethnicity) and another GE course must have either an "re" or "d" (diversity) designation. One GE course must have a "wi" designation. Note that some GE courses may have more than one designation (such as cl and d) and that course CAN be used to satisfy both requirements.

A total of 9 units of UD CHEM electives, which may include a maximum of 3 unit of CHEM 4990. Typically, CHEM 4900 students enroll in one unit each semester and repeat multiple times.