

# CSUEB Degree Roadmap

## Bachelor of Arts in Chemistry

|   |              | TOTAL UNITS TO DEGREE:                | 120 |
|---|--------------|---------------------------------------|-----|
| Course  | Course Title | Units                                 |     |
| <b>First Semester (suggested timeline for GE; adjust as needed for major)</b>   |              |                                       |     |
| E   | GS 101       | Freshman Studies                      | 1   |
| A1  |              |                                       | 3   |
| LD Major  | CHEM 111     | General Chemistry I                   | 5   |
| B4  | MATH 130     | Calculus I                            | 4   |
| D1/CODE   |              |                                       | 3   |
| TOTAL:  |              |                                       | 16  |
| <b>Second Semester (suggested timeline for GE; adjust as needed for major)</b>  |              |                                       |     |
| E   | GS 102       | Freshman Studies                      | 1   |
| A2  |              |                                       | 3   |
| C1  |              |                                       | 3   |
| LD Major  | MATH 131     | Calculus II                           | 3   |
| LD Major  | CHEM 112     | General Chemistry II                  | 5   |
| TOTAL:  |              |                                       | 15  |
| <b>Third Semester (suggested timeline for GE; adjust as needed for major)</b>   |              |                                       |     |
| E   | LIB 101      | Information Literacy                  | 1   |
| A3  |              |                                       | 3   |
| B2  |              |                                       | 3   |
| 2nd Comp  |              |                                       | 3   |
| UD Major  | CHEM 331     | Organic Chemistry I                   | 5   |
| TOTAL:  |              |                                       | 15  |
| <b>Fourth Semester (suggested timeline for GE; adjust as needed for major)</b>  |              |                                       |     |
| C2  |              |                                       | 3   |
| UD Major  | CHEM 332     | Organic Chemistry II                  | 5   |
| LD Major  | CHEM 220     | Quantitative Analysis                 | 4   |
| elective  |              |                                       | 3   |
| TOTAL:  |              |                                       | 15  |
| <b>Fifth Semester (suggested timeline for GE; adjust as needed for major)</b>   |              |                                       |     |
| B1/B3   | PHYS 125     | Principles of Physics I               | 4   |
| D2  |              |                                       | 3   |
| UD Major  | CHEM 340     | Survey of Biochemistry                | 3   |
| UD Major  | GEOL 100     | Earth Systems Science                 | 4   |
| TOTAL:  |              |                                       | 14  |
| <b>Sixth Semester (suggested timeline for GE; adjust as needed for major)</b>   |              |                                       |     |
| UD Major  | CHEM 320     | Bioanalytical and Forensic Laboratory | 3   |
| UD Major  | PHYS 126     | Principles of Physics II              | 4   |
| B6  |              |                                       | 3   |
| C3  |              |                                       | 3   |
| elective  |              |                                       | 2   |
| TOTAL:  |              |                                       | 15  |
| <b>Seventh Semester (suggested timeline for GE; adjust as needed for major)</b> |              |                                       |     |
| Code 2  |              |                                       | 3   |
| D3  |              |                                       | 3   |
| UD Major  | TED 301      | Exploring Education                   | 3   |
| UD Major  | CHEM 350     | Biophysical Chemistry                 | 3   |
| elective  |              |                                       | 3   |
| TOTAL:  |              |                                       | 15  |
| <b>Eighth Semester</b>  |              |                                       |     |
| UD Major  | CHEM 470     | Chemical Literature                   | 1   |
| UD Major  | CHEM 425     | Environmental Chemistry               | 3   |
| D4  |              |                                       | 3   |
| C4/UD Major   | PHIL 335     | Philosophy of Science                 | 3   |
| elective  |              |                                       | 3   |
| elective  |              |                                       | 2   |
| TOTAL:  |              |                                       | 15  |

3 units Code may be double-counted with LD GE; and 3 units Writing II may be double-counted with Major.

Please enter all courses required for the major, including any prerequisites. If there are any General Education courses that are recommended to complement the major they should be included in the table below, and listed in the road map.

### General Education and University Requirements-Suggested Courses

A1. first semester  
A2. second semester  
A3. third semester  
B1. PHYS 125  
B2. third semester  
B3. PHYS 125  
B4. MATH 130  
C1. second semester  
C2. fourth semester  
C3. sixth semester  
D1. first semester  
D2. fifth semester  
D3. seventh semester  
E. GS 101, GS 102, LIB 101  
Code 1. should also satisfy D1  
Code 2. seventh semester  
2nd Comp third semester  
B6. sixth semester  
C4. eighth semester  
D4. eighth semester