

BA Degree in Chemistry (671501)

Minimum Number of Units in Major = 56

Bulletin URL: <http://www.sfsu.edu/~bulletin/current/programs/chemist.htm#671501> Key to Course Abbreviations: <http://www.sfsu.edu/~admisrec/reg/noindex/crsabbrev.html>

1st Semester Requirements

Requirement	Recommended Courses	Units
Basic Information Competence		
Written English Proficiency	ENG 114	3
GE 1 Oral Communication	COMM 150	3
GE 2 Physical and Biological Sciences, Category A also satisfies Major Lower Division	CHEM 115	5
Major Lower Division (See Note 1)	PHYS 111 & PHYS 112	4
1st Semester Total		15

Note: Review the Bulletin for GE II requirements in the following areas:
 LD-Lifelong Development; AERM-American Ethnic and Racial Minorities; L/F-Laboratory of Fieldwork

2nd Semester Requirements

Requirement	Recommended Courses	Units
GE 1 Critical Thinking		3
Major Lower Division (See Note 1)	PHYS 121 & PHYS 122	4
Major Upper Division	CHEM 333 & CHEM 334	5
University Elective		3
2nd Semester Total		15

3rd Semester Requirements

Requirement	Recommended Courses	Units
GE 1 Written Communication also satisfies University Written English Proficiency		3
GE 1 Quantitative Reasoning also satisfies Major Lower Division	MATH 226	4
GE 2 Humanities and Creative Arts		3
Major Upper Division (See Note 2)	CHEM 335 & CHEM 336	6
3rd Semester Total		16

4th Semester Requirements

Requirement	Recommended Courses	Units
GE 2 Physical and Biological Sciences, Category B		3
GE 2 Behavioral and Social Sciences		3
Major Lower Division	CHEM 215 & CHEM 216	5
Major Lower Division	MATH 227	4
4th Semester Total		15

5th Semester Requirements

Requirement	Recommended Courses	Units
University Written Eng Proficiency/GWAR or University Elective		3
GE 2 Behavioral and Social Sciences		3
GE 2 Humanities and Creative Arts		3
Major Upper Division	CHEM 320	4
5th Semester Total		13

6th Semester Requirements

Requirement	Recommended Courses	Units
US History		3
GE 2 Humanities and Creative Arts		3
GE 3		3
Major Upper Division	CHEM 422	4
Major Upper Division (See Notes 3 & 6)	CHEM 349	3
6th Semester Total		16

7th Semester Requirements

Requirement	Recommended Courses	Units
US Government and California		3
GE 2 Physical and Biological Sciences (If necessary to achieve 9 units)		3
GE 3		3
Major Upper Division (See Notes 4 and 5)	CHEM 300	3
Major Upper Division Elective (on advisement, see Note 7)		2 to 3
7th Semester Total		14 to 15

8th Semester Requirements

Requirement	Recommended Courses	Units
GE 2 Behavioral and Social Sciences		3
GE 3		3
Major Upper Division (See Notes 4 & 6)	CHEM 301	3
University Elective		6 to 7
8th Semester Total		15 to 16

Note: All courses required for the major must be completed with grade of C- or better with one exception

Note 1: PHYS 220/222 and PHYS 240/242 may be substituted for PHYS 111/112 and PHYS 121/122.

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Note 2: CHEM 338 may be substituted for CHEM 336.

Note 3: CHEM 340 may be substituted for CHEM 349.

Note 4: CHEM 351 and 353 may be substituted for CHEM 300 and 301 upon advisement.

Note 5: This course typically offered fall semester only.

Note 6: This course typically offered spring semester only.

Note 7: Consult with a major advisor regarding appropriate choice of major electives and be sure to check course prerequisites before enrolling.

Department Website: <http://www.chemistry.sfsu.edu/>