

BACHELOR OF SCIENCE (B.S.) DEGREE IN CHEMISTRY

A total of 120 units must be completed with at least a 2.0 grade point average in all college work attempted, all units attempted at CSUN and all upper division units in the major. Students who do not pass the Mathematics Placement Test or Chemistry Placement Test may need to take preparatory courses such as Math 102/104 (or Math 105) and Chem 100.

SUGGESTED FIVE-YEAR SEQUENCE OF REQUIRED COURSES FOR B.S. CHEMISTRY MAJORS

Fall Semester	Units	Spring Semester	Units
FIRST YEAR			
Chem 101 & 101L (General Chemistry I)	5	Chem 102 & 102L (General Chemistry II)	5
Math 150A (Math Analysis I)	5	Math 150B (Math Analysis II)	5
General Education ¹	3	General Education ¹	3
	13		13
SECOND YEAR			
Phys 225 & 220AL (Mechanics and Waves & Lab)	5	Phys 226 & 220BL (Elect., Magnet. & Optics & Lab)	5
Math 250 (Math Analysis III)	3	Math 280 (Applied Differential Equations)	3
General Education ¹	6	General Education ¹	3
	14		11
THIRD YEAR			
Chem 321 & 321L (Chemical Analysis I)	4	Chem 422 & 422L (Chemical Analysis II)	4
Chem 333 & 333L (Principles of Organic Chemistry I)	4	Chem 334 & 334L (Principles of Organic Chemistry II)	4
Chem 333R	1	Chem 334 R	1
General Education ¹	6	General Education ¹	6
	15		15
FOURTH YEAR			
Chem 351 (Physical Chemistry I) (Fall Only)	4	Chem 352 (Physical Chemistry II) (Spring Only)	3
Chem 464 (Principles of Biochemistry)	4	Chem 352L (Physical Chemistry Lab) (Spring Only)	2
General Education ¹	6	Chem 401 (Inorganic Chemistry)	3
	14	Chem 401L (Inorganic Chemistry Lab)	1
		General Education ¹	3
			12
FIFTH YEAR			
Chem 411 (Synthesis)	3	Chem Elective	3
Chemistry 495 or 499A (Research or Indep. Study)	1	Free Elective	3
General Education ¹	7	General Education ¹	6
	11		12

¹General Education units must include 6 units of American History and Government if CSUN work is used to satisfy Title V requirements.

GENERAL EDUCATION REQUIREMENTS FOR B.S. CHEMISTRY MAJORS

The following may be used as a guide and worksheet to select courses to satisfy G.E. requirements. Consult your advisor and the G.E. section of the CSUN catalog before selecting courses. Enter your course selections in the spaces provided. Chemistry courses may not be used by chemistry majors to satisfy G.E. requirements. Science and Mathematics courses which do satisfy G.E. requirements for the B.S. Biochemistry program have been inserted in the appropriate spaces below.

Nine units of G.E. requirements must be upper division selected from two different section (A through F). Title V requirements (6 units) must be satisfied in addition to these requirements.

SECTION A: BASIC SUBJECTS (12 units / 3 units minimum from each subsection)	
A-1	
A-2	
A-3	Math 150A
A-4	
SECTION D: SOCIAL SCIENCES (6 units)	
6 units from at least 2 disciplines	

SECTION B: NATURAL SCIENCE (8 units)	
B-1	Phys 225/220AL & 226
B-2	
SECTION E: APPLIED ARTS AND SCIENCES (3 units)	
3 units from at least 2 disciplines	

SECTION C: HUMANITIES (6 units / 3 units minimum from each subsection)	
C-1	
C-2	
C-3	
SECTION F: COMPARATIVE CULTURAL STUDIES (6 units / 3 units minimum from each subsection)	
F-1	
F-2	
F-3	