



**California State Polytechnic University, Pomona
Degree Curriculum Sheet**

Plan (Major) CHEMISTRY
Subplan/Option Industrial Chemistry

Catalog Year 2012-2013
Minimum Units Required 180

Name _____
Student ID _____

TGA _____
GWT Satisfied Yes No

Required Core Courses		
Course		Units
General Chemistry	CHM 121/121L	3/1
General Chemistry	CHM 122/122L	3/1
General Chemistry	CHM 123/123L	3/1
Quantitative Analysis	CHM 221/221L	2/2
Organic Chemistry	CHM 314	3
Organic Chemistry	CHM 315	3
Organic Chemistry	CHM 316	3
Organic Chemistry Lab	CHM 317L	1
Organic Chemistry Lab	CHM 318L	1
Organic Chemistry Lab	CHM 319L	1
Spectroscopic Methods	CHM 342/342L	2/2
Separation Methods	CHM 343/343L	2/2
Electroanalytical Methods	CHM 344/344L	2/2
Physical Chemistry	CHM 352/352L	1/2
Organic Synthesis	CHM 422/422L	2/2
or Organic Analysis	CHM 424/424L	(2/2)
Senior Research Project	CHM 491	3
Senior Research Project	CHM 492	3
Undergraduate Seminar	CHM 493	2
Total Units		55

Required Subplan/Option Core Courses		
Course		Units
Elem Phys Chemistry	CHM 304/304A	3/1
and Elem Phys Chemistry	CHM 305	3
or Physical Chemistry	CHM 311	(3)
and Physical Chemistry	CHM 312	(3)
and Physical Chemistry	CHM 313	(3)
Elements of Biochemistry	CHM 321/321L	3/1
or Biochemistry	CHM 327/327L	(3/1)
or Inorganic Chemistry	CHM 401	(3)
The Chemist in Industry	CHM 340	4
Two courses from the following: CHM 402, 409, 413, 450, 452/452L, 460		6-8
Total Units		20-25

Required Support Courses			
Course			Units
Basic Biology (B2, B3)	BIO 115/115A/115L		3/1/1
Introduction to C++	CS 128		4
Analytic Geom & Calculus (B4)	MAT 114		4
Analytic Geom & Calculus	MAT 115		4
Analytic Geom & Calculus	MAT 116		4
General Physics (B1, B3)	PHY 131/131L		3/1
General Physics	PHY 132/132L		3/1
General Physics	PHY 133/133L		3/1
Cooperative Education	SCI 470		4
or Cooperative Education	SCI 471	(2)	
and Cooperative Education	SCI 472	(2)	
(If a suitable Co-op position is not available, students will take an additional advanced Chemistry elective [consult advisor])			
Statistical Methods in Engr. & Physical Sciences	STA 309		3
Total Units			40

Elective Support Courses	
Course	Units
Select a minimum of 6 units from one approved elective package. (See Advisor)	6
Total Units	6

Unrestricted Electives	
Course	Units
Unrestricted Electives	0-3
Select a sufficient number of courses so that the total from "Required Subplan/Option", "Required Support", "GE", and "Unrestricted Electives" is at least 119 units.	
Total Units	0-3

General Education Requirements		
Area		Units
Area A Communication & Critical Thinking		12
1 Oral Communication		
2 Written Communication		
3 Critical Thinking		
Area B Mathematics & Natural Sciences		16
<i>Select at least one lab course from sub-area 1 or 2.</i>		
1 Physical Science		
2 Biological Science		
3 Laboratory Activity		
4 Math/Quantitative Reasoning		
5 Science & Technology Synthesis		
Area C Humanities		16
1 Visual and Performing Arts		
2 Philosophy and Civilization		
3 Literature and Foreign Language		
4 Humanities Synthesis		
Area D Social Sciences		20
1 U.S. History, Constitution, American Ideals		
2 History, Economics and Political Science		
3 Sociology, Anthropology, Ethnic & Gender Studies		
4 Social Science Synthesis		
Area E Lifelong Understanding & Self Development		4
Total Units		68

American Institutions	
Courses that satisfy this requirement may also satisfy G.E. Area D1	8

American Cultural Perspectives Requirement	
Refer to catalog for list of courses that satisfy this requirements. Course may also satisfy major, minor, GE, or unrestricted elective requirements.	4

The following required support courses should be taken to satisfy the indicated GE Requirements to achieve the minimum units to degree listed at the top of this sheet.		
Course		GE Area
General Physics	PHY 131/131L	B1, B3
Basic Biology	BIO 115/115A/115L	B2, B3
Analytic Geom & Calculus	MAT 114	B4
The remaining GE requirements may be satisfied by any course approved for that area.		

No more than 105 community college quarter units or 36 extension credit quarter units may be applied toward a Bachelor's degree.
A minimum 2.0 cumulative GPA is required in core (including option) courses, Cal Poly Pomona courses, and overall work completed in order to receive a degree in this major.