



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

Plan (Major) CIVIL ENGINEERING  
Subplan/Option Geospatial Engineering

Catalog Year 2015 - 2016  
Minimum Units Required 194

Name \_\_\_\_\_  
Student ID \_\_\_\_\_

Required Core Courses		
Course		Units
Civil Engineering CAD I & Lab	CE 127/127L	1/1
Civil Engineering CAD II Lab	CE 128L	1
Elementary Surveying & Lab	CE 134/134L	2/2
Civil Engineering Materials & Lab	CE 221/221L	2/1
Structural Analysis I	CE 304	4
Structural Analysis II	CE 305	4
Structural Design Lab	CE 305L	1
Structural Testing Lab	CE 306L	1
Geotechnical Engineering I	CE 325	2
Geotechnical Engineering II	CE 326	3
Geotechnical Engineering Lab	CE 327L	1
Hydraulic Engineering & Lab	CE 332/332L	3/1
Technical Communications and Documentation	CE 362/362A	2/1
Structural Design-Reinforced Concrete	CE 421	4
Engineering Hydrology	CE 451	4
Analytic Geometry and Calculus II	MAT 115	4
Analytic Geometry and Calculus III	MAT 116	4
Calculus of Several Variables I	MAT 214	3
Elementary Linear Algebra and Diff Equations	MAT 224	4
Vector Statics	ME 214	3
Vector Dynamics	ME 215	4
Strength of Materials I	ME 218	3
Fluid Mechanics I	ME 311	3
<b>Total Units</b>		<b>69</b>

Required Subplan/Option Core Courses		
Course		Units
Advanced Surveying & Lab	CE 220/220L	3/1
Highway Engineering & Lab	CE 222/222L	2/2
Surveying Computations	CE 240	3
Geodesy and Satellite Surveying & Lab	CE 311/311L	3/1
Land Survey Descriptions	CE 313	4
Public Land Surveys	CE 331	3
Digital Mapping & Lab	CE 420/420L	3/1
Photogrammetry and Remote Sensing & Lab	CE 427/427L	3/1
Geospatial Engineering Seminar	CE 465	1
Subdivision Design & Lab	CE 482/482L	3/1
Geographical Information Systems & Lab	CE 484/484L	3/1
Comprehensive Civil Engineering Design I	CE 491	1
and Comprehensive Civil Engineering Design II	CE 492	2
and Comprehensive Civil Engineering Design III	CE 493	1
<b>Total Units</b>		<b>43</b>

Required Support Courses		
Course		Units
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.		
General Chemistry & Lab (B3)	CHM 121/121L	3/1
California Land and Boundaries Law (D4)	EGR 322	4
Ethical Considerations in Tech and Applied Sci (C4)	IME 402	4
Engineering Geology I (B5)	GSC 321/321L	3/1
Application of Statistics in Engineering or Statistical Methods in Engineering and the Physical Sciences	IME 301 STA 309	3 (3)
Analytic Geometry and Calculus I (B4)	MAT 114	4
General Physics & Lab (B1, B3)	PHY 131/131L	3/1
General Physics & Lab	PHY 132/132L	3/1
General Physics & Lab	PHY 133/133L	3/1
<b>Total Units</b>		<b>35</b>

General Education Requirements		IGE (G.E. Alternative)
Area	Units	
<b>Area A Communication &amp; Critical Thinking</b>	12	
1. Oral Communication		IGE 120 4
2. Written Communication		IGE 121 4
3. Critical Thinking		IGE 122 4
		IGE 220 4
<b>Area B Mathematics &amp; Natural Sciences</b>	16	
<i>Select at least one lab course from subarea 1 or 2.</i>		
1. Physical Science		IGE 221 4
2. Biological Science		IGE 222 4
3. Laboratory Activity		IGE 223 4
4. Math/Quantitative Reasoning		IGE 224 4
5. Science & Technology Synthesis		AREA A1 4
		AREA A3 4
		AREA B 16
		AREA C1, C2 or C3 4
<b>Area C Humanities</b>	16	
1. Visual and Performing Arts		AREA C4 4
2. Philosophy and Civilization		AREA D4 4
3. Literature and Foreign Language		
4. Humanities Synthesis		
<b>Area D Social Sciences</b>	20	
1. U.S. History, Constitution, American Ideals		See University Catalog for information on how IGE meets GE requirements.
a. United States History		
b. Introduction to American Government		
2. History, Economics and Political Science		
3. Sociology, Anthropology, Ethnic & Gender Studies		
4. Social Science Synthesis		
<b>Area E Lifelong Understanding &amp; Self Development</b>	4	
<b>Total</b>	<b>68</b>	

<b>American Institutions</b>	
Courses that satisfy this requirement may also satisfy GE Area D1	8

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

All persons who receive undergraduate degrees from Cal Poly Pomona must pass the Graduation Writing Test (GWT). The test must be taken by the quarter following completion of 120 units for undergraduates.