



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

Plan (Major) CIVIL ENGINEERING
Subplan/Option Geospatial Engineering

Catalog Year 2012-2013 Name _____
Minimum Units Required 198 Student ID _____

TGA _____
GWT Satisfied _____ Yes _____ No _____

Required Core Courses		
Course		Units
Civil Engineering CAD I	CE 127/127L	1/1
Civil Engineering CAD II	CE 128L	1
Elementary Surveying	CE 134/134L	2/2
Civil Engineering Materials	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	CE 332/332L	3/1
Technical Communication & Documentation	CE 362/362A	2/1
Structural Design - Reinforced Concrete	CE 421	4
Engineering Hydrology	CE 451	4
Analytic Geometry/Calculus II	MAT 115	4
Analytic Geometry/Calculus III	MAT 116	4
Calculation of Several Variables I	MAT 214	3
Elementary Linear Algebra & Differential Equations	MAT 224	4
Vector Statics	ME 214	3
Vector Dynamics	ME 215	4
Strength Materials I	ME 218	3
Fluid Mechanics I	ME 311	3
Total Units		69

Required Subplan/Option Core Courses		
Course		Units
Advanced Surveying	CE 220/220L	3/1
Highway Engineering	CE 222/222L	3/1
Surveying Computations	CE 240	3
Geodesy & Satellite Surveying	CE 311/311L	3/1
Land Survey Descriptions	CE 313	4
Public Land Surveys	CE 331	3
Digital Mapping	CE 420/420L	3/1
Photogrammetry & Remote Sensing	CE 427/427L	3/1
Geospatial Engineering Seminar	CE 465	1
Comprehensive C.E. Design I, II, III	CE 491, 492, 493	4
Subdivision Design/Lab	CE 482/482L	3/1
GIS in Engineering	CE 484/484L	3/1
Total Units		43

Required Support Courses		
Course		Units
General Chemistry	CHM 121	3
General Chemistry Lab (B3)	CHM 121L	1
General Chemistry	CHM 122/122L	3/1
Ethical Considerations in Technology and Applied Science (C4)	EGR 402	4
California Land and Boundaries Law (D4)	EGR 322	4
Engineering Geology (B5)	GSC 321/321L	3/1
Application of Statistics in Engineering or Statistical Methods	IME 301	3
Analytic Geometry and Calculus I (B4)	MAT 114	4
General Physics (B1, B3)	PHY 131/131L	3/1
General Physics	PHY 132/132L	3/1
General Physics	PHY 133/133L	3/1
Total Units		39

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

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

American Cultural Perspectives Requirement	Units
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
and General Chemistry Lab	CHM 121L	B3
Analytic Geometry/Calculus I	MAT 114	B4
Engineering Geology	GSC 321/L	B5
Ethical Considerations in Tech. & Applied Science	EGR 402	C4
California Land and Boundaries Law	EGR 322	D4
The remaining GE requirements may be satisfied by any course approved for that area.		

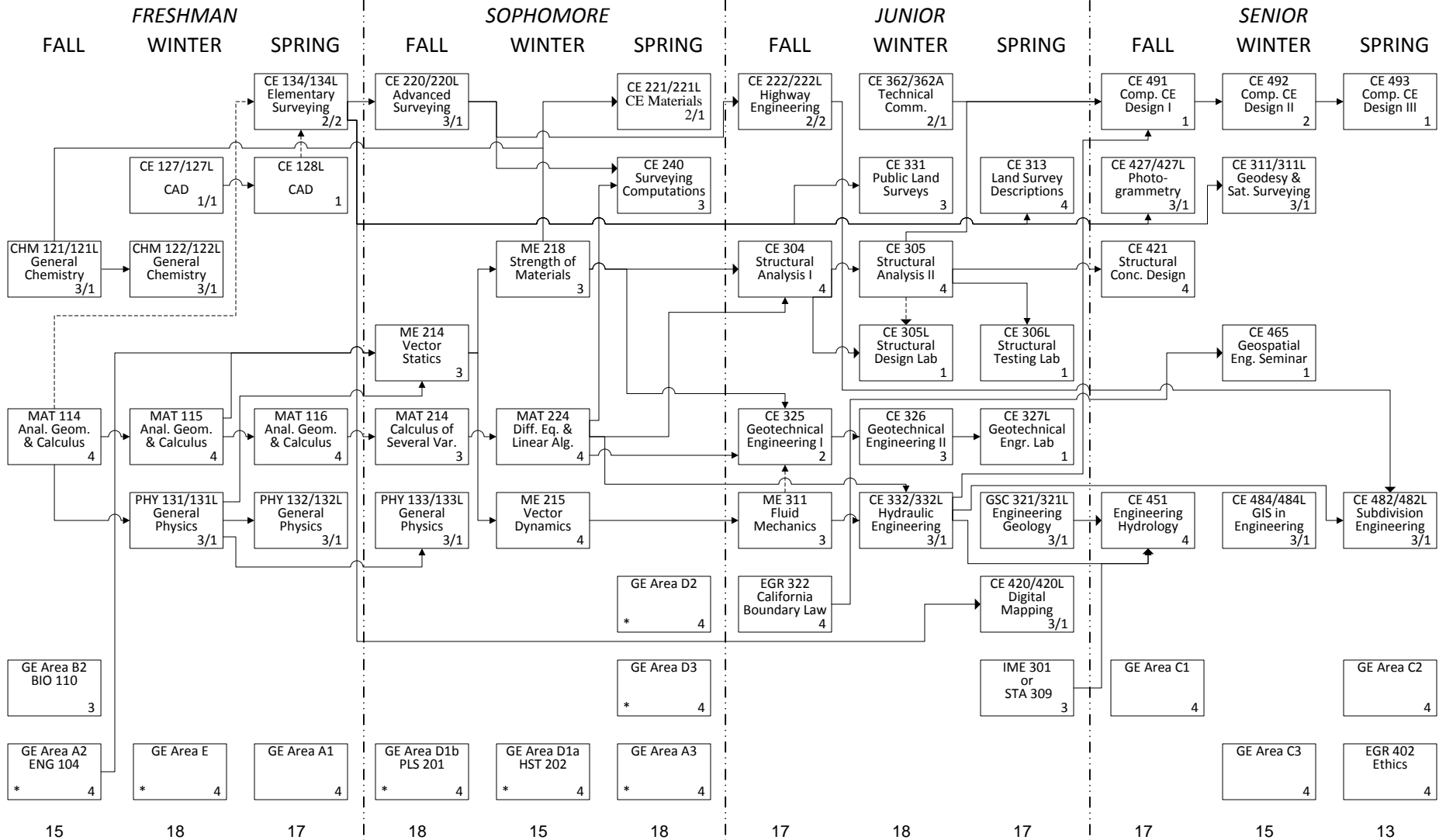
No more than 105 community college quarter units or 36 extension credit quarter units may be applied toward a Bachelor's degree.
A minimum 2.0 cumulative GPA is required in core (including option) courses, Cal Poly Pomona courses, and overall work completed in order to receive a degree in this major.

California State Polytechnic University, Pomona Civil Engineering Department Curriculum

2012-2013

GEOSPATIAL ENGINEERING OPTION

NAME: _____ DATE: _____



Total = 198 units

Not all prerequisites are shown. Students are responsible for checking current University Catalog to determine specific prerequisites.

* IGE sequence replaces these courses plus two of GE Areas C1, C2, and C3. See University Catalog for details.

