California State Polytechnic University, Pomona
Degree Curriculum Sheet

Plan (Major) **CIVIL ENGINEERING** Catalog Year **2011-2012** Name _____ Evaluator _____
Subplan/Option **Geospatial Engineering** Minimum Units Required **198** Student ID _____ GWT Satisfied _____Yes ____No

Required Core Courses

Course		Units
*Students in this major are expected to **maintain** a GPA of at least 2.00 in all core courses.*		
Civil Engineering CAD I	CE 127/127L	1/1
Civil Engineering CAD II	CE 128L	1
Elementary Surveying	CE 134/134L	2/2
Structural Analysis I	CE 304	4
Structural Analysis II	CE 305	4
Structural Testing Laboratory	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
Concrete Testing Lab	CE 422L	1
Water Supply Engineering	CE 431/431L	3/1
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	**70**

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	CE 427/427L	3/1
Comprehensive C.E. Design I, II, III	CE 491, 492, 493	4
Subdivision Deisgn/Lab	CE 482/482L	3/1
GIS in Engineering	CE 484/484L	3/1
	Total Units	**42**

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 STA 309	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

Area	Units	IGE (G.E. Alternative)
Area A Communication & Critical Thinking	**12**	IGE 120 4
1 Oral Communication		IGE 121 4
2 Written Communication		IGE 122 4
3 Critical Thinking		IGE 220 4
Area B Mathematics & Natural Sciences	**16**	IGE 221 4
Select at least one lab course from sub-area 1 or 2.		IGE 222 4
1 Physical Science		IGE 223 4
2 Biological Science		IGE 224 4
3 Laboratory Activity		Area A1 4
4 Math/Quantitative Reasoning		Area A3 4
5 Science & Technology Synthesis		Area B 16
Area C Humanities	**16**	Area C1, C2 or C3 4
1 Visual and Performing Arts		Area C4 4
2 Philosophy and Civilization		Area D4 4
3 Literature and Foreign Language		
4 Humanities Synthesis		See University Catalog for information on how IGE meets G.E. requirements.
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
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.

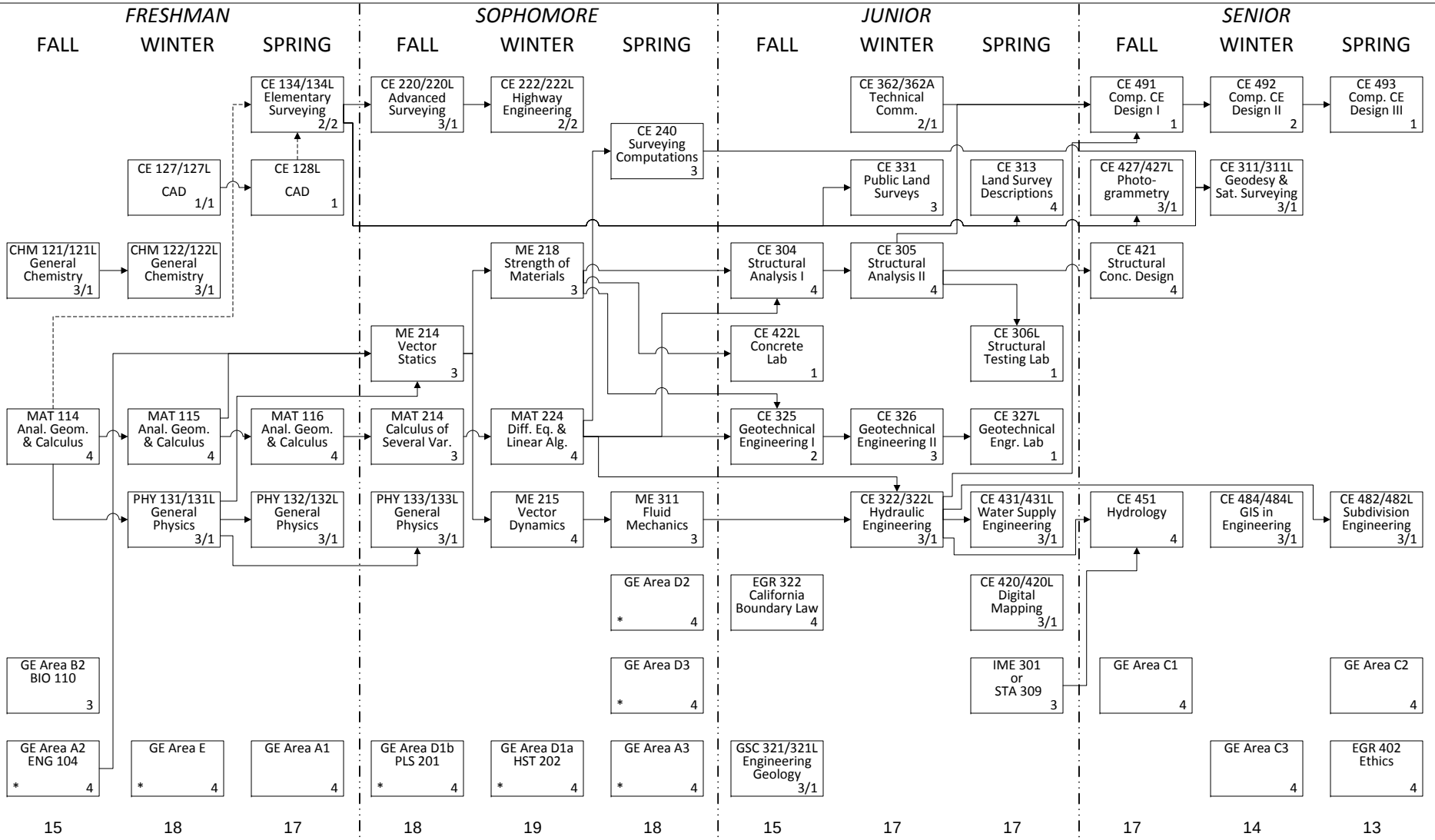
No more than 105 community college quarter units or 36 extension credit quarter units may be applied toward a Bachelor's degree.
A minimum 2.0 cumulative GPA is required in core (including option) courses, Cal Poly Pomona courses, and overall work completed in order to receive a degree in this major.

California State Polytechnic University, Pomona
Civil Engineering Department Curriculum

2011-2012

GEOSPATIAL ENGINEERING OPTION

NAME: _____ DATE: _____



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.

Corequisite

Prerequisite