



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

Plan (Major) CIVIL ENGINEERING
Subplan/Option Geospatial Engineering

Catalog Year 2009-2010 Name _____
Minimum Units Required 198 Student ID _____

Evaluator _____
GWT Satisfied _____ Yes _____ No _____

Required Core Courses		
Course		Units
<i>Students in this major are expected to maintain a GPA of at least 2.00 in all core courses.</i>		
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
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/Lab	CE 332/332L	3/1
Technical Communication	CE 362/362A	2/1
Structural Design - Reinforced Concrete	CE 421	4
Concrete Design Lab	CE 422L	1
Water Supply Engineering/Lab	CE 431/431L	3/1
Engineering Hydrology	CE 451	4
Vector Statics	ME 214	3
Vector Dynamics	ME 215	4
Strength Materials	ME 218	3
Fluid Mechanics	ME 311	3
Total Units		55

Required Subplan/Option Courses		
Course		Units
Advanced Surveying	CE 220/220L	3/1
Highway Engineering/Lab	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
Design Project	CE 491, 492, 493	4
Subdivision Design/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 (B1, B3)	CHM 121L	1
General Chemistry/Lab	CHM 122/122L	3/1
Analytic Geometry and Calculus I (B4)	MAT 114	4
Analytic Geometry/Calculus II	MAT 115	4
Analytic Geometry/Calculus III	MAT 116	4
Calculation of Several Variables I	MAT 214	3
Linear Algebra & Differential Equations	MAT 224	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
Statistical Methods	IME 301	3
or	STA 309	
Engineering Geology/Lab (B5)	GSC 321/321L	3/1
Ethical Considerations in Technology and Applied Science (C4)	EGR 402	4
California Land and Boundaries Law (D4)	EGR 322	4
Total Units		54

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
			IGE 220 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 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 A2 4
			Area A3 4
			Area B 16
Area C Humanities		16	
1 Visual and Performing Arts			Area C1, C2 or C3 4
2 Philosophy and Civilization			Area C4 4
3 Literature and Foreign Language			Area D4 4
4 Humanities Synthesis			
Area D Social Sciences		20	
1 U.S. History, Constitution, American Ideals			See University Catalog for information on how IGE meets G.E. requirements.
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	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/Lab	PHY 131/131L	B1, B3
and General Chemistry Lab	CHM 121L	B3
Analytic Geometry/Calculus I	MAT 114	B4
Engineering Geology/Lab	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.

**Civil Engineering Department
Civil Engineering Major
Geospatial Engineering Option
Curriculum Year: 2009-2010**

*Your department has developed this road plan, taking into account prerequisites and schedule restrictions.
You should pay attention to these concerns when deviating from this plan.*

Year 1	Fall	Units	Winter	Units	Spring	Units	Comments	
	CE127/127L Major Core	2	CE128L Major Core	1	CE 134/134L Major Core	4		<i>Students in this major are expected to maintain a GPA of at least 2.00 in all core courses.</i>
	CHM 121/121L Major Support	3	CHM 122/122L Major Support	4	MAT 116 Major Support	4		
	CHM 121L GE Area B2	1	MAT 115 Major Support	4	PHY 132/132L Major Support	4		<i>MAT 114, PHY 131/131L and CHM121L satisfy both major and general education requirements</i>
	MAT 114 GE Area B1	4	PHY 131/131L GE Area B2	4	ENG 104 GE Area A2	4		
	GE Area A1 Any approved course in GE Area A1	4	GE Area E Any approved course in area E	4				
	Total Units	14	Total Units	17	Total Units	16		
Total Units for Year					47			

Year 2	Fall	Units	Winter	Units	Spring	Units	Comments	
	CE220/220L Major Core	4	CE222/222L Major Core	4	CE 240 Major Core	3		<i>Upper division CE courses must be approved in advance by your advisor.</i>
	ME214 Major Core	3	ME218 Major Core	3	CE 311 Major Core	3		
	MAT 214 Major Support	3	ME215 Major Core	4	GE Area D3 Any approved course in area D3	4		<i>One course must be completed in each of the GE areas A2-3, B1-3, C1-3, D3, and E.</i>
	PHY 133/133L Major Support	4	MAT 224 Major Support	4	GE Area D2 Any approved course in area D2	4		
	GE Area D1b Any approved course in area D1b	4	GE Area D1a Any approved course in area D1a	3	GE Area A3 Any approved course in area A3	4		
Total Units	18	Total Units	19	Total Units	18			

Total Units for Year	55
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Year 3	Fall	Units	Winter	Units	Spring	Units	Comments	
	CE304 Major Core	4	CE362/362A Major Core	3	CE 306L Major Core	1		
	CE332/332L Major Core	4	CE305 Major Core	4	CE327L Major Core	1		
	CE325 Major Core	2	CE326 Major Core	3	CE420/420L Major Core	4		
	GE Area C1 Any approved course in area C1	4	CE431/431L Major Core	4	CE313 Major Core	4		
	EGR322 GE Area D4	4	CE331 Major Core	3	GE Area C2 Any approved course in area C2	4		
					GE Area B2 Any approved course in area B2	3		
	Take the Graduate Writing Test							
	Total Units	18	Total Units	17	Total Units	17		
	Total Units for Year							52

Year 4	Fall	Units	Winter	Units	Spring	Units	Comments		
	CE491 Major Core	1	CE492 Major Core	2	CE 493 Major Core	1		<i>All GE Area A courses and all lower division GE courses in a GE area must be completed before taking the GE synthesis course in that area.</i>	
	CE421 Major Core	4	CE484/484L Major Core	4	CE482/482L Major Core	4			
	CE451 Major Core	4	CE311/311L Major Core	4	GSC 321/321L GE Area B4	4			
	CE427/427L Major Core	4	GE Area C3 Any approved course in area C3	4	EGR 402 GE Area C4	4			
	IME 301 or STA 309 Major Support	3							
	CE 422L Major Core	1							
			Request a graduation check		File an application for graduation				
	Total Units	17	Total Units	14	Total Units	13			
	Total Units for Year								44

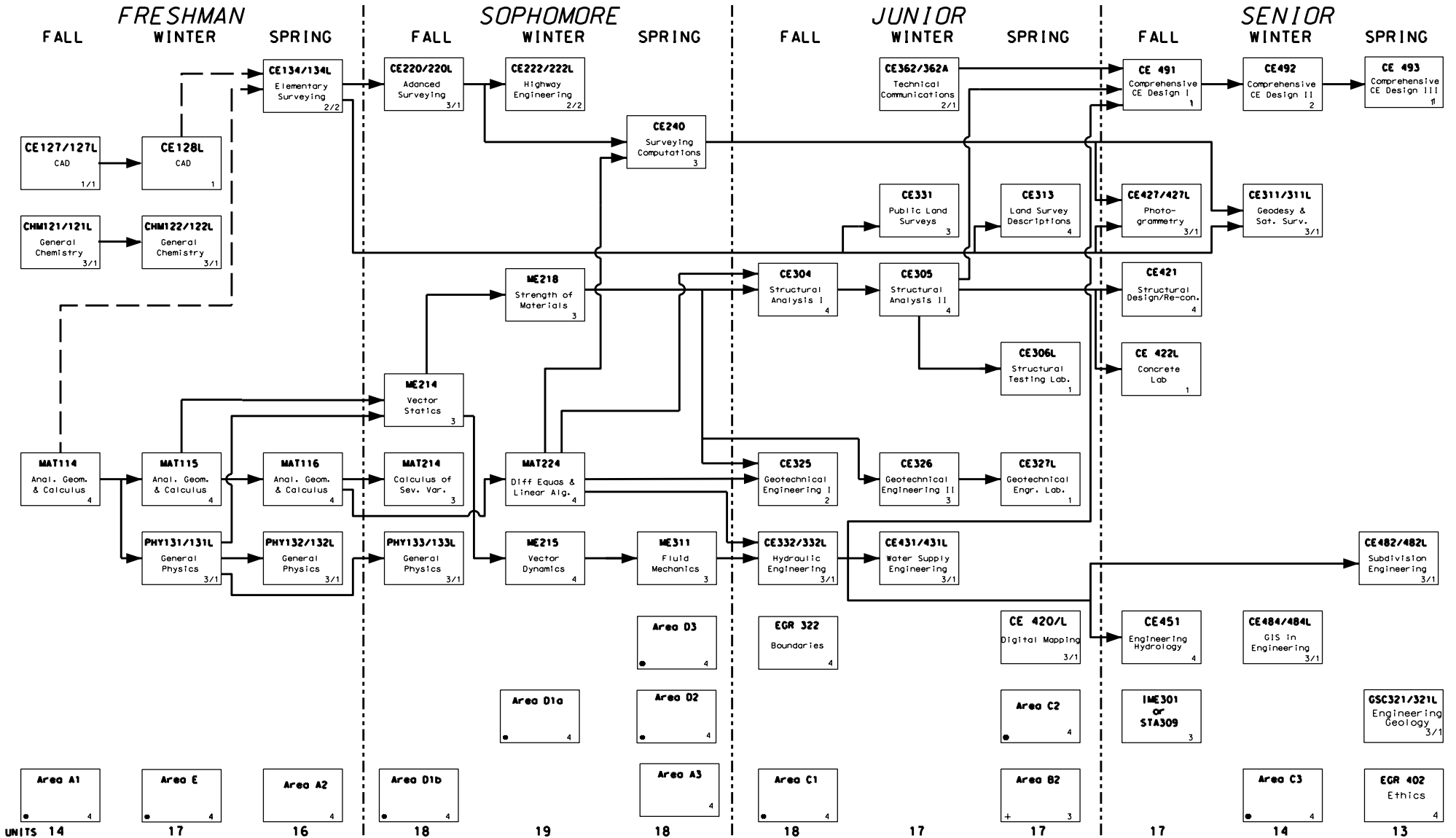
Total Units on Plan	198	
Major Core Units	97	
Major Support Units	33	
General Education Units	68	
Unrestricted Elective Units	0	

CALIFORNIA STATE POLYTECHNIC UNIVERSITY POMONA CIVIL ENGINEERING DEPARTMENT CURRICULUM

AY
2009/2010

GEOSPATIAL ENGINEERING OPTION

NAME: _____ DATE: __/__/__



Students are responsible for prerequisites. Refer to the current University Catalog. Some prerequisites are not shown on this chart

* Qualified students may substitute IGE sequence plus Area C1, C2, or C3 course for courses marked with asterisk. See University Catalog for more details. --- means corequisite.

TOTAL = 198

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