Plan (Major) ______ ENGINEERING

Subplan/Option _____ General Civil Engineering

Catalog Year

2010-2011 Name Minimum Units Required 198

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

Required Core Courses Units Course Students in this major are expected to maintain a GPA of at least 2.00 in all core courses. Civil Engineering CAD I/Lab CE 127/127L 1/1 Civil Engineering CAD I/Labl CE 128L 1 Elementary Surveying/Lab 2/2 CE 134/134L Structural Analysis I CE 304 4 Structural Analysis II CE 305 4 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 Communication 2/1 CE 362/362A Structural Design - Reinforced Concrete CE 421 4 CE 422L Concrete Design Lab 1 Water Supply Engineering/Lab CE 431/431L 3/1 Engineering Hydrology CE 451 4 Analytic Geometry/Calculus II MAT 115 4 Analytic Geometry/Calculus III MAT 116 4 Calculus of Several Variables I MAT 214 3 Linear Algebra & Differential Equations MAT 224 4 Vector Statics 3 ME 214 Vector Dynamics ME 215 4 Strength of Materials 3 ME 218 Fluid Mechanics ME 311 3 70 Total Units

Required Subplan/Option Courses		
Course		Units
Introduction to Civil Engineering	CE 122	1
Advanced Surveying/Lab	CE 220/220L	3/1
Highway Engineering/Lab	CE 222/222L	3/1
Transportation Engineering/Lab	CE 223/223L	3/1
Computer Programming & Numerical Methods	CE 303/303A	2/1
Structural Design-Steel	CE 406	4
Structural Design-Timber/Lab	CE 433/433L	2/1
Design Project	CE 491, 492, 493	4
Engineering Economics	CE 301	4
	Total Units	31

mum Units Required198	Student ID _	
Required Support Courses		
Course		Units
General Chemistry	CHM 121	3
General Chemistry Lab (B3)	CHM 121L	1
General Chemistry/Lab	CHM 122/122L	3/1
Analytic Geometry/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
Engineering Geology/Lab (B5)	GSC 321/321L	3/1
Statistical Methods	IME 301	3
or	STA 309	(3)
Ethical Considerations in Technology	and	
Applied Science (C4)	EGR 402	4
Roles of Design Professionals (D4)	EGR 445	4

Elective Subplan/Option Courses		
Course		Units
Technical Electives**	CE XXX	11
**Upper Division Civil Engineering Course in advance by advisor.	es approved	

Total Units 11

Total Units

39

		Evaluator			
		GWT Satisfied		Yes	No
General	Education Requirements			IGE (G.	E.
Area	•		Units	Alternati	ive)
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 a	t 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
1	Visual and Performing Arts			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	See Unive	ersity
1	U.S. History, Constitution, American Ideals			Catalog for	or
2	History, Economics and Political Science			informatio	on on
3	Sociology, Anthropology, Ethnic & Gender S	tudies		how IGE I	neets
4	Social Science Synthesis			G.E. requi	ire-
Area E	Lifelong Understanding & Self Develop	ment	4	ments.	
		Total Units	68		

American Institutions Courses that satisfy this requirement may al D1	lso satisfy G.E. Area	8
American Cultural Perspectives Require Refer to catalog for list of courses that satis Course may also satisfy major, minor, GE, or requirements.	fy this requirement.	4
The following required support courses shound indicated GE Requirements to achieve the m at the top of this sheet.	,	
indicated GE Requirements to achieve the m	,	
indicated GE Requirements to achieve the m at the top of this sheet.	,	listed
indicated GE Requirements to achieve the m at the top of this sheet. Course General Physics/Lab	inimum units to degree	listed GE Area
indicated GE Requirements to achieve the m at the top of this sheet. Course General Physics/Lab and General Chemistry Lab	PHY 131/131L	listed GE Area B1, B3
indicated GE Requirements to achieve the m at the top of this sheet. Course General Physics/Lab	PHY 131/131L CHM 121L	listed GE Area B1, B3 B3
indicated GE Requirements to achieve the m at the top of this sheet. Course General Physics/Lab and General Chemistry Lab Analytic Geometry/Calculus I	PHY 131/131L CHM 121L MAT 114	listed GE Area B1, B3 B3 B4

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.

