

BS ARCHITECTURAL ENGINEERING

2007-2009 Cal Poly Catalog

Architectural Engineering Department
Engineering West (21), Room 110
(805) 756-1314

- ☐ 60 units upper division ☐ GWR
 ☐ 2.0 GPA ☐ USCP

* = Satisfies General Education requirement

Note: All ARCE majors must obtain a grade of C- or better in ARCE courses that are prerequisites for other ARCE courses.

MAJOR COURSES

ARCE 211 Structures I	3
ARCE 212 Structures II	3
ARCE 223 Mechanics of Structural Members	4
ARCE 225 Dynamics or ME 212 Engrg Dynamics	3
ARCE 227 Structures III	2
ARCE 257 Structural CAD for Building Design	2
ARCE 302 Structural Analysis	4
ARCE 303 Steel Design	3
ARCE 304 Timber Design	3
ARCE 305 Masonry Design	2
ARCE 306 Matrix Analysis of Structures	3
ARCE 351, 352, 353 Structural Computing Analysis I, II, III	1,1,1
ARCE 371 Structural Systems Laboratory	3
ARCE 372 Steel Structures Design Laboratory	3
ARCE 412 Dynamics of Framed Structures	3
ARCE 421 Soil Mechanics	3
ARCE 422 Foundation Design	3
ARCE 444 Reinforced Concrete Lab	3
ARCE 451 Timber/Masonry Structures Design and Constructability Laboratory	3
ARCE 452 Concrete Structures Design and Constructability Laboratory	3
ARCE 453 Senior Project Laboratory	3
ARCE 483 Seismic Analysis and Design	4
Advanced structural electives	6
Approved professional electives STAT 321 Prob & Stat for Engr (10-31-07)	4
	76

SUPPORT COURSES

ARCH 105 Professional Practice 1	1
ARCH 106 Materials of Construction	2
ARCH 121, 122, 123 Design and Drawing 1.1, 1.2, and 1.3	3,3,3
ARCH 221 Architectural Design Fundamentals	3
ARCH 217/ARCH 218/ARCH 219 (C3)*	4
BRAE 237 Intro to Engineering Surveying	2
CHEM 124 General Chem/Engr Discipline (B3/B4)*	4
CM 211 Construction Contract Documents	4
CM 332 Evaluation of Cost Alternatives or IME 314 Engineering Economics	3

CSC 231 Fortran for Engineering Students or CSC 234 C and UNIX (3)	2
CSC 341 Numerical Engineering Analysis or approved equivalent (B6)*	4
EDES 101 Intro to Architecture and Env Design	2
EE 201 Electrical Circuit Theory	3
GEOL 201 Physical Geology	3
MATH 141, 142 Calculus I, II (B1)*	4,4
MATH 143 Calculus III (Add'l Area B)*	4
MATH 241 Calculus IV	4
MATH 244 Linear Analysis I	4
ME 302 Thermodynamics	3
ME 341 Fluid Mechanics	3
PHYS 141 General Physics IA (Add'l Area B)*	4
PHYS 132, 133 General Physics	4,4
	84

GENERAL EDUCATION (GE)

72 units required; 28 units are in Support.
 →Minimum of 8 units required at the 300-400 level.

Area A Communication (12 units)

A1 Expository Writing	4
A2 Oral Communication	4
A3 Reasoning, Argumentation, and Writing	4

Area B Science and Mathematics (4 units)

B1 Mathematics/Statistics * 8 units in Support	0
B2 Life Science	4
B3 Physical Science * 4 units in Support	0
B4 One lab taken with either a B2 or B3 course	
B5 (not required of Engineering)	
B6 Upper-division Area B * 4 units in Support	0
Additional Area B units * 8 units in Support	0

Area C Arts and Humanities (12 units)

C1 Literature	4
C2 Philosophy	4
C3 Fine/Performing Arts * 4 units in Support	0
C4 Upper-division elective	4

Area D/E Society and the Individual (16 units)

D1 The American Experience (40404)	4
D2 Political Economy	4
D3 Comparative Social Institutions	4
D4 Self Development (CSU Area E)	4

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ELECTIVES	0
	204