MAJOR COURSES

CE 111 Introduction to Civil Engineering ............... 1
CE 114 Intro CAD in Civil & Environmental Engr 4
CE 201 Mechanics of Materials (6) or CE 204, CE 207 Mechanics of Materials I, II (3)(3) .......... 6
CE 221, 222 Fund Transportation Engr and Lab ..... 3,2
CE 251 Numerical Methods in Civil Engineering ... 4
CE 259 Civil Engineering Materials ................. 2
CE 336 Water Resources Engineering .............. 4
CE 337 Hydraulics Laboratory ....................... 1
CE 351 Structural Analysis ............................ 4
CE 355 Reinforced Concrete Design ................. 4
CE 356 Structural Steel Design ...................... 4
CE 381, 382 Geotechnical Engineering and Lab .... 4,1
CE 461, 462 or CE 466, 467 or CE 468, 469 ....... 3,3
1  Advisor approved emphasis area to be selected from: general civil, geotechnical, structural, transportation, or water resources engineering. 14
1,2,3  Advisor approved technical electives ........... 10

SUPPORT COURSES

BIO 213 and ENGR/BRAE 213 (B2)*.................... 2,2
BRAE 239 Engineering Surveying ....................... 4
CHEM 124 Gen Chem for Engineering (B3/B4)* .... 4
CHEM 125 Gen Chem for Engineering ................. 4
ENGL 149 Technical Writing for Engineers (A3)* 4
ENVE 331 Intro to Environmental Engineering ...... 4
GEOL 201 Physical Geology ............................. 3
MATE 210 Materials Engineering ...................... 3
MATE 215 Materials Laboratory I ..................... 1
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 211 Engineering Statics ............................ 3
ME 212 Engineering Dynamics ...................... 3
ME 302 Thermodynamics ............................... 3
ME 341 Fluid Mechanics I .............................. 3
PHYS 141 General Physics IA (Add’l Area B)* ... 4
PHYS 132, 133 General Physics II, III ............... 4,4
STAT 312 Statistical Methods for Engineers (B6)* 4
1  To be selected after consultation with academic advisor.
2  More than 4 units of advisor-approved coursework outside CE/ENVE is only permitted in special/unusual cases, requires written justification by the student, and approval by the Department Chair.
3  No more than 4 total units of advisor-approved technical elective credit from CE 400, 500 and ENVE 400, 500 combined.
4  Please see www.eadvise.calpoly.edu for the current list of approved courses.

GENERAL EDUCATION (GE)

Area A Communication (8 units)
A1 Expository Writing ................................... 4
A2 Oral Communication ................................... 4
A3 Reasoning, Argumentation, and Writing *4 units in Support........................................ 0

Area B Science and Mathematics (no addl units req’d)
B1 Mathematics/Statistics * 8 units in Support .... 0
B2 Life Science * 4 units in Support .................. 0
B3 Physical Science * 4 units in Support .......... 0
B4 One lab taken with either a B2 or B3 course B5 (requirement for Liberal Arts students only)
B6 Upper-division Area B * 4 units in Support .... 0
Additional Area B units * 8 units in Support ....... 0

Area C Arts and Humanities (16 units)
C1 Literature .................................................. 4
C2 Philosophy .................................................. 4
C3 Fine/Performing Arts ................................. 4
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

ELECTIVES....................................................... 0

72 units required; 32 units are in Support.
→See page 56 for complete GE course listing
→Minimum of 8 units required at the 300-400 level.

Area A Communication (8 units)
A1 Expository Writing ................................... 4
A2 Oral Communication ................................... 4
A3 Reasoning, Argumentation, and Writing *4 units in Support........................................ 0

Area B Science and Mathematics (no addl units req’d)
B1 Mathematics/Statistics * 8 units in Support .... 0
B2 Life Science * 4 units in Support .................. 0
B3 Physical Science * 4 units in Support .......... 0
B4 One lab taken with either a B2 or B3 course B5 (requirement for Liberal Arts students only)
B6 Upper-division Area B * 4 units in Support .... 0
Additional Area B units * 8 units in Support ....... 0

Area C Arts and Humanities (16 units)
C1 Literature .................................................. 4
C2 Philosophy .................................................. 4
C3 Fine/Performing Arts ................................. 4
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

ELECTIVES....................................................... 0

72 units required; 32 units are in Support.
→See page 56 for complete GE course listing
→Minimum of 8 units required at the 300-400 level.

Area A Communication (8 units)
A1 Expository Writing ................................... 4
A2 Oral Communication ................................... 4
A3 Reasoning, Argumentation, and Writing *4 units in Support........................................ 0

Area B Science and Mathematics (no addl units req’d)
B1 Mathematics/Statistics * 8 units in Support .... 0
B2 Life Science * 4 units in Support .................. 0
B3 Physical Science * 4 units in Support .......... 0
B4 One lab taken with either a B2 or B3 course B5 (requirement for Liberal Arts students only)
B6 Upper-division Area B * 4 units in Support .... 0
Additional Area B units * 8 units in Support ....... 0

Area C Arts and Humanities (16 units)
C1 Literature .................................................. 4
C2 Philosophy .................................................. 4
C3 Fine/Performing Arts ................................. 4
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

ELECTIVES....................................................... 0

72 units required; 32 units are in Support.
→See page 56 for complete GE course listing
→Minimum of 8 units required at the 300-400 level.