BS ARCHITECTURAL ENGINEERING

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

*= Required in Support; also satisfies GE

Note: No major or support courses may be taken as credit/no credit.
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 421 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

Select 6 units from:
ARCE 403, 414, 423, 445, 446, 447, 448, 471
Professional elective: STAT 312 Statistical Methods for Engineers or STAT 321 Probability and Statistics for Engineers and Scientists .......... 4

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SUPPORT COURSES

ARCH 105 Professional Practice 1 ...................... 1
ARCH 106 Materials of Construction .................. 2
ARCH 121, 122, 123 Design and Drawing 1, 1, 1 3,3,3
1,2, and 1,3 ARCH 131, 132, 133 1,1, 1, 2, 1, 3 4,4,4
ARCH 221 Architectural Design Fundamentals ........ 3
(5/24/10)
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

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GENERAL EDUCATION (GE)

72 units required, 28 of which are specified in Support.
See page 50 for complete GE course listing.
Minimum of 8 units required at the 300 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

80

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

36

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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FREE ELECTIVES ............................................... 0

204