

Note: No Major or Support courses may be selected as credit/no credit.

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

<b>MAJOR COURSES</b>		
ARCE 106	Introduction to Building Systems	2
ARCE 211	Structures I	3
ARCE 212	Structures II	3
ARCE 223	Mechanics of Structural Members	3
ARCE 224	Mechanics of Structural Members Laboratory	1
ARCE 227	Structures III	2
ARCE 257	Structural CAD for Building Design	2
ARCE 302	Structural Analysis	3
ARCE 303	Steel Design I	3
ARCE 304	Timber Design	3
ARCE 305	Masonry Design	2
ARCE 306	Matrix Analysis of Structures	3
ARCE 352	Structural Computing Analysis	1
ARCE 353	Matrix Structural Computing Analysis	1
ARCE 354	Numerical Analysis Laboratory	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 Design	4
ARCE 451	Timber & Masonry Structures Design & Constructability Lab	3
ARCE 452	Concrete Structures Design and Constructability	3
ARCE 476	Architectural Engineering Building Systems	3
ARCE 483	Seismic Analysis and Design	3
ME 212	Engineering Dynamics	3
Senior Project		
ARCE 415	Interdisciplinary Capstone Project	4
<b>Total Major Units</b>		<b>71</b>

<b>SUPPORT COURSES</b>		
ARCH 131 & ARCH 132 & ARCH 133	Design and Visual Communication 1.1 and Design and Visual Communication 1.2 and Design and Visual Communication 1.3	12
ARCH 217 or ARCH 218 or ARCH 219 or ARCE 260	History of World Arch: Prehistory - Middle Ages (C1) <sup>1</sup> / History of World Arch: Middle Ages - 18th Century / History of World Arch: 18th Century - Present / History of Structures	4
BRAE 237	Introduction to Engineering Surveying	2
CHEM 124	Gen CHEM for Physical Sci & ENGR I (B1 & B3) <sup>1</sup>	4
CM 115	Fundamentals of Construction Management	6
CM 232 or IME 314	Evaluation of Cost Alternatives / Engineering Economics	3
CSC 231	Programming for Engineering Students	2
EE 201	Electric Circuit Theory	3
GEOL 201	Physical Geology	3
MATH 141	Calculus I (B4) <sup>1</sup>	4
MATH 142	Calculus II (B4) <sup>1</sup>	4
MATH 143	Calculus III (Area B Electives) <sup>1</sup>	4
MATH 241	Calculus IV	4
MATH 244	Linear Analysis I	4
ME 302	Thermodynamics I	3
ME 341	Fluid Mechanics I	3
PHYS 141	General Physics IA (Area B Electives) <sup>1</sup>	4
PHYS 132	General Physics II	4
PHYS 133	General Physics III	4
STAT 312 or STAT 321	Statistical Methods for Engineers (UD-B) <sup>1</sup> / Probability & Statistics for Engineers & Scientists	4
<b>Total Support Units</b>		<b>81</b>

<b>GENERAL EDUCATION</b>		
<b>Area A English Language Communication and Critical Thinking</b>		
A1	Oral Communication	4
A2	Written Communication	4
A3	Critical Thinking	4
<b>Area B Scientific Inquiry and Quantitative Reasoning</b>		
B1	Physical Science (4 units in Support) <sup>1</sup>	0
B2	Life Science	4
B3	One lab taken with either a B1 or B2 course	
B4	Mathematics/Quantitative Reasoning (8 units in Support) <sup>1</sup>	0
Upper-Division B (4 units in Support) <sup>1</sup>		
Area B Electives (8 units in Support) <sup>1</sup>		
<b>Area C Arts and Humanities</b>		
Lower-division courses in Area C must come from three different subject prefixes.		
C1	Arts (4 units in Support) <sup>1</sup>	0
C2	Humanities	4
Lower-Div C Elective - Select a course from C1 or C2 (NO ARCH)		
Upper-Division C		
<b>Area D Social Sciences</b>		
D1	American Institutions (Title 5, Section 40404 Requirement)	4
Area D Elective - Select either a lower-division D2 or upper-division D course.		
<b>Area E Lifelong Learning and Self-Development</b>		
Lower-Division E		
<b>Area F Ethnic Studies</b>		
Lower-Division F		
<b>Total GE Units</b>		
<b>FREE ELECTIVES</b>		
<b>TOTAL DEGREE UNITS</b>		

<b>FOOTNOTES</b>
<sup>1</sup> Required in Major or Support; also satisfies General Education (GE) requirement.