

2017 ARCE PRE AND CO REQUISITES

COURSE #	UNITS	COURSE NAME	PREREQUISITES	CO-REQUISITES
ENGL 101	3	First Year Composition	ENGL placement 101	
ENGL 102	3	First Year Composition II	ENGL 101 or 101A	
CHEM 103a or 151	3	Chemistry I	MATH 110, MATH Read. Test Scores	CHEM 104A (encouraged)
CHEM 104a	1	Chem. Lab. I		CHEM 103A
ENGR 102 or 102A and B	3	Intro. To Engineering		MATH 122B, 124, or 125
MATH 122A & 122B/124/125	5, 3	Calculus I	MATH 120R or MATH 110 & MATH 111 or MATH Read. Test	
MATH 129	3	Calculus II	MATH 122B, 124 or 125 with a C or better	
MATH 223	4	Calculus III	MATH 129, 223, or 250A with a C or better	
MATH 254	3	Ordinary Differential Equations	MATH 129, 223, or 250A with a C or better	
PHYS 141	4	Introductory Mechanics	MATH 122b, 124, or 125 or appropriate Math Placement Level	MATH 129
PHYS 241	4	Electricity & Magnetism	PHYS 141	MATH 223 (encouraged)
ENGR 211 I, M, and P	3	ENGR. Science Electives	211I=Math 254 and CE 214 / 211M = Math 254 and Phys 241 / 211P=Math 129	
CE 214	3	Statics	PHYS 141, or 161H, and MATH 129 or 250B	
CE 215	3	Mechanics of Solids	CE 214	
CE 218	3	Mechanics of Fluids	CE 214	
ARCE 295	1	Introduction to Architectural Engineering	MATH 1222A/B or 125	
ARC 220	3	History of Applied Building Technology		
ARCE 210	3	Building Information Modeling	ENGR 102/102A-B	
ARCE 223	3	Environmental Adaptive Systems	PHYS 141	

ALL COURSES 300 LEVEL OR HIGHER REQUIRE ADVANCED STANDING (GPA \geq 2.25)

AME 230	3	Thermodynamics	PHYS 141	
AME 442	3	HVAC System Design	AME 230 and CE 218	
CE 301	3	Engineering Communications		
CE 310	3	Probability and Statistics in CE	MATH 129	
CE 333	3	Elementary Structure Analysis	CE 215	
CE 334	3	Structural Design In Steel	CE 333	
CE 335	3	Structural Design In Concrete	CE 333	
CE 381	3	Construction Engineering Management		
CE 389	1	Materials Testing Lab	CE 215	
CE 438	3	Behavior & Design of Structural Systems	CE 333 and CE 334 (CE 335 not required but strongly recommended)	
ARCE 320	3	Power System Engineering	ENGR 211M	
ARCE 330	3	Architectural Lighting		
ARCE 400A	6	Capstone Design Studio		
ARCE 408A	2	Issues in Professional Practice		
ARCE 408B	3	Senior Capstone Design		
MATH/SCIENCE ELECTIVE	3	CE 303 or CE 402 or AME 301 or Math 310 or RNR 351		
TECHNICAL ELECTIVES				
ARC 321	3	Building Materials and Methods II		
ARC 326	2	Site Analysis and Planning		
ARC 421	3	Building Technology V, EAS I		
ARC 461D	3	Computer Energy Analysis		
ARC 461E	3	Sustainable Design and the LEED Initiati		
CE 432	3	Advanced Structural Design in Steel	CE 334	
CE 434	3	Design of Wood and Masonry	CE 333	CE 333
CE 435	3	Prestressed Concrete Structures	CE 333 and CE 335	
CE 437	3	Advanced Structural Design in Concrete	CE 333 and CE 335	
CE 482	3	Construction Proj. Plan, Sched. & Control		
CE 483	3	Construction Cost Estimating	Math 129, CE 381	
CE 485	3	Construction Materials and Methods		
SBE 301	4	Introduction to Design Thinkin		