



ARCHITECTURAL ENGINEERING, BSAR

FALL

SPRING

Course Number	Course Title	USP	CR	Min Grade	Grade	Course Number	Course Title	USP	CR	Min Grade	Grade
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FRESHMAN YEAR

ARE 1000	Exploring CAECM		1	C		MATH 2205	Calculus II		4	C	
						Prerequisite:	C in Math 2200				
ARE 1060	Arch Design Studio I		3	C		ES 2110	Statics		3	C	
						Prerequisite:	Concurrent in MATH 2205				
MATH 2200	Calculus I	Q	4	C		PHYS 1210	Engineering Physics I		4	C	
Prerequisite:	C in Math 1405 or 1450, MPE 5, Math ACT 27, Math SAT 640					Prerequisite:	Concurrent in Math 2205				
CHEM 1020	General Chemistry I	PN	4	C			USP: UIS & Wyo Const.	V	3	D	
Prerequisite:	ACT Math 23 or concurrent MATH 1400, 1405 or 1450										
	USP: Human Culture	H	3	D			USP: Communications I	C1	3	C	
	or First Year Seminar										
Total			15			Total			17		

SOPHOMORE YEAR

MATH 2210	Calculus III		4	C		ARE 2410	Fund. Of Bldg. Performance		3	C	
Prerequisite:	C in MATH 2205					Prerequisite:	C in PHYS 1210				
ES 2120	Dynamics		3	C		ARE 2060	Arch. Design Studio II		3	C	
Prerequisite:	C in MATH 2205 and ES 2110					Prerequisite:	C in ARE 1060				
ES 2410	Mechanics of Materials		3	C		ES 2310	Thermodynamics		3	C	
Prerequisite:	C in MATH 2205 and ES 2110					Prerequisite:	C in MATH 2210 and either ES 2120 or PHYS 1210				
One of:	Geology 1100, 1320, or 1330		4	D		ES 2330	Fluid Dynamics		3	C	
						Prerequisite:	C in MATH 2210 and either ES 2120 or PHYS 1210				
	USP: Communications II	C2	3	C		ARE 3200	Structural Analysis I		3	C	
Prerequisite:	C in C1					Prerequisite:	Gateway, C in ES 2410				
Total			17			Total			15		

JUNIOR YEAR

ART 3030	History of Architecture	H	3	C		ARE 3110	Professional Practice		3	C	
Prerequisite:	Gateway, C in C1						Gateway				
ARE 3400	HVAC of Buildings		3	C		ARE 3300	Bldg. Electrical/Plumbing Sys		3	C	
Prerequisite:	Gateway, C in ES 2310 and ARE 2410, Concurrent in ES 2330					Prerequisite:	Gateway, C in ARE 1060, Concurrent in ES 2330				
MATH 2310	Applied Differential Eqns I		3	D		ARE 3210	CE Materials	C3	4	C	
Prerequisite:	C in MATH 2205					Prerequisite:	Gateway, C in C2 and C in ES 2410				
STAT 2050	Fundamentals in Statistics		4	D			ARE PDE		3	C	
Prerequisite:	C in MATH 1400					Prerequisite:	Gateway				
	ARE MSTP Elective		3	D			ARE PDE		3	C	
						Prerequisite:	Gateway				
Total			16			Total			16		

SENIOR YEAR

ARE 3600	Arch. Design Studio III		3	C		ARE 4600	Arch. Design Studio IV		3	C	
Prerequisite:	Gateway, C in ARE 2410 and ARE 2060					Prerequisite:	Gateway, C in ARE 3600				
	ARE PDE		3	C			ARE PDE		3	C	
Prerequisite:	Gateway					Prerequisite:	Gateway				
	ARE PDE		3	D			ARE PDE		3	C	
Prerequisite:	Gateway					Prerequisite:	Gateway				
	USP: Human Culture	H	3	D		One of:	ARE 4720 or 4740—Capstone		3	C	
						Prerequisite:	Gateway, C in ARE 3110 for both, plus: For ARE 4720: C in ARE 4200, 4250 and 4260 (or concurrent) For ARE 4740: C in ARE 3400, concurrent in ARE 4430 or 4490				
Total			12			Total			12		

Fall only or spring only course	Total Program Credits:	120
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- A minimum of 120 hours is required. • A minimum of 42 hours must be upper division.
- Math/Science, Technical and Professional Development Electives must be selected with advisor's approval from Department list.
- Advanced Standing/Gateway: Prior to enrolling in upper division ARE/CE courses, students must earn 57 quality points in the following course: CHEM 1020, PHYS 1210 or 1220, MATH 2200, MATH 2205, ES 2110, ES 2120, and ES 2410.
- Degree candidates must meet the academic requirements of the university, and must have a minimum GPA of 2.0 in all engineering courses, and all courses required for the major. • Grades of C or better are required for all prerequisite courses.
- Students choose an area of emphasis in either structural or mechanical systems, and select Option Electives and the Capstone Design for their emphasis area. Care should be taken to ensure prerequisites are completed.
- Students may have a maximum of 6 credits in courses with a grade of D in upper division ARE/CE courses that apply towards their degree.
- Students may not take a course for S/U credit to satisfy any requirement, unless the course is offered for S/U credit only.
- No more than two upper division courses may be transferred and applied to the ARE degree. ARE 4720 and ARE 4740 cannot be transferred to UW.