



ARCHITECTURAL ENGINEERING, BSAR

FALL

SPRING

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

15

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SOPHOMORE YEAR

MATH 2210	Calculus III <i>Prerequisite: C in MATH 2205</i>		4	C		ARE 2410	Fund. Of Bldg. Performance <i>Prerequisite: C in PHYS 1210</i>		3	C	
ES 2120	Dynamics <i>Prerequisite: C in MATH 2205 and ES 2110</i>		3	C		ARE 2060	Arch. Design Studio II <i>Prerequisite: C in ARE 1600</i>		3	C	
ES 2410	Mechanics of Materials <i>Prerequisite: C in MATH 2205 and ES 2110</i>		3	C		ES 2310	Thermodynamics <i>Prerequisite: C in MATH 2210 and either ES 2120 or PHYS 1210</i>		3	C	
One of:	Geology 1100, 1320, or 1330		4	D		ES 2330	Fluid Dynamics <i>Prerequisite: C in MATH 2210 and either ES 2120 or PHYS 1210</i>		3	C	
	USP: Communications II <i>Prerequisite: C in C1</i>	C2	3	C		ARE 3200	Structural Analysis I <i>Prerequisite: Gateway, C in ES 2410</i>		3	C	
Total						Total					

17

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JUNIOR YEAR

ART 3030	History of Architecture <i>Prerequisite: Gateway, C in C1</i>	H	3	C		ARE 3110	Professional Practice <i>Prerequisite: Gateway</i>		3	C	
ARE 3400	HVAC of Buildings <i>Prerequisite: Gateway, C in ES 2310 and ARE 2410, Concurrent in ES 2330</i>		3	C		ARE 3300	Bldg. Electrical/Plumbing Sys <i>Prerequisite: Gateway, C in ARE 1600, Concurrent in ES 2330</i>		3	C	
MATH 2310	Applied Differential Eqns I <i>Prerequisite: C in MATH 2205</i>		3	D		ARE 3210	CE Materials <i>Prerequisite: Gateway, C in C2 and C in ES 2410</i>	C3	4	C	
STAT 2050	Fundamentals in Statistics <i>Prerequisite: C in MATH 1400</i>		4	D			ARE PDE <i>Prerequisite: Gateway</i>		3	C	
	ARE MSTP Elective		3	D			ARE PDE <i>Prerequisite: Gateway</i>		3	C	
Total						Total					

16

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SENIOR YEAR

ARE 3600	Arch. Design Studio III <i>Prerequisite: Gateway, C in ARE 2410 and ARE 2600</i>		3	C		One of:	ARE 4720 or 4740—Capstone <i>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</i>		3	C	
	ARE PDE <i>Prerequisite: Gateway</i>		3	C		ARE 4600	Arch. Design Studio IV <i>Prerequisite: Gateway, C in ARE 3600</i>		3	C	
	ARE PDE <i>Prerequisite: Gateway</i>		3	D			ARE PDE <i>Prerequisite: Gateway</i>		3	C	
	USP: Human Culture	H	3	D			ARE PDE <i>Prerequisite: Gateway</i>		3	C	
Total						Total					

12

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Fall only or spring only course

Total Program Credits: 120

- 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 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.