



**B.S. Architectural Engineering
20-2021Catalog**

**University of Wyoming
B.S. Architectural Engineering**

	cr	Min Grade	Notes
USP - University Studies Program Requirements			
USP: First Year Seminar	3	C	FYS
USP: Communications I	3	C	C1
USP: Communications II	3	C	C2
USP: Communications III (ARE 3210 CE Materials part of Architectural Engineering curriculum)		C	C3
USP: US & Wyoming Constitutions	3	D	V
USP: Human Culture ART 3030 History of Architecture	3	D	H
Human Culture Course	3	D	H
USP: Quantitative MATH 2200 Calculus I	4	C	Q
USP: Physical & Natural World CHEM 1020 General Chemistry	4	D	PN
PHYS 1210 Engineering Physics I	4	C	PN
Credit hours subtotal:			30
Architectural Engineering Major Courses			
ARE 1000 VISTA Studio I	1	C	
ARE 1600 Arch Design Studio I	3	C	
ARE 2000 VISTA Studio II	3	C	
ARE 2410 Fund. Of Building	3	C	
ARE 2600 Arch. Design Studio II	3	C	
ARE 3000 VISTA Studio III	3	C	
ARE 3200 Structural Analysis I	3	C	
ARE 3210 CE Materials	3	C	C3
ARE 3300 Building Electrical/Plumbing Sys.	3	C	
ARE 3400 HVAC of Buildings	3	C	
ARE 3600 Arch. Design Studio III	3	C	
ARE 4600 Arch. Design Studio IV	3	C	
ARE Option Electives - Complete all			
ARE Option Elective #1			
ARE Option Elective #2			
ARE Option Elective #3			
ARE Option Elective #4			
ARE Option Elective #5			
ARE Option Elective #6			
	18	C	ARE Option Elective note
ARE Major Electives - Complete all			
ARE Major Elective #1			
ARE Major Elective #2			
	6	C	ARE Major Elective note
ARE Capstone Design	3	C	ARE 4720 or ARE 4740

ES 2110 Statics	3	C
ES 2120 Dynamics	3	C
ES 2410 Mechanics of Materials	3	C
ES 2310 Thermodynamics	3	C
ES 2330 Fluid Dynamics	3	C

Credit hours subtotal: 76

Major Related Courses

STAT 2050 Fundamentals in Statistics	4	D
MATH 2205 Calculus II	4	C
MATH 2210 Calculus III	4	C
MATH 2310 Applied Differential Equations I	3	D
Choose One:		
GEOL 1100 Physical Geology		
GEOL 1500 Water, Dirt, and Earth's Environment		
GEOL 1600 Global Sustainability: Managing Earth's Resources	4	D
Math/Science Elective	3	D

Credit hours subtotal: 22

B.S. Architectural Engineering total credit total: 128

Architectural Engineering Major Notes:

- A minimum of 128 hours is required.
- A minimum of 42 hours must be upper division.
- Math/Science, Option and Major 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 courses: 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.

University of Wyoming Requirements

- Students must have a minimum cumulative GPA of 2.0 to graduate.
- Students must complete 42 hours of upper division (3000-level or above) coursework, 30 of which must be from the University of Wyoming.
- Courses must be taken for a single letter grade unless offered only for S/U.
- University Studies Program (USP), Human Culture (H) and Physical & Natural World (PN) courses must be taken outside of the major subject, but can be cross-listed with the major.

The University of Wyoming Office of the Registrar provides final approval of degree completion requirements prior to the awarding of any degree.