ELECTRICAL ENGINEERING, BSEE

FALL						SPRING					
Course Number	Course Title	USP	CR	Min Grade	Grade	Course Number	Course Title	USP	CR	Min Grade	Grade

FRESHMAN YEAR

Course Number	Course Title	USP	CR	Min Grade	Grade	Course Number	Course Title	USP	CR	Min Grade	Grade
CHEM 1020	General Chemistry I	PN	4	D		MATH 2205	Calculus II	Q	4	C	
Prerequisite:	ACT Math 23 or concurrent MATH 1400, 1405 or 1450					Prerequisite:	C in Math 2200				
EE 1010	Intro/Electrical & Computer Eng		1	D		EE/ES > 2000	Any ES, EE, BE course (2000 or higher) or COSC 3011 or COSC 3750		3	D	
	USP: Communications I	C1	3	C		MATH 2250	Elementary Linear Algebra		3	C	
						Prerequisite:	C in Math 2200				
MATH 2200	Calculus I	Q	4	C		PHYS 1210	Engr Physics I	PN	4	C	
Prerequisite:	C in Math 1405 or 1450, MPE 5, Math ACT 27, Math SAT 640					Prerequisite:	Concurrent in Math 2205				
COSC 1010	Intro to Computer Science		3	C			USP: US & Wyo Const.	V	3	D	
	Total		**15**				**Total**		**17**		

SOPHOMORE YEAR

Course Number	Course Title	USP	CR	Min Grade	Grade	Course Number	Course Title	USP	CR	Min Grade	Grade
EE/ES > 2000	Any ES, EE, BE course (2000 or higher) or COSC 3011 or COSC 3750		3	D		EE 2220	Circuits and Signals		4	C	
						Prerequisite:	C in ES 2210				
ES 2210	Electric Circuit Analysis		3	C		EE 2390	Digital Systems Design		4	C	
Prerequisite:	Concurrent in MATH 2205					Prerequisite:	C in MATH 2205 and ES 1060 (or COSC 1010 or COSC 1030)				
MATH 2210	Calculus III		4	C		MATH 2310	Applied Differential Eqns I		3	C	
Prerequisite:	C in Math 2205					Prerequisite:	C in MATH 2205				
PHYS 1220	Engr Physics II	PN	4	C			Math/Science Elective		3	D	
Prerequisite:	Concurrent in MATH 2210										
	USP: Human Culture	H	3	D			General Elective		3	D	
	Total		**17**				**Total**		**17**		

JUNIOR YEAR

Course Number	Course Title	USP	CR	Min Grade	Grade	Course Number	Course Title	USP	CR	Min Grade	Grade
EE 3150	Electromagnetics		3	C		EE 3331	Electronics II		3	D	
Prerequisite:	C in ES 2210, MATH 2210, and concurrent in PHYS 1220					Prerequisite:	C in EE 2220 and either EE 3310 or EE 3311				
EE 3220	Signals and Systems		3	C		EE 3332	Electronics II Laboratory		1	D	
Prerequisite:	C in EE 2220					Prerequisite:	Concurrent in EE 3331 (or completed) and C in EE 3312				
EE 3311	Electronics I		3	C		EE 4075	C++ with Num Meth for		4	D	
Prerequisite:	Concurrent in EE 2220 and C in PHYS 1220 or C in EE 3150					Prerequisite:	C in MATH 2205, COSC 1010, and MATH 2310 or 2250				
EE 3312	Electronics I Laboratory		1	C		EE 4220	Probabilistic Signals and		3	C	
Prerequisite:	Concurrent in EE 3311 (or completed)					Prerequisite:	C in MATH 2210 and concurrent in EE 3220				
EE 3510	Elec Machines & Power Sys		4	D		EE 4390	Microprocessors		3	D	
Prerequisite:	C in ES 2210					Prerequisite:	C in EE 2390				
	USP: Communications II	C2	3	C		EE 4620	Automatic Control Systems		3	D	
Prerequisite:	C in C1					Prerequisite:	C in EE 2220				
	Total		**17**				**Total**		**17**		

SENIOR YEAR

Course Number	Course Title	USP	CR	Min Grade	Grade	Course Number	Course Title	USP	CR	Min Grade	Grade
EE 4440	Communication Theory		3	D		EE 4830	Senior Design II	C3	2	C	
Prerequisite:	C in EE 3220 and EE 4220					Prerequisite:	C in EE 4820 concurrent in design courses				
EE 4820	Senior Design I		2	C			EE or BE Elective (>4000)		3	D	
Prerequisite:	C in EE 2220, EE 2390, and C2; Concurrent in EE 3311/3312 and 6 credits of 4000-level EE/BE courses										
	Technical Elective		3	D			EE or BE Elective (>4000)		3	D	
	EE or BE Elective (>4000)		3	D			EE or BE Elective (>4000)		3	D	
	USP: Human Culture	H	3	D			EE or BE Elective (>4000)		3	D	
	Total		**14**				**Total**		**14**		

Fall only or spring only course

Total Program Credits: 128

• A minimum of 128 hours is required. • A minimum of 42 hours must be upper division.

• Math/Science, Technical, and BE/EE Electives must be selected with advisor's approval from Department list. •Math courses used as a General Elective must be 2000 level or higher.

• Degree candidates must meet the academic requirements of the university, and must have a minimum GPA of 2.0 in all engineering courses.

• Students may not take a course for S/U credit to satisfy any requirement, unless the course is offered for S/U credit only.

• PHYS 1210 must be taken prior to or concurrently with ES 2120. While PHYS 1220 is not a prerequisite for ES 2210, it is recommended that PHYS 1220 is taken before or concurrently with ES 2210

• Grades of C or better are required for all courses that are prerequisites for courses within the students course of study and all required MATH courses.

2024-2025 Catalog Year