

ELECTRICAL ENGINEERING

Academic Year 2019 - 2020

FALL

SPRING

Course number	Course Title	USP	Credits	Min Grade	Grade Earned	Course Number	Course Title	USP	Credits	Min Grade	Grade Earned	
Freshman year												
_____ 1101	First Year Seminar	FYS	3	C		ES 2110	Statics (1)		3	*		
							MATH 2205 or concurrent enrollment					
CHEM 1020	General Chemistry I	PN	4			MATH 2205	Calculus II		4	C		
	ACT 23 or concurrent enrollment MATH 1400 or 1405 or 1450						MATH 2200 or AP credit in MATH 2200					
ENGL 1010	College Comp & Rhetoric	COM1	3	C		MATH 2250	Elementary Linear Algebra		3	C		
							MATH 2200 or MATH 2350					
ES 1060	Intro to Eng Problem Solving		3	C		PHYS 1210	Engineering Physics I (2)	PN	4	C		
	MATH 2200 or concurrent enrollment						Math 2200 or AP credit in MATH 2200					
MATH 2200	Calculus I	Q	4	C								
	MATH 1405 or MATH 1450, or MPE 5, or ACT 27/SAT of 600											
Total			17									
Sophomore year												
ES 2120	Dynamics (1)		3	*		EE 2220	Circuits and Signals		4	C		
	ES 2110 and MATH 2205; PHYS 1210 or concurrent enrollment.						EE 2210					
ES 2210	Electric Circuit Analysis		3	C		EE 2390	Digital Systems Design		4	C		
	MATH 2205 or concurrent enrollment						COSC 1010 or COSC1030 or ES 1060, and MATH 2205.					
MATH 2210	Calculus III		4	C		MATH 2310	Applied Differential Equations I		3	C		
	MATH 2205 or AP credit in MATH 2205						MATH 2205					
PHYS 1220	Engineering Physics II (2)		4			US & Wyo Constitution Course		V	3			
	MATH 2200 and 2205, and concurrent enrollment in MATH 2210.											
	Human Culture Course	H1	3			Math/Science Elective (3)			3			
Total			17									
Junior year												
EE 3150	Electromagnetics		3	*		EE 3330	Electronics II		4	*		
	ES2210, MATH 2210, and PHYS 1220 or concurrent enrollment						EE 2220 and EE 3310					
EE 3220	Signals And Systems		3	C		EE 4075	C++ with Numerical Methods		4	*		
	EE 2220.						MATH 2205, (COSC 1010 or ES 1060), (MATH 2250 or 2310)					
EE 3310	Electronics I		4	C		EE 4220	Probabilistic Signals & Systems		3	C		
	PHYS 1220 or PHYS 1320 or EE 3150, and EE 2220 or concurrent enrollment.						EE 3220 and MATH 2210					
EE 3510	Electric Machines & Power Systems		4	*		EE 4390	Microprocessors		3	*		
	ES 2210						EE 2390.					
	Communication Course	COM2	3	C		EE 4620	Automatic Control Systems		3	*		
	COM1						EE 2220.					
Total			17									
Senior year												
EE 4440	Communication Theory		3	*		EE 4830	Senior Design I (7)	COM3	2	C		
	EE 3220 and EE 4220						EE 4820					
EE 4820	Senior Design I (6)		2	C		BE or EE Elective (5)			3	*		
	see note below						BE or EE Elective (5)			3		*
	Technical Elective (4)		4	*		BE or EE Elective (5)			3	*		
	BE or EE Elective (5)		3	*			BE or EE Elective (5)			3		*
	Human Culture Course	H2	3									
Total			15									
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												
Total												

KEY

Fall only	Prerequisite(s)
Spring only	

*Students must have a minimum cumulative GPA of 2.0 in all Engineering courses and overall GPA of 2.0 for graduation. Grade of C (2.0) or higher is required for all prerequisite courses. Note: a minimum of 42 hours of upper division coursework, 30 hours of which must be from the University of Wyoming.

(1) or any ES, EE, BE course (≥2000 level), or COSC 3011 or COSC 3750

(2) PHYS 1210: no credit can be earned in PHYS 1210 if taken after ES 2120. PHYS 1220 should be taken before or concurrently with ES 2210.

(3) Math/Science Electives: One course from the ECE Math/Science Elective List. ABET requires a minimum of 30 hours of a combination of college level mathematics and basic sciences (some with experimental experience)

(4) Technical Elective: Any course marked as technical electives in the ECE Math/Science Elective List.

(5) EE Electives: A minimum of 19 hours of EE and technical electives is required. A minimum of 15 credit hours of non-required EE courses offered by the ECE Department. Suggestions are as follows:

Electronics: EE 4250, 4300, 4330, 4340, 4360, 4560, BE 4810, BE 4820

Comm/Signal Processing: EE 4245, 4300, 4345, 4870

Systems & Controls: EE 5210, 5400

Power Engineering: EE 4510, 4540, 4550, 4560

Digital/Computer: EE 4360, 4490, 4590, 4870, 4970, 4990

(6) Prerequisite: EE 2220, EE 2390, & EE 3310 or concurrent enrollment, plus 6 hours of 4000 level EE/BE courses or concurrent enrollment. COM2 grade C or better.

(7) COM3 to satisfy this requirement with EE 4820/4830 the COM2 course must be taken before EE 4820. Also EE 4820 and EE 4830 must be taken in sequence. EE 4830 is ideally taken in the final semester.

rev: 4/11/2019

Total Program Credits:

128