UW College of Engineering and Physical Sciences

ELECTRICAL ENGINEERING, BSEE

FRESHMAN YEAR

FALL

Course Number	Course Title	USP	CR	Min Grad	Grade
CHEM 1020	General Chemistry I	PN	4	D	
Prerequisite:	*ACT Math 23 or concurrent MATH 1400, 1405 or 1450*				
	USP: US & Wyo Const.	V	3	D	
	USP: Communications I	C1	3	C	
MATH 2200	Calculus I	Q	4	C	
Prerequisite:	*C in Math 1405 or 1450, MPE 5, Math ACT 27, Math SAT 640*				
COSC 1010	Intro to Computer Science		3	D	
	Total		17		

SPRING

Course Number	Course Title	USP	CR	Min Grade	Grade
MATH 2205	Calculus II	Q	4	C	
Prerequisite:	*C in Math 2200*				
EE/ES > 2000	Any ES, EE, BE course (2000 or higher) or COSC 3011 or COSC 3750		3	D	
MATH 2250	Elementary Linear Algebra		3	C	
Prerequisite:	*C in Math 2200*				
PHYS 1210	Engr Physics I	PN	4	C	
Prerequisite:	*Concurrent in Math 2205*				
	Total		14		

SOPHOMORE YEAR

FALL

Course Number	Course Title	USP	CR	Min Grad	Grade
EE/ES > 2000	Any ES, EE, BE course (2000 or higher) or COSC 3011 or COSC 3750		3	D	
ES 2210	Electric Circuit Analysis		3	C	
Prerequisite:	*Concurrent in MATH 2205*				
MATH 2210	Calculus III		4	C	
Prerequisite:	*C in Math 2205*				
PHYS 1220	Engr Physics II	PN	4	C	
Prerequisite:	*Concurrent in MATH 2210*				
	USP: Human Culture	H	3	D	
	Total		17		

SPRING

Course Number	Course Title	USP	CR	Min Grade	Grade
EE 2220	Circuits and Signals		4	C	
Prerequisite:	*C in ES 2210*				
EE 2390	Digital Systems Design		4	C	
Prerequisite:	*C in MATH 2205 and ES 1060 (or COSC 1010 or COSC 1030)*				
MATH 2310	Applied Differential Eqns		3	C	
Prerequisite:	*C in MATH 2205*				
	Math/Science Elective		3	D	
	General Elective		3	D	
	Total		17		

JUNIOR YEAR

FALL

Course Number	Course Title	USP	CR	Min Grad	Grade
EE 3150	Electromagnetics		3	C	
Prerequisite:	*C in ES 2210, MATH 2210, and concurrent in PHYS 1220*				
EE 3220	Signals and Systems		3	C	
Prerequisite:	*C in EE 2220*				
EE 3311	Electronics I		3	C	
Prerequisite:	*Concurrent in EE 2220 and C in PHYS 1220 or C in EE 3150*				
EE 3312	Electronics I Laboratory		1	C	
Prerequisite:	*Concurrent in EE 3311 (or completed)*				
EE 3510	Elec Machines & Power Sys		4	D	
Prerequisite:	*C in ES 2210*				
	USP: Communications II	C2	3	C	
Prerequisite:	*C in C1*				
	Total		17		

SPRING

Course Number	Course Title	USP	CR	Min Grade	Grade
EE 3331	Electronics II		3	D	
Prerequisite:	*C in EE 2220 and either EE 3310 or EE 3311*				
EE 3332	Electronics II Laboratory		1	D	
Prerequisite:	*Concurrent in EE 3331 (or completed) and C in EE 3312*				
EE 4075	C++ with Num Meth for		4	D	
Prerequisite:	*C in MATH 2205, ES 1060 and either MATH 2250 or MATH 2310*				
EE 4220	Probabilistic Signals and		3	C	
Prerequisite:	*C in MATH 2210 and concurrent in EE 3220*				
EE 4390	Microprocessors		3	D	
Prerequisite:	*C in EE 2390*				
EE 4620	Automatic Control Systems		3	D	
Prerequisite:	*C in EE 2220*				
	Total		17		

SENIOR YEAR

FALL

Course Number	Course Title	USP	CR	Min Grad	Grade
EE 4440	Communication Theory		3	D	
Prerequisite:	*C in EE 3220 and EE 4220*				
EE 4820	Senior Design I		2	C	
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		4	D	
	EE or BE Elective (>4000)		3	D	
	USP: Human Culture	H	3	D	
	Total		15		

SPRING

Course Number	Course Title	USP	CR	Min Grade	Grade
EE 4830	Senior Design II	C3	2	C	
Prerequisite:	*C in EE 4820 concurrent in design courses*				
	EE or BE Elective (>4000)		3	D	
	EE or BE Elective (>4000)		3	D	
	EE or BE Elective (>4000)		3	D	
	EE or BE Elective (>4000)		3	D	
	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.
- 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 concurently 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.