

ELECTRICAL ENGINEERING CURRICULUM

AY 2013-2014

	FALL		SPRING	
FRESHMAN YEAR				
	ES 1000 Orientation to Engr	1	MATH 2205 Calculus II	4
	MATH 2200 Calculus I	4	2,4 PHYS 1210 Engr Physics I	4
	2 CHEM 1020 Gen Chemistry I	4	ES 2110 Statics	3
2,10	ES 1060 Engr Problem Solving	3	MATH 2250 Linear Algebra	3
	ENGL 1010 English Comp I	3	11 EE 1010 Intro to ECE	1
	PEAC 1001 PE Activity & Health	1	US & Wyo Constitutions	3
		16		18

SOPHOMORE YEAR				
	MATH 2210 Calculus III	4	MATH 2310 Differential Equations I	3
	ES 2120 Dynamics	3	2 EE 2220 Circuits & Signals	4
2	ES 2210 Electric Circuit Analysis	3	2 EE 2390 Digital Systems	4
2,5	PHYS 1220 Engr Physics II	4	6 Math/Science Elective	3
9	USP/Technical Elective	3		14
		17		

JUNIOR YEAR				
	EE 3150 Electromagnetics	3	2 EE 3330 Electronics II	4
	EE 3220 Signals & Systems	3	2 EE 4390 Microprocessors	3
2	EE 3310 Electronics I	4	2 EE 4440 Communication Theory	3
2	EE 3510 Electromechanics	4	EE 4620 Control Systems	3
8	Cultural Context	3	EE 4075 Numerical Methods/C++	4
		17		17

SENIOR YEAR				
	EE 4820 Senior Design I	2	1 EE 4830 Senior Design II	2
	EE 4220 Prob Signals & Systems	3	3 EE Elective	3
3	EE Elective	3	3 EE Elective	3
3	EE Elective	3	3 EE Elective	2
8	Cultural Context	3	7 Technical Elective	3
	ENGL 4010 Sci & Tech Writing	3	Cultural Context	3
		17		16

Total Hours: **132**

- 1 Normally taken in the final semester
- 2 Course includes laboratory
- 3 EE Elective: 14 credits of non-required EE courses offered by the ECE Department. Suggestions are as follows:
 - Electronics: EE 4250, 4300, 4330, 4340, 4360, 4380, 4560, BE 4810
 - Comm/Signal Processing: EE 4230, 4240, 4300, 4530, 4870
 - Systems & Controls: EE 4620, 5210, 5400
 - Power Engineering: EE 4510, 4540, 4550, 4560
 - Digital/Computer: EE 4070, 4230, 4490, 4970, 4990
- 4 No credit can be earned in PHYS 1210 if taken after ES 2120
- 5 It is recommended that PHYS 1220 should be taken before or concurrently with ES 2210
- 6 Math/Science Elective: Any course from the ECE Math/Science Elective List. ABET requires a minimum of 32 hours of a combination of college level mathematics and basic sciences (some with experimental experience) appropriate to the discipline. Basic sciences are defined as biological, chemical, and physical sciences.
- 7 Technical Elective: Any course in Engineering, Computer Science, or those marked as technical electives in the ECE Math/Science Elective List
- 8 Cultural context must meet the following requirements:
 - 1) 1-CH course, 1-CS course, 1-CA course
 - 2) 1-WB course, 1-G course, 1-D course
- 9 Additional University Studies (USP) course or technical elective
- 10 ES 1060 may be replaced with COSC 1010. However, academic credit toward this program is accepted for only one of these classes.
- 11 May be waived if transfer with 31 credits minimum to be replaced with EE elective

Note: Maximum of 1 credit of EE 4800 Co-OP can be counted as an EE or Technical Elective

Note: Transfer credits in above disciplines without UW equivalent will be considered by the ECE faculty individually