Computer Engineering, BS (2015-2016)

University of Wyoming

Freshman Fall Semester			Hrs	Min Grade	Notes
CHEM	1020	General Chemistry I	4	D	PN#1; Prerequistie-ACT Math score of 23 or above, or concurrent enrollment in Math 1400, or 1405 or 1450.
COSC	1010	Introduction to Computer Science I	4	C	Prerequisite: grade of C or better in MATH 1400 or Level 4 or higher on the MPE within one year prior to the start of the course.
ENGL	1010	College Composition & Rhetoric	3	C	COM 1
FY		First Year Seminar Course	3	C	FY
MATH	2200	Calculus I	4	C	Q; Prerequisite: C or better in MATH 1405 or 1450 or Level 5 on the MPE or Math ACT of 27 or Math SAT of 600.
		Credit hours subtotal:	**18**		

Freshman Spring Semester			Hrs	Min Grade	Notes
COSC	1030	Computer Science I	4	C	Prerequisite: COSC 1010 or equivalent experience and concurrent registration in MATH 1405 or MATH 1450.
EE	1010	Intro. to Electrical and Computer Engineering	1	C	(S.O.)
ES	2110	Statics	3	C	Prerequisites: MATH 2205 or concurrent enrollment.
MATH	2205	Calculus II	4	C	Prerequisite: grade of C or better in MATH 2200 or AP credit in MATH 2200.
PHYS	1210	Engineering Physics I	4	C	PN#2; Prerequisite: grade of C or better in MATH 2200 or AP credit in MATH 2200.
		Credit hours subtotal:	**16**		

Sophomore Fall Semester			Hrs	Min Grade	Notes
COSC	2030	Computer Science II	4	C	Prerequisite: COSC 1030
ES	2120	Dynamics	3	C	Prerequisites: ES 2110 and MATH 2205; PHYS 1210 or concurrent enrollment.
ES	2210	Electric Circuit Analysis	3	C	Prerequisite: MATH 2205.
MATH	2210	Calculus III	4	C	Prerequisite: grade of C or better in MATH 2205 or Advanced Placement credit in MATH 2205.
PHYS	1220	Engineering Physics II	4	C	Prerequisite: grades of C or higher in MATH 2200, 2205 and concurrent enrollment in MATH 2210.
		Credit hours subtotal:	**18**		

Sophomore Spring Semester			Hrs	Min Grade	Notes
COSC	2150	Computer Organization	3	C	Prerequisite: ES 2210
EE	2220	Circuits and Signals	4	C	(S.O.) Prerequisite: ES 2210
EE	2390	Digital Systems Design	4	C	Prerequisite: MATH 2205.
MATH	2300	Discrete Structures	3	D	Prerequisite: grade of C or better in COSC 1030, MATH 2200 or 2350.
MATH	2310	Applied Differential Equations I	3	C	Prerequisite: grade of C or better in MATH 2205.
		Credit hours subtotal:	**17**		

Notes: (S.O.) offered Spring semester ONLY   (F.O.) offered Fall semester ONLY

*Students must have a minimum cummulative GPA of 2.0 in all Engineering course for graduation.

  Grade of C (2.0) or higher is required for all prerequisite courses.

Students must complete a minimum of 48 hours of upper division coursework, 30 of which must from the University of Wyoming

EE 1010 may be replaced with technical elective if transfer credits > 30 hrs

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.

Computer Engineering, BS

University of Wyoming

Junior Fall Semester

			Hrs	Min Grade	Notes
EE	3220	Signal and Systems	3	C	(F.O.) Prerequisite: EE 2220.
EE	3310	Electronics I	4	C	(F.O.) Prerequisite: PHYS 1220 or PHYS 1320 and EE 2220 as a corequisite.
EE	4490	HDL Digital Design	3	*	(F.O.)
		Human Culture course	3	D	H#1
		Communication 2 course	3	C	COM 2
		Credit hours subtotal:	**16**		

Junior Spring Semester

			Hrs	Min Grade	Notes
EE	3330	Electronics II	4	C	(S.O.) Prerequisite: EE 2220 and EE 3310.
EE	4220	Probabilistic Signals and Systems	3	C	(S.O.) Prerequisite: EE 3220.
EE	4390	Microprocessors	3	*	(S.O.) Prerequisite: EE 2390.
		Human Culture course	3	*	H#2
		Math/Science Elective	3	C	One course from the ECE Math/Science Elective List
		Credit hours subtotal:	**16**		

Senior Fall Semester

			Hrs	Min Grade	Notes
COSC	4760	Computer Networks	3	C	Prerequisite: COSC 2030.
		or EE 4870 Network Hardware	(4)	*	(F.O.) Prerequisites: EE 2390.
EE	3150	Electromagnetics	3	C	(F.O.) Prerequisite: EE 2220.
EE	4820	Senior Design I	2	C	(F.O.) Prerequisites: EE 2390, EE 3330 and corequisite courses in the area of the design project.
		EE/COSC Elective	3	*	Any EE or COSC course at the 4000 or 5000 level.
		General Elective	3	*	Any ≥1000 level course (MATH course must be >Math 2210)
		US/Wyoming Constitution Course	3	*	V
		Credit hours subtotal:	**17**		

Senior Spring Semester

			Hrs	Min Grade	Notes
EE	4830	Senior Design II	2	*	(S.O.) Prerequisites: EE 4820 and selected courses in the area of the design project.
		CPEN Option Course #1	3	*	
		CPEN Option Course #2	3	*	
		EE/COSC Elective	3	*	
		EE/COSC Elective	3	*	
		Credit hours subtotal:	**14**		
		TOTAL CREDIT HOURS:	**132**		

Notes: (S.O.) offered Spring semester ONLY (F.O.) offered Fall semester ONLY

Math/Science Elective: One 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.

CPEN Elective Courses (Choose four classes from this list, at most two of which can be from the Computer Science department):

EE 4245, 4340, 4345, 4360, 4440, 4530, 4590, 4870, 4990, 5390, 5430, 5630, 5650 COSC 3020, 4450, 4550, 4555, 4560, 4730, 4740, 4760.

Prerequisites for Upper Division electives vary. EE 4075 is not allowed. Other EE or COSC graduate level classes may be considered upon petition.

EE 4830 is normally taken in the final semester.