

Bachelor of Science in Electrical Engineering plan

Electric Power Engineering Concentration (16 cr.)

*This suggested plan applies to students entering in **Academic Year 2016-2017** who are ready for calculus.*

Semester 1			Semester 2		
CH1150&1151	Univ. Chemistry I & Lab I	4	PH2100	Univ. Physics I - Mechanics	3
CH1153	Prob. Solv. Chem. I :optional	1	ENG1102	Engineering Modeling & Design	3
ENG1101	Engineering Analysis	3	MA2160	Calculus with Technology 2	4
MA1160 ¹	Calculus with Technology 1	4	PH1200	Univ. Physics II Lab	1
PH1100	Physics Lab 1	1	EE1110	Essential Math for EE's	1
UN1015	Composition	3	EE1111	Intro. to Elec. & Comp. Engg.	1
			UN1025	Global Issues	3
	Total	15/16		Total	16
Semester 3			Semester 4		
MA2321 ²	Linear Algebra	2	EE2112	Electric Circuits II w/lab	4
MA3521 ²	Differential Equations	2	EE3120	Electric Energy Systems	3
EE 2111	Electric Circuits I	3	EE2174	Digital Logic w/ Lab	4
PH2200	Univ. Physics II Elec&Magnetism	3	MA3160	Multi-variable Calculus	4
CS1111	Intro to Programming in C/C++	3			
	Goal 4 Crit/Creat.Thinking course ⁶	3		Goal 8 Soc/Eth Reasoning course ⁶	3
	Total	16		Total	18
Semester 5			Semester 6		
EE3131	Electronics	4	EE3901	Design Fundamentals	2
EE3140	Electromagnetics	3	EE3180	Probability – Signal Analysis	3
EE3160	Linear Systems	3	EE3261	Control Systems	3
	SELECT Approved Elective ^{3a}	3	EE3171	Microcontroller Applications	4
	HASS 2 nd Comp/Comm. course ⁶	3	EE3250	Intro. Communication Theory	3
	Total	16		Total	15
Semester 7			Semester 8		
EE4901 ⁴	EE Design Project 1 (part 1)	2	EE4910 ⁴	EE Design Project 2 (part 2)	2
EE4221	Power Analysis I ⁷	3	EE4222	Power Analysis II ⁷	3
	Power Concentration Elective ⁷	3	EE4226	Power Engineering Laboratory	1
	EE Elective ⁷	3		Power Concentration Elective ⁷	3
	HASS HU/FA elective ⁶	3		HASS EC/SS/PSY elective ⁶ ;HASS	6
	Approved electives ^{3b}	2		Free electives	1
	Total	16		Total	16
Total			128 Credits		

Students must *add 3 units of co-curricular activities* (Physical Education), usually taken in six .5 units.

Follow pre-requisites and semester offerings. This is a 'suggested' plan which can vary by individual student; shows best route through system to avoid conflicts. Students who begin in a pre-calculus course will take ENG1001 and ENG1100 in place of ENG1101 in first year.

1. MA1160 may be replaced by MA1161
2. MA2320 and MA3520 may replace MA2321 and MA3521
3. SELECT Approved Elective(3a): 3 credits from a "select approved list", topics recommended by industry professionals, plus 2 credits from Approved electives(3b) list: CH1153 may apply. Reduce 3b by 2 cr. with enterprise design option.
4. Approved Engineering Design courses or Enterprise courses may replace EE4901, & EE4910. See department advisor for details.
5. EE Electives: 15 credits of EE courses not listed here and not EE3805, EE4805, EE4901, EE4910.
6. HASS = Humanities, Arts and Social Sciences. Follow university requirements for general education courses.
7. Up to 6 credits "EE" level 4000+ may be double-counted toward the ECE accelerated master's program.