

Bachelor of Science in Electrical Engineering plan Electric Power Engineering concentration (16 cr.)

This suggested plan applies to students entering in Academic Year 2019-2020 who are ready for calculus.

Semester 1			Semester 2		
CH1150&1151	Univ. Chemistry I & Lab I	4	PH2100&1100	Univ. Physics I - Mechanics	4
CH1153 ³	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	EE1110	Essential Math for EE's	1
UN1015	Composition	3	EE1111	Intro. to Elec. & Comp. Engg.	1
			UN1025	Global Issues	3
Total		14/15	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&1200	Univ. Physics II Elec&Magnetism	4	MA3160	Multi-variable Calculus	4
CS1111	Intro to Programming in C/C++	3		Soc Resp/Ethical Reasoning course ⁶	3
	Critical/Creative.Thinking course ⁶	3	Total		18
Total		17	Total		18
Semester 5			Semester 6		
EE3131	Electronics	4	EE3901	Design Fundamentals	2
EE3140	Electromagnetics	3	EE3180	Probability – Signal Analysis	3
EE3160	Signals and Systems	3	EE3261	Control Systems	3
	SELECT Approved Elective ^{3a}	3	EE3171	Microcontroller Applications	4
	HASS Comp/Comm. ⁶	3		HASS HU/FA elective ⁶	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 ^{7,8}	3	EE4226	Power Engineering Laboratory	1
	EE Elective ⁷	3		Power Concentration Elective ^{7,8}	3
	Approved electives ^{3b}	3	EE4250	Modern Communication Systems	3
	HASS EC/SS/PSY elective ⁶	3		HASS elective ⁶	3
Total		17	Total		15
Total			128 Credits		

Students must add 3 units of co-curricular activities (such as Physical Education, Pep Band and music lessons).

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: 3 credits of EE courses not listed here and not EE3010, EE3805, EE4000, 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.
8. Concentration Electives:
EE4219,EE4220,EE4227,EE4228,EE4262,EE5200,EE5223,EE5224,EE5230,EE5240,EE5250,EE5260,EE5275,EE5290.