

## Bachelor of Science in Electrical Engineering Environmental Applications concentration (18 cr)

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

<b>Semester 1</b>			<b>Semester 2</b>		
CH1150&1151	Univ. Chemistry I & Lab I	4	PH2100	Univ. Physics I - Mechanics	3
CH1153	Prob. Solv. Chem. I :optional	1	PH1100	Physics Lab 1	1
ENG1101	Engineering Analysis	3	ENG1102	Engineering Modeling & Design	3
MA1160 <sup>1</sup>	Calculus with Technology 1	4	MA2160	Calculus with Technology 2	4
UN1015	Composition	3	EE1110	Essential Math for EE's	1
			EE1111	Intro. to Elec. & Comp. Engg.	1
			UN1025	Global Issues	3
Total		<b>14/15</b>	Total		<b>16</b>
<b>Semester 3</b>			<b>Semester 4</b>		
MA2321 <sup>2</sup>	Linear Algebra	2	EE2112	Electrical Circuits II & Lab	4
MA3521 <sup>2</sup>	Differential Equations	2	EE3120	Electric Energy Systems	3
EE 2111	Electrical Circuits I	3	MA3160	Multi-variable Calculus	4
CS1111	Intro to Programming in C/C++	3	EE2174	Digital Logic and Lab	4
PH2200 &1200	Univ. Physics 2-Elec&Magnet	4		Critical/Creative Thinking crse <sup>6</sup>	3
	Soc. Resp./Ethic. Reasoning crse <sup>6</sup>	3	Total		<b>18</b>
Total		<b>17</b>			
<b>Semester 5</b>			<b>Semester 6</b>		
EE3131	Electronics	4	EE3901	Design Fundamentals	2
EE3140	Electromagnetics	3	EE3261	Control Systems	3
EE3160	Signals and Systems	3	EE3171	Microcontroller Appls & Lab	4
CEE3501	Environmental Engineering Fund.	3	CEE3502	Env. Monitoring & Measurement	3
	HASS HU/FA elective <sup>6</sup>	3		Remote sensing Choice 2a or HASS	3
Total		<b>16</b>	(Sugg. GE2100 for HASS)		<b>15</b>
<b>Semester 7</b>			<b>Semester 8</b>		
EE4901 <sup>8</sup>	EE Design Project 1 (part 1)	2	EE4910 <sup>8</sup>	EE Design Project 2 (part 2)	2
EE3180	Probability – Signal Analysis	3	CEExxxx <sup>4</sup>	Env. Quality Engg. Elective	3
CEExxxx <sup>4</sup>	Env. Quality Engg. Elective	3		Remote sensing choice 1b or HASS	3
	Remote sensing choice 1a or 2b <sup>3</sup>	3		EE elective <sup>5,7</sup>	3
	EE elective <sup>5,7</sup>	3		HASS SS/PSY/EC elective <sup>6</sup>	3
	HASS Comp/Comm. Course <sup>6</sup>	3		Free Elective	1
Total		<b>17</b>	Total		<b>15</b>
Total			<b>128 Credits</b>		

Students must add 3 units of co-curricular activities (such as 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. 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. Remote sensing sequence: Choose either set: (1a EE4252 and 1b GE4250) or (2a EE2190 and 2b EE3190)
4. Choose two courses from the Environmental Quality Engineering Areas list.
5. EE Electives: Minimum 6 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 distribution electives.  
GE2100, Environmental Geology is a recommended *HASS Restricted List elective* for this program.
7. Up to 6 credits "EE" level 4000+ may be double-counted toward an ECE accelerated master's program.
8. Approved Engineering Design courses or Enterprise courses may replace EE4901, & EE4910. See department advisor.