

## General Engineering transfer to Bachelor of Science in Computer Engineering (CpE)

*This suggested plan applies to students entering in **Academic Year 2018-2019** who are ready for calculus.*

<b>Semester 1</b>			<b>Semester 2</b>		
MA1160 <sup>1</sup>	Calculus with Technology 1	4	MA2160	Calculus with Technology 2	4
ENG1101	Engineering Analysis/Problem Solving	3	ENG1102	Engg Modeling & Design	3
PH1100	Physics Lab 1	1	PH2100	Univ. Physics I - Mechanics	3
CS1150/51	University Chemistry	4	CS1121 <sup>8</sup>	Intro to Programming I	3
			EE1110 <sup>8</sup>	Essential Math for EE's	1
			EE1111 <sup>8</sup>	Intro. to Elec.& Comp. Engg.	1
UN1015	Composition <sup>6</sup>	3	UN1025	Global Issues <sup>6</sup>	3
Total		<b>15</b>	Total		<b>18</b>
<b>Semester 3</b>			<b>Semester 4</b>		
MA2321 <sup>2</sup>	Linear Algebra	2	EE2112	Electric Circuits II w/ Lab	4
MA3521 <sup>2</sup>	Differential Equations	2	CS2311	Discrete Structures	3
EE2111	Electric Circuits I	3	CS1141	Programming at the H/S Interface	3
EE2174	Digital Logic and Lab	4	PH2200	University Physics II	3
CS1122	Intro to Programming II	3	PH1200	Physics II Lab	1
	Crit/Creat Thinking course <sup>6</sup>	3		Soc Resp/Eth Reasoning crse <sup>6</sup>	3
Total		<b>17</b>	Total		<b>17</b>
<b>Semester 5</b>			<b>Semester 6</b>		
EE3131	Electronics and Lab	4	EE3173	Hardware/Software Integration	4
CS3331 or ...EE3160 <sup>3</sup>	Concurrent Programming or ...Linear Systems	3	EE3901	Design Fundamentals	2
CS3421	Computer Organization	3	CS3411	Systems Programming	3
MA3710	Engineering Statistics	3	CS4321	Intro. to Algorithms	3
CS2321	Data Structures	3		HASS Comp/Comm. course <sup>6</sup>	3
Total		<b>16</b>	Total		<b>15</b>
<b>Semester 7</b>			<b>Semester 8</b>		
EE4901 <sup>5</sup>	EE Design Project 1 (part 1)	2	EE4910 <sup>5</sup>	EE Design Project 2 (part 2)	2
EE4173	Comp Sys Engg & Performance	3		CpE Technical elective <sup>4,7</sup>	3
EE4272/CS4461	Computer Networks	3		CpE Technical elective <sup>4</sup>	3
	CpE Technical elective <sup>4,7</sup>	3		HASS elective <sup>6</sup>	3
	Math/Science elective	2		HASS upper level elective <sup>6</sup>	3
	HASS upper level elective <sup>6</sup>	3	Total		<b>14</b>
Total		<b>16</b>	Total		<b>128</b> 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 & ENG1100 in place of ENG1101 in 1<sup>st</sup> yr.

1. MA1160 may be replaced by MA1161
2. MA2320 and MA3520 may replace MA2321 and MA3521 (MA2320 and MA3520 are taken in separate semesters)
3. Students choose either CS3331, Concurrent Programming, or EE3160, Linear Systems. Either CS3331 or EE3160 may be taken for technical elective credit if the student desires both CS3331 & EE3160.
4. CpE Technical Electives are taken from the list of approved courses. Choose courses to develop advanced skills in your interest area(s) and gear your education toward a particular career path. Minimum 6 credits upper-level coursework required.
5. Approved Engineering Design courses or Enterprise courses may replace EE4901, & EE4910. See department advisor for details
6. Follow university General Education and Humanities, Arts & Social Sciences (HASS) distribution requirements.
7. Up to 6 credits "EE" level 4000+ may be double-counted toward the ECE accelerated master's program.
8. If first-year electives are not CS1121, EE1110, & EE1111, see ECE advisor for alternative plan.