

**Degree: BS in Computer Engineering  
Freshman 4-Year Academic Roadmap**

Year 1: Freshman Year					Year Total					28	
Fall	Term(s)	Pre-req	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req	Pre-req Course(s)	Units		
CSE 2010 CS-I	Fall & Spring	<input checked="" type="checkbox"/>	CSE 1250 or instructor consent	4	CSE 2020 CS -II	Fall & Spring	<input checked="" type="checkbox"/>	CSE 2010 and MATH 2720	4		
MATH 2210 Calc I	Fall & Spring	<input checked="" type="checkbox"/>	Math 1401 or satisfactory score on department placement exam	4	MATH 2220 Calc II		<input checked="" type="checkbox"/>	MATH 2210	4		
MATH 2720 Discrete Math		<input checked="" type="checkbox"/>	Completion of the Quantitative Reasoning GE requirement	3	GE A1 Oral Communication		<input type="checkbox"/>		3		
		<input type="checkbox"/>		3	GE A2 Written Communication		<input type="checkbox"/>		3		
		<input type="checkbox"/>					<input type="checkbox"/>				
Semester Total				14	Semester Total				14		

Year 2: Sophomore Year					Year Total					37	
Fall	Term(s)	Pre-req	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req	Pre-req Course(s)	Units		
CSE 2130 Machine Organization	Fall & Spring	<input checked="" type="checkbox"/>	CSE 2020	3	CSE 3100 Digital Logic	Fall & Spring	<input checked="" type="checkbox"/>	CSE 2020	4		
MATH 2310 Linear Algebra	Fall & Spring	<input checked="" type="checkbox"/>	MATH 2210 and MATH 2220	4	MATH 2320 Multivariable Calc	Fall & Spring	<input checked="" type="checkbox"/>	MATH 2220 and MATH 2310	4		
PHYS 2500, 2500L General Phys I & Lab		<input checked="" type="checkbox"/>	MATH 2210	5	PHYS 2510, 2510L General Phys II & Lab		<input type="checkbox"/>	MATH 2220 and PHYS 2500	5		
GE B2 Life Science		<input type="checkbox"/>		3	MATH 2265 Statistics		<input checked="" type="checkbox"/>	MATH 2210	3		
GE C1 Arts		<input type="checkbox"/>		3	GE C2.1 Literature		<input type="checkbox"/>		3		
Semester Total				18	Semester Total				19		

Year 3: Junior Year					Year Total					29	
Fall	Term(s)	Pre-req	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req	Pre-req Course(s)	Units		
CSE 4600 Operating Systems	Fall & Spring	<input checked="" type="checkbox"/>	CSE 2130	3	CSE 4030 Analog Circuits	Spring	<input checked="" type="checkbox"/>	CSE 3100 and CSE 3350	4		
CSE 3350 Signals and Systems	Fall	<input checked="" type="checkbox"/>	MATH 2220 and MATH 2310	3	CSE 4560 Embedded Systems	Spring	<input checked="" type="checkbox"/>	CSE 3100 and CSE 2130	4		
		<input checked="" type="checkbox"/>			Choose one from: CSE 4100 Network Security CSE 5300 Data Com.	Fall & Spring	<input checked="" type="checkbox"/>	SE 2020 CSE 2020 and CSE 3350	3		
CSE 4010 Computer Architecture	Fall & Spring		CSE 3100 and CSE 2130	3	D2 American Government		<input type="checkbox"/>		3		
D1 U.S. History		<input type="checkbox"/>		3			<input type="checkbox"/>				
GE C2.2 Philosophy		<input type="checkbox"/>		3			<input type="checkbox"/>				
Semester Total				15	Semester Total				14		

Year 4: Senior Year					Year Total					31	
Fall	Term(s)	Pre-req	Pre-req Course(s)	Units	Spring	Term(s)	Pre-req	Pre-req Course(s)	Units		
CSE 5208 Eng. Design I (WI)	Fall	<input checked="" type="checkbox"/>	Senior Standing	4	CSE 5408 Eng. Design II	Spring	<input checked="" type="checkbox"/>	CSE 5208	4		
CSE 5210 Digital Design		<input checked="" type="checkbox"/>	CSE 4010	4	Choose one from: CSE 5350 Numerical Comp. CSE 4310 Algorithm Analysis	Fall & Spring	<input checked="" type="checkbox"/>	CSE 2020 and MATH 2310	3		
CSE 5410 Robotics		<input checked="" type="checkbox"/>	CSE 3100 and MATH 2310	4	CSE Elective 2		<input type="checkbox"/>		3		
CSE Elective 1		<input type="checkbox"/>		3	CSE Elective 3		<input type="checkbox"/>		3		
		<input type="checkbox"/>			GE C2.3 World Languages or Literature in Translation		<input type="checkbox"/>		3		
Semester Total				15	Semester Total				16		

\*Course may be offered in summer

**Degree Units Total** 125



**Diversity and Inclusiveness**

<b>(DI)</b>	<b>Perspectives</b>	<b>At least 1 course required</b>
<b>(G)</b>	<b>Global Perspectives</b>	<b>At least 1 course required</b>