

# COMPUTER ENGINEERING

## Curriculum Guide effective Fall 2013 ~ North Dakota State University

STUDENT:

ID #:

ADVISOR:

	Fall					Spring				
	Course	Crs	Grade	Gen Ed	Course	Crs	Grade	Gen Ed		
Freshman (<27 crs)	<b>CHEM 121</b>	General Chemistry I	3		S	<b>ECE 173</b>	Intro to Computing	3		
	<b>ECE 111</b>	Intro to ECE	3			<b>ENGL 120</b>	College Composition II	3		C
	<b>ECE 275</b>	Digital Systems I	3			<b>MATH 129</b>	Basic Linear Algebra	2		
	<b>ENGL 110</b>	College Composition I	3		C	<b>MATH 166</b>	Calculus II	4		
	<b>MATH 165</b>	Calculus I	4		R	<b>PHYS 251</b>	Univ Physics I	4		S
	<b>UNIV 189</b>	Skills for Success	1		F	Science Lab	0	1	0	L
		<b>17</b>				<b>17</b>				
Sophomore (27-59 crs)	<b>EE 206</b>	Circuit Analysis I/lab	4			<b>COMM 110</b>	Fund Public Speaking	3		C
	<b>MATH 265</b>	Calculus III (w/vectors)	4			<b>CSCI 161</b>	Comp Science II	4		
	<b>PHYS 252</b>	Univ Physics II	4			<b>ECE 311</b>	Circuit Analysis II w/Lab	4		
	<b>CSCI 222</b>	Discrete Math	3			<b>MATH 266</b>	Intro Differential Equations	3		
	<b>ME 221</b>	Engineering Mech I	3			Gen Ed Elective	0	3	0	A or B
			<b>18</b>				<b>17</b>			
Junior (60 - 89 crs)	<b>ECE 321</b>	Electronics I w/Lab	5			<b>ECE 341</b>	Random Processes	3		
	<b>ECE 343</b>	Signals & Systems w/Lab	4			<b>ECE 374</b>	Computer Organization	3		
	<b>ECE 376</b>	Embedded Systems w/Lab	4			<b>ECE 351</b>	Applied EM w/Lab	4		
	Gen Ed Elective	0	3	0	A or B	<b>ECE 401</b>	Design I (capstone)	1		
						CprE Core Elec		3		
						<b>ENGL</b>	Upper Level Writing	3		C
		<b>16</b>				<b>17</b>				
Senior (90 + crs)	<b>CSCI 474</b>	Operating Sys Concepts	3			<b>ECE 405</b>	Design III (capstone)	3		
	<b>ECE 403</b>	Design II (capstone)	2			<b>ENGR 402</b>	Engr Ethics & Soc Resp	1		
	ECE/Engr Sci E		3			CprE Core Elec		3		A or B
	CprE Core Elec		3			<b>ECE 423</b>	VLSI	3		A or B
	Gen Ed Elective <sup>y</sup>	0	3	0	A or B	Gen Ed Elective	0	3	0	
	Wellness Elec	0	2	0	W					
		<b>16</b>				<b>13</b>				
<b>TOTAL CREDITS</b>							<b>131</b>			

General Education Electives			
<i>Approved courses listed in the registration schedule centerfold.</i>			
Gen Ed	Course	Crs	Grade
A		3	
A		3	
B		3	
B		3	
D ■	(double-count with A or B above)		
G ●	(double-count with A or B above)		
L		1	
W		2	

### General Education Categories:

- A - Humanities/Fine Arts
- B - Social/Behavioral Sciences
- C - Communication
- D - Cultural Diversity ■
- F - First-Year Experience
- G - Global Perspectives ●
- L - Co-requisite Lab
- R - Quantitative Reasoning
- S - Science & Technology
- W - Wellness

\*Select from ENGL 320, 321, 324 or 459 to satisfy the Upper Level Writing for General Education

Transfer Students: "T" indicates requirement satisfied with transfer credits. Transfer courses with grades less than "C" are not accepted in biology, chemistry, computer science, any engineering class, mathematics or physics.

All students: No grades less than a C accepted in ECE 173, ECE 275, EE 206 & all required Math courses.

CprE Core Classes: ECE 373, ECE 375, ECE 443, & ECE 470