gree: Computer Engineering, B.S. 21-22

Requirement Area	Course	Course Title	Prerequisites	Units
First Semester (FALL)				
B4/LD Major	MATH 130	Calculus I	One from the following: Satisfactory score of 78 or higher on Mathematics Placement Exa	4
B1/B3/LD Major	PHYS 135	Physics for Scientists and Engineers I		4
LD Major	CS 101	Computer Science	Mathematics/QR Placement Category I or II, or successful completion of GE area B4	4
A1		Oral Communication		3
			Total:	15
Second Semester (SPRING)				
A2		Written Communication		3
LD Major	MATH 131	Calculus II	MATH 130 with grade C- or better.	3
LD Major	PHYS 136	Physics for Scientists and Engineers II	MATH 130 and PHYS 135.	4
C1		Arts		3
F		Ethnic Studies		3
			Total:	16
Third Semester (FALL)				
A3	PHIL 100	Workshop in Critical Thinking		3
LD Major	CS 201	Computer Science II	CS 101 with grade C- or better.	4
LD Major	MATH 215	Introduction to Linear Algebra	MATH 131 with grade C- or better.	3
Writing II	ENGR 200	Introduction to Engineering and Design		3
LD Major	CHEM 110	General Chemistry for Engineering		3
			Total:	16
Fourth Semester (SPRING)				
LD Major	CS 211	Discrete Structures	MATH 130 with grade C- or better.	3
LD Major	CMPE 221	Assembly Language and Logic Design	CS 100 or CS 101, both with grade C- or better.	3
LD Major	ENGR 230	Electric Circuits I	PHYS 136 and MATH 215	3
LD Major	MATH 230	Calculus III	MATH 131 with grade C- or better.	3
LD Major	ENGR 220	Statics	PHYS 135.	3
			Total:	15
Fifth Semester (FALL)				
C2		Humanities		3
LD Major	CS 301	Data Structures and Algorithms	CS 201 and CS 211.	3

UD Major	CMPE 321	Digital Logic and Computer Architecture	CS 211 and CS 221, both with grade C- or better.	3
UD Major	CMPE 322	Digital Design Laboratory		1
UD Major	CMPE 330	Electric Circuits II	ENGR 230, MATH 285 (co-requisite)	3
UD Major	MATH 285	Introduction to Differential Equations	MATH 131 with a grade C- or better.	3
			Total:	16
Sixth Semester (SPRING)				
D1/Code 1		Social Science/US Code		3
UD Major	CMPE 344	Microprocessor Laboratory	CS 301.	3
UD Major	CMPE 370	Digital Signal Processing I	CMPE 330.	3
UD Major	INDE 330	Engineering Statistics and Probability	MATH 130.	3
B2		Life Science		3
			Total:	15
Seventh Semester (FALL)				
UD Major	CMPE 492	Senior Design I	All of: CMPE 344, CMPE 370.	3
UD Major	CMPE 421	Computer Architecture II	CS 321 and CMPE 322.	3
UD Major		Elective		3
D2/Code 2		Social Science/US Code		3
Add'l C1 or C2*		Arts or Humanities		3
			Total:	15
Eighth Semester (SPRING)				
UD Major	CMPE 493	Senior Capstone: Senior Design II	CMPE 492.	3
UD Major	CMPE 480	VLSI Circuit Design/Layout		3
UD Major		Elective		3
UD-B/Overlay		UD Science	Completion of GE areas A1, A2, A3 and B4.	3
UD-C/Overlay		UD Arts or Humanities	Completion of GE areas A1, A2, A3 and B4.	3
UD-D/Overlay		UD Social Science	Completion of GE areas A1, A2, A3 and B4.	3
			Total:	18
Total Units:				126