

Degree: Computer Engineering, B.S.				
Requirement Area	Course	Course Title	Prerequisites	Units
First Semester				
B4/LD Major	MATH 130	Calculus I	One from the following: Satisfactory score of 78 or higher on Mathematics Placement Exam, MATH 120 or MATH 125 (either course with grade C- or better).	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				3
			Total:	15
Second Semester				
A2				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				3
C2				3
			Total:	16
Third Semester				
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 230	Calculus III	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				
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 210.	3
LD Major	MATH 210	Linear Algebra with Differential Equations	MATH 130.	3
LD Major	ENGR 220	Statics	PHYS 135.	3
			Total:	15
Fifth Semester				
B2				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.	3
UD Major	MATH 375	Differential Equations I	MATH 131 and MATH 210, both with grade C- or better.	3
			Total:	16
Sixth Semester				
D1/Code 1				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
D2				3
			Total:	15
Seventh Semester				
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
D3/Code 2				3
Add'l C1 or C2*				3
			Total:	15
Eighth Semester				
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
B6/Overlay			Completion of GE areas A1, A2, A3 and B4.	3
C4/Overlay			Completion of GE areas A1, A2, A3 and B4.	3
D4/Overlay			Completion of GE areas A1, A2, A3 and B4.	3
			Total:	18
Total Units:				126

General Education & University Requirements - Suggested Courses
Area A (9 units): Communication in the English Language & Critical Thinking (Must earn passing grade of C-/CR or better)
<input type="checkbox"/> A1. COMM 100 or 104, MLL 111
<input type="checkbox"/> A2. ENGL 101, 102, or 104
<input type="checkbox"/> A3. PHIL 100
Area B (9 units): Scientific Inquiry & Quantitative Reasoning
<input type="checkbox"/> B1. Physical Science
<input type="checkbox"/> B2. Life Science
<input type="checkbox"/> B3. Laboratory Activity
<input type="checkbox"/> B4. Quantitative Reasoning (Must earn passing grade of C-/CR or better.)
Area C (9 units): Arts & Humanities - Minimum of three different disciplines as designated by course prefix (e.g., ART, THEA, MUS)
<input type="checkbox"/> C1. Arts
<input type="checkbox"/> C2. Humanities
<input type="checkbox"/> *Additional Lower-division Area C Course in Arts (C1) or Humanities (C2)
Area D (9 units): Social Sciences - Minimum of three different disciplines as designated by course prefix (e.g., ANTH, ECON, POSC)
<input type="checkbox"/> D1.
<input type="checkbox"/> D2.
<input type="checkbox"/> D3.
Area E (3 units): Lifelong Learning and Self-Development
<input type="checkbox"/> E.
Second Composition: Requires completion of GE A2 with a C-/CR or better. Must be completed before attaining junior standing.
<input type="checkbox"/> Writing II.
University Writing Skills Requirement
<input type="checkbox"/> UWSR. Writing Skills Test (WST) or First and/or Second Tier Courses
U.S. Code (American Institutions Requirement) - Two courses (6 units) covering three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. Constitution), and US-3 (California State & Local Government).
<input type="checkbox"/> Code 1.
<input type="checkbox"/> Code 2.
Upper Division GE Requirements (9 units): Should be taken after completion of A1, A2, A3, and B4 with a C- (CR)
<input type="checkbox"/> B6. Upper-division Science Inquiry and Quantitative Reasoning
<input type="checkbox"/> C4. Upper-division Arts OR Humanities
<input type="checkbox"/> D4. Upper-division Social Sciences
Overlay Requirements (9 units): Courses may be upper or lower division, and GE or major
<input type="checkbox"/> Diversity (Div)
<input type="checkbox"/> Social Justice (SJ)
<input type="checkbox"/> Sustainability (S)