

CSUEB Degree Roadmap

Bachelor of Science in Computer Science

TOTAL UNITS TO DEGREE:			120
Course	Course Title	Units	
First Semester (suggested timeline for GE; adjust as needed for major)			
E	GS 101	Freshman Studies	1
A1	COMM 100	Public Speaking	3
B2	Life Science		3
B4	MATH 130	Calculus I	4
D1	Social Science		3
TOTAL:			14
Second Semester (suggested timeline for GE; adjust as needed for major)			
E	GS 102	Freshman Studies	1
A2	ENGL 101	College Writing: Stretch II	3
A3	PHIL 100	Workshop in Critical Thinking	3
Lower Division Major	CS 101	Computer Science I	4
Lower Division Major	MATH 131	Calculus II	3
TOTAL:			14
Third Semester (suggested timeline for GE; adjust as needed for major)			
E	LIBY 210	Introduction to Information Literacy Skills	1
B1/B3	PHYS 135	Physics for Scientists and Engineers 1	4
Lower Division Major	CS 211	Discrete Structures	3
Lower Division Major	CS 201	Computer Science II	4
Writing II/WID (2nd Comp)	ENGL 102	Accelerated English Writing	3
TOTAL:			15
Fourth Semester (suggested timeline for GE; adjust as needed for major)			
D2	CS 230	Computing and Social Responsibility	3
D3	Social Science		3
Code 1	CA HIST		3
Lower Division Major	CS 221	Computer Organization and Assembly	3
Lower Division Major	MATH 225	Linear Algebra for Computer Science	3
TOTAL:			15
Fifth Semester (suggested timeline for GE; adjust as needed for major)			
C1	Arts		3
B6	Upper div Science		3
Upper Division Major	STAT 316	Statistics for Science and Engineering	3
Upper Division Major	CS 301	Data Structures	4
Upper Division Major	CS 321	Computer Architecture	3
TOTAL:			16
Sixth Semester (suggested timeline for GE; adjust as needed for major)			
C2	Humanities		3
C3	Creative/Physical		3
Code 2	AM INST		3
Upper Division Major	CS 311	Programming Language Concepts	3
Upper Division Major	CS 413	Analysis of Algorithms	3
TOTAL:			15
Seventh Semester (suggested timeline for GE; adjust as needed for major)			
D4	Upper div Soc Sci		3
Upper Division Major	CS 401	Software Engineering	4
Upper Division Major	CS 421	Operating Systems	3
Upper Division Major	CS 411	Automata and Computation	3
Upper Division Major	CS Breadth	From breadth course list	3
TOTAL:			16
Eighth Semester			
C4	Art/Humanities elective		3
Upper Division Major	CS 441	Computer Networks	3
Upper Division Major	CS Breadth	From breadth course list	3
Upper Division Major	CS Elective	Any 300 or above not used for req/breadth	3
Upper Division Major	CS Elective	Any 300 or above not used for req/breadth	3
TOTAL:			15

Up to 9 units may be double counted, as follows: 3 units LD GE with Major Prefix; 3 units Code with LD GE; and 3 units Writing II with Major. LD GE courses that are required in the major, but outside of the major prefix, are permissible.



General Education and University Requirements-Suggested Courses

A1. COMM 100
 A2. ENGL 101
 A3. PHIL 100
 B1/B3. PHYS 135
 B4. MATH 130
 B6. Upper division Science
 C1. Arts
 C2. Humanities
 C3. Creative/Physical Expression
 C4. Upper division Arts/Humanities
 D1. Social Science elective
 D2. CS 230
 D3. Social Science elective
 D4. Upper division Social Science
 E. GS 101, GS 102, LIBY 210

Code 1. CA HIST
 Code 2. AM INST
 Writing II/WID (2nd ENGL 102 Comp)

9 units of overlay GE courses must be completed in order to fulfill the Diversity, Social Justice, and Sustainability requirements. Please choose C1-C4 and D1,D3,D4 courses to satisfy these 3 overlays.