	D	egree: Computer Science, B.S. 21-22		
Requirement Area	Course	Course Title First Semester (FALL)	Prerequisites	Units
E	GS 101A	Foundations of Success I		1
A1	COMM 100	Communication		3
B2				3
			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	
B4	MATH 130	Calculus I	better).	4
D1				3
Elective				1
			Total:	15
		Second Semester (SPRING)		
E	GS 101B	Foundations of Success II		1
A2	ENGL 102			3
C1			Mathamatics /OD	3
			Mathematics/QR Placement Category I or	
			II, or successful	
			completion of GE area	
LD Major	CS 101	Computer Science I	B4.	4
			MATH 130 with grade C-	
LD Major	MATH 131	Calculus II	or better.	3
Elective			Total:	1 15
		Third Semester (FALL)	Total.	15
E		The service of the se		1
B1/B3	PHYS 135	Physics for Engineers I		4
			MATH 130 with grade C-	
LD Major	CS 211	Discrete Structures	or better.	3
ID Major	CS 201	Computer Science II	CS 101 with grade C- or better.	4
LD Major A3	PHIL 100	Workshop in Critical Thinking	better.	3
7.5	THE 100	Workshop in Childar Hinking	Total:	15
		Fourth Semester (SPRING)		
LD Major/D2	CS 230	Computing and Social Responsibility		3
Second Composition	ENGL 200 or PHYS 230			3
Code 1				3
		Assembly Language and Computer	CS 100 or CS 101, both	
LD Major	CS 221	Architecture	with grade C- or better.	3
25 Major	00 221	7.10.1110.1110	With grade of or section	
LD Major	MATH 225	Numerical Algorithms and Linear Algebra	CS 101 and MATH 130.	3
			Total:	15
11D D/O I.	ı	Fifth Semester (FALL)		2
UD-B/Overlay F		Ethnic Studies		3
г UD Major	STAT 316	Statistics for Science and Engineering	MATH 131	3
UD Major	CS 301	Data Structures	CS 201 and CS 211	3
,				
			CS 211 and CS 221, both	
UD Major	CS 321	Computer Architecture	with grade C- or better.	3
		Sight Company (SPRING)	Total:	15
C2	l	Sixth Semester (SPRING)		3
Code 2				3
UD Major	CS 311	Programming Language Concepts	CS 201 and CS 221.	3
•				
UD Major	CS 441	Computer Networks	CS 301	3
OD Major	C3 441	Computer Networks	CS/MATH 211 and CS	3
UD Major	CS 413	Analysis of Algorithms	301	3
-			Total:	15
		Seventh Semester (FALL)		
UD-D/Overlay			00 204 11	3
IID Maior	CS 401	Software Engineering	CS 301 with grade C- or better.	2
UD Major	CS 401	Software Engineering	CS 301 with grade C- or	3
UD Major	CS 421	Operating Systems	better.	3
-			CS 211 and MATH 225,	
			both with grade C- or	
UD Major	CS 411	Automata and Complexity	better.	3
UD Major	CS Breadth		Total:	3 15
		Eighth Semester (SPRING)	i otai.	15
Add'l C1 or C2*				3
UD-C/Overlay				3
UD Major	CS Breadth			3
UD Major	CS Elective			3
UD Major	CS Elective			3
			Total:	15
Total Units:				120

	9 units): Communication in the English Language & Critical Thinkin
□ A1 C	(Must earn passing grade of C-/CR or better)
	OMM 100 or 104, MLL 111 NGL 101, 102, or 104
	HIL 100
	Area B (9 units) : Scientific Inquiry & Quantitative Reasoning
☐ B1. Ph	ysical Science
☐ B2. Li	fe Science
	boratory Activity
☐ B4. Q	uantitative Reasoning (Must earn passing grade of C-/CR or
better.)	
Area C (9 units): Arts & Humanities - Minimum of three different disciplin
	as designated by course prefix (e.g., ART, THEA, MUS)
☐ C1. Ar	
<u>⊔ CZ. HI</u>	<u>umanities</u>
□ *Addit	tional Lower-division Area C Course in Arts (C1) or Humanities (C2)
	(02)
Area D (6 units): Social Sciences - Minimum of three different disciplines
	designated by course prefix (e.g., ANTH, ECON, POSC)
□ D1.	
□ D2.	Avec 5 /2ital . Lifeland Lauring and Calf Davidanment
□ E.	Area E (3 units): Lifelong Learning and Self-Development
<u>ш Е.</u>	Area F (3 units): Ethnic Studies
□ F.	Area r (3 units). Ethnic studies
	Composition: Requires completion of GE A2 with a C-/CR or bette
	Must be completed before attaining junior standing.
	nd Composition
coveri	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S.
coverii	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1.
coveri	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2.
coverii Code Code	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR)
coverion Code Code UD-B.	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR) Upper-division Science Inquiry and Quantitative Reasoning
coverion Code Code UD-B.	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR)
coverion Code Code UD-B.	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR) Upper-division Science Inquiry and Quantitative Reasoning
coveriu Code Code UD-B.	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR) Upper-division Science Inquiry and Quantitative Reasoning Upper-division Arts OR Humanities
Coverion Code ☐ Code ☐ UD-B. ☐ UD-C. ☐ UD-D.	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR) Upper-division Science Inquiry and Quantitative Reasoning Upper-division Arts OR Humanities Upper-division Social Sciences
Coverion Code ☐ Code ☐ UD-B. ☐ UD-C. ☐ UD-D.	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR) Upper-division Science Inquiry and Quantitative Reasoning Upper-division Arts OR Humanities Upper-division Social Sciences
Coveria Code UD-B. UD-C. UD-D. Overlay F	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR) Upper-division Science Inquiry and Quantitative Reasoning Upper-division Arts OR Humanities . Upper-division Social Sciences Requirements (9 units): Courses may be upper or lower division, a
coveria Code Code UD-B. UD-C. UD-C.	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR) Upper-division Science Inquiry and Quantitative Reasoning Upper-division Arts OR Humanities Upper-division Social Sciences Requirements (9 units): Courses may be upper or lower division, a GE or major
Coverial Code Code UD-B. UD-C. UD-C. UD-D. Overlay F	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR) Upper-division Science Inquiry and Quantitative Reasoning Upper-division Arts OR Humanities Upper-division Social Sciences Requirements (9 units): Courses may be upper or lower division, a GE or major sity (Div) Justice (SJ) inability (S)
Coveriu Code Code UD-B. UD-C. UD-C. UD-D. Overlay F Social Sustai	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR) Upper-division Science Inquiry and Quantitative Reasoning Upper-division Arts OR Humanities Upper-division Social Sciences Requirements (9 units): Courses may be upper or lower division, a GE or major sity (Div) Justice (SJ) inability (S) Computer Science Breadth Coursework
Coveria Code Code UD-B. UD-C. UD-C. UD-D. Overlay F Social Sustai	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR) Upper-division Science Inquiry and Quantitative Reasoning Upper-division Arts OR Humanities Upper-division Social Sciences Requirements (9 units): Courses may be upper or lower division, a GE or major sity (Div) Justice (SJ) inability (S) Computer Science Breadth Coursework must complete two (2) courses of the following for 6 units:
Coveria Code Code UD-B. UD-C. UD-C. UD-D. Overlay F Social Sustai	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR) Upper-division Science Inquiry and Quantitative Reasoning Upper-division Arts OR Humanities Upper-division Social Sciences Requirements (9 units): Courses may be upper or lower division, a GE or major sity (Div) Justice (SJ) inability (S) Computer Science Breadth Coursework
Coveria Code Code UD-B. UD-C. UD-C. UD-D. Overlay F Social Sustai	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR) Upper-division Science Inquiry and Quantitative Reasoning Upper-division Arts OR Humanities Upper-division Social Sciences Requirements (9 units): Courses may be upper or lower division, a GE or major sity (Div) Justice (SJ) inability (S) Computer Science Breadth Coursework must complete two (2) courses of the following for 6 units:
covering Code Code Code UD-B. UD-C. UD-C. UD-D. Overlay F Social Sustai Students CS 351 - V	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR) Upper-division Science Inquiry and Quantitative Reasoning Upper-division Arts OR Humanities Upper-division Social Sciences Requirements (9 units): Courses may be upper or lower division, a GE or major sity (Div) Justice (SJ) inability (S) Computer Science Breadth Coursework must complete two (2) courses of the following for 6 units: Website Development Units: 3
covering Code Code Code Code UD-B. UD-C. UD-D. Overlay F Social Sustai Students CS 351 - V	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR) Upper-division Science Inquiry and Quantitative Reasoning Upper-division Arts OR Humanities Upper-division Social Sciences Requirements (9 units): Courses may be upper or lower division, a GE or major sity (Div) Justice (SJ) inability (S) Computer Science Breadth Coursework must complete two (2) courses of the following for 6 units: Website Development Units: 3
covering Code Code Code UD-B. UD-C. UD-C. UD-C. Coverlay F Social Sustai Students CS 351 - V CS 431 - I CS 453 - I	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR) Upper-division Science Inquiry and Quantitative Reasoning Upper-division Arts OR Humanities Upper-division Social Sciences Requirements (9 units): Courses may be upper or lower division, a GE or major Sity (Div) Justice (SJ) inability (S) Computer Science Breadth Coursework must complete two (2) courses of the following for 6 units: Website Development Units: 3 Database Architecture Units: 3 Mobile Programming Units: 3
covering Code Code Code UD-B. UD-C. UD-D. Overlay F Social Social Students CS 351 - V CS 431 - I CS 453 - I CS 455 - C	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR) Upper-division Science Inquiry and Quantitative Reasoning Upper-division Arts OR Humanities Upper-division Social Sciences Requirements (9 units): Courses may be upper or lower division, a GE or major Sity (Div) Justice (SJ) inability (S) Computer Science Breadth Coursework must complete two (2) courses of the following for 6 units: Website Development Units: 3 Database Architecture Units: 3 Mobile Programming Units: 3 Computer Graphics Units: 3
coverial Code Code Code UD-B. UD-B. UD-C. UD-C. Coverlay F Social Sustai Students CS 351 - V CS 431 - F CS 453 - F CS 455 - C CS 461 - A	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR) Upper-division Science Inquiry and Quantitative Reasoning Upper-division Arts OR Humanities Upper-division Social Sciences Requirements (9 units): Courses may be upper or lower division, a GE or major Sity (Div) Justice (SJ) inability (S) Computer Science Breadth Coursework must complete two (2) courses of the following for 6 units: Website Development Units: 3 Database Architecture Units: 3 Mobile Programming Units: 3 Computer Graphics Units: 3 Artificial Intelligence Units: 3
coverial Code Code Code UD-B. UD-B. UD-C. UD-C. Coverlay F Social Sustai Students CS 351 - V CS 431 - F CS 453 - F CS 455 - C CS 461 - A	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR) Upper-division Science Inquiry and Quantitative Reasoning Upper-division Arts OR Humanities Upper-division Social Sciences Requirements (9 units): Courses may be upper or lower division, a GE or major Sity (Div) Justice (SJ) inability (S) Computer Science Breadth Coursework must complete two (2) courses of the following for 6 units: Website Development Units: 3 Database Architecture Units: 3 Mobile Programming Units: 3 Computer Graphics Units: 3 Security and Information Assurance Units: 3
coverial Code Code Code UD-B. UD-B. UD-C. UD-C. Coverlay F Social Sustai Students CS 351 - V CS 431 - F CS 453 - F CS 455 - C CS 461 - A	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR) Upper-division Science Inquiry and Quantitative Reasoning Upper-division Arts OR Humanities Upper-division Social Sciences Requirements (9 units): Courses may be upper or lower division, a GE or major Sity (Div) Justice (SJ) inability (S) Computer Science Breadth Coursework must complete two (2) courses of the following for 6 units: Website Development Units: 3 Database Architecture Units: 3 Mobile Programming Units: 3 Computer Graphics Units: 3 Artificial Intelligence Units: 3
Covering Code Code Code Code Code Code Code Code	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR) Upper-division Science Inquiry and Quantitative Reasoning Upper-division Arts OR Humanities Upper-division Social Sciences Requirements (9 units): Courses may be upper or lower division, a GE or major Sity (Div) Justice (SJ) Inability (S) Computer Science Breadth Coursework must complete two (2) courses of the following for 6 units: Website Development Units: 3 Database Architecture Units: 3 Mobile Programming Units: 3 Computer Graphics Units: 3 Artificial Intelligence Units: 3 Elective Courses
Covering Code Code Code Code Code Code Code Code	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR) Upper-division Science Inquiry and Quantitative Reasoning Upper-division Arts OR Humanities Upper-division Social Sciences Requirements (9 units): Courses may be upper or lower division, a GE or major Sity (Div) Justice (SJ) inability (S) Computer Science Breadth Coursework must complete two (2) courses of the following for 6 units: Website Development Units: 3 Database Architecture Units: 3 Mobile Programming Units: 3 Computer Graphics Units: 3 Artificial Intelligence Units: 3 Elective Courses must take two (2) courses with the CS prefix numbered 300 or about the course of the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with take two (3) courses with take two (4) courses with take two (5) courses with take two (6) courses with take two (7) courses with take two (8) courses with take two
Covering Code Code Code Code Code Code Code Code	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR) Upper-division Science Inquiry and Quantitative Reasoning Upper-division Arts OR Humanities Upper-division Social Sciences Requirements (9 units): Courses may be upper or lower division, a GE or major Sity (Div) Justice (SJ) inability (S) Computer Science Breadth Coursework must complete two (2) courses of the following for 6 units: Website Development Units: 3 Computer Graphics Units: 3 Mobile Programming Units: 3 Computer Graphics Units: 3 Security and Information Assurance Units: 3 Elective Courses must take two (2) courses must not be the same as those already
Covering Code Code Code Code Code Code Code Code	ng three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. 1. 2. of A1, A2, A3, and B4 with a C- (CR) Upper-division Science Inquiry and Quantitative Reasoning Upper-division Arts OR Humanities Upper-division Social Sciences Requirements (9 units): Courses may be upper or lower division, a GE or major Sity (Div) Justice (SJ) inability (S) Computer Science Breadth Coursework must complete two (2) courses of the following for 6 units: Website Development Units: 3 Database Architecture Units: 3 Mobile Programming Units: 3 Computer Graphics Units: 3 Artificial Intelligence Units: 3 Elective Courses must take two (2) courses with the CS prefix numbered 300 or about the course of the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with the CS prefix numbered 300 or about take two (2) courses with take two (3) courses with take two (4) courses with take two (5) courses with take two (6) courses with take two (7) courses with take two (8) courses with take two

CSUEB General Breadth and Graduation Requirement Checklist

		Degree: Computer Science, B.S.		
Requirement Area	Course	Course Title	Prerequisites	Units
		First Semester		
Е	GS 101A	Foundations of Success I		1
A1	COMM 100	Communication		3
B2				3
			One from the following:	
			Satisfactory score of 78	
			or higher on	
			Mathematics Placement	
			Exam, MATH 120	
			or MATH 125 (either	
B4	MATH 130	Calculus I	course with grade C- or	4
	ENGL 100 or 103			3
	ENGL 109			1
			Total:	15
		Second Semester		
Е	GS 101B	Foundations of Success II		1
A2	ENGL 101 or 103			3
	ENGL 109			1
C1				3
			Mathematics/QR	
			Placement Category I or	
			II, or successful	
			completion of GE area	
LD Major	CS 101	Computer Science I	B4.	4
			MATH 130 with grade C-	
LD Major	MATH 131	Calculus II	or better.	3
,			Total:	15
	•	Third Semester	'	
Е				1
B1/B3	PHYS 135	Physics for Engineers I		4
LD Major	CS 211	Discrete Structures	or better.	3
LD Major	CS 201	Computer Science II	better.	4

A3	PHIL 100	Workshop in Critical Thinking		3
			Total:	15
		Fourth Semester		
LD Major/D1	CS 230	Computing and Social Responsibility		3
Writing II/Second	Com ENGL 200 or PHYS 230			3
Code 1/D2				3
LD Major	CS 221	Architecture	with grade C- or better.	3
LD Major	MATH 225	Numerical Algorithms and Linear Algebra	CS 101 and MATH 130.	3
			Total:	15
		Fifth Semester		
UD-B				3
F				3
UD Major	STAT 316	Statistics for Science and Engineering	MATH 131	3
UD Major	CS 301	Data Structures	CS 201 and CS 211	3
			CS 211 and CS 221, both	
UD Major	CS 321	Computer Architecture	with grade C- or better.	3
			Total:	15
		Sixth Semester		
C2				3
Code 2				3
UD Major	CS 311	Programming Language Concepts	CS 201 and CS 221.	3
			CS/MATH 211 and CS	
UD Major	CS 413	Analysis of Algorithms	301	3
UD Major	CS 441	Computer Networks	CS 301	3
			Total:	15
		Seventh Semester		
UD-D/Overlay				3
UD Major	CS 401	Software Engineering	better.	3
UD Major	CS 421	Operating Systems	better.	3
UD Major	CS 411	Automata and Complexity	both with grade C- or	3
UD Major	CS Breadth			3
			Total:	15

		Eighth Semester	
Add'l C1 or C2*			3
UD-C/Overlay			3
UD Major	CS Breadth		3
UD Major	CS Elective		3
UD Major	CS Elective		3
		Total:	15
Total Units:			120

		Degree: Computer Science, B.S.		
Requirement Area	Course	Course Title	Prerequisites	Units
		First Semester		
Е	GS 101A	Foundations of Success I		1
A1	COMM 100	Communication		3
B2				3
B4	MATH 115	College Algebra		3
B4 Support	MATH 15			1
D1				3
			Total:	14
_		Second Semester		· ·
E	GS 101B	Foundations of Success II		1
A2	ENGL 102			3
C1				3
	MATH 120	Precalculus		3
			Mathematics/QR	
			Placement Category I or	
			II, or successful	
			completion of GE area	
LD Major	CS 101	Computer Science I	B4.	4
F		Ethnic Studies		3
			Total:	17
		Third Semester		
Е				1

	<u> </u>			
			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	
LD Major	MATH 130	Calculus I	better).	4
B1/B3	PHYS 135	Physics for Engineers I		4
LD Major	CS 201	Computer Science II	better.	4
A3	PHIL 100	Workshop in Critical Thinking		3
			Total:	16
		Fourth Semester		
LD Major	CS 211	Discrete Structures	or better.	3
LD Major	MATH 131	Calculus II	or better.	3
LD Major/D2	CS 230	Computing and Social Responsibility		3
Second Comp	ENGL 200 or PHYS 230			3
LD Major	CS 221	Architecture	with grade C- or better.	3
LD Major	MATH 225	Numerical Algorithms and Linear Algebra	CS 101 and MATH 130.	3
			Total:	18
		Fifth Semester		
UD-B/Overlay				3
Code 1				3
UD Major	STAT 316	Statistics for Science and Engineering	MATH 131	3
UD Major	CS 301	Data Structures	CS 201 and CS 211	3
UD Major	CS 321	Computer Architecture	with grade C- or better.	3
			Total:	15
		Sixth Semester		
C2				3
Code 2/D3				3
UD Major	CS 311	Programming Language Concepts	CS 201 and CS 221.	3
UD Major	CS 413	Analysis of Algorithms	301	3

UD Major	CS 441	Computer Networks	CS 301	3
			Total:	15
		Seventh Semester		
UD-D/Overlay				3
UD Major	CS 401	Software Engineering	better.	3
UD Major	CS 421	Operating Systems	better.	3
UD Major	CS 411	Automata and Complexity	both with grade C- or	3
UD Major	CS Breadth			3
			Total:	15
		Eighth Semester	•	
UD-C/Overlay				3
Add'l C1 or C2*				3
UD Major	CS Breadth			3
UD Major	CS Elective			3
UD Major	CS Elective			3
			Total:	15
Total Units:				125

		Degree: Computer Science, B.S.		
Requirement Area	Course	Course Title	Prerequisites	Units
		First Semester		
E	GS 101A	Foundations of Success I		1
A1	COMM 100	Communication		3
B2				3
B4	MATH 115	College Algebra		3
B4 Support	MATH 15			1
	ENGL 100 or 103			3
	ENGL 109			1
			Total:	15
		Second Semester		
Е	GS 101B	Foundations of Success II		1
A2	ENGL 101 or 104			
	ENGL 109			3 1 3
C1				3
	MATH 120	Precalculus		3
			Mathematics/QR	
			Placement Category I or	
			II, or successful	
			completion of GE area	
LD Major	CS 101	Computer Science I	B4.	4
F				3
			Total:	18
		Third Semester		
E				1
LD Major	MATH 130	Calculus I	Satisfactory score of 78	4
B1/B3	PHYS 135	Physics for Engineers I		4

LD Major	CS 201	Computer Science II	better.	4
A3	PHIL 100	Workshop in Critical Thinking		3
			Total:	16
		Fourth Semester	·	
LD Major	CS 211	Discrete Structures	or better.	3
LD Major	MATH 131	Calculus II	or better.	3
LD Major/D1	CS 230	Computing and Social Responsibility		3 3 3
Writing II/Second C	om ENGL 200 or PHYS 230			3
LD Major	CS 221	Architecture	with grade C- or better.	3
LD Major	MATH 225	Numerical Algorithms and Linear Algebra	CS 101 and MATH 130.	3
			Total:	18
		Fifth Semester		
UD-B/Overlay				3
Code 1/D2				3
UD Major	STAT 316	Statistics for Science and Engineering	MATH 131	3
UD Major	CS 301	Data Structures	CS 201 and CS 211	3
UD Major	CS 321	Computer Architecture	with grade C- or better.	3
			Total:	15
		Sixth Semester		
C2				3
Code 2/D3				3
UD Major	CS 311	Programming Language Concepts	CS 201 and CS 221.	3
UD Major	CS 413	Analysis of Algorithms	301	3
UD Major	CS 441	Computer Networks	CS 301	3
			Total:	15
		Seventh Semester		
UD-D/Overlay				3
UD Major	CS 401	Software Engineering	better.	3
UD Major	CS 421	Operating Systems	better.	3
UD Major	CS 411	Automata and Complexity	both with grade C- or	3
UD Major	CS Breadth			3
			Total:	15
		Eighth Semester		

Total Units:				127
			Total:	15
UD Major	CS Elective			3
UD Major	CS Elective			3
UD Major	CS Breadth			3
Add'l C1 or C2*				3
UD-C/Overlay				3

		Degree: Computer Science, B.S.		
Requirement Area	Course	Course Title	Prerequisites	Units
		First Semester	•	
Е	GS 101A	Foundations of Success I		1
A1	COMM 100	Communication		3
B2				1 3 3 5
B4	MATH 125	Precalculus with Algebra		5
D1		_		3
			Total:	15
		Second Semester		
E	GS 101B	Foundations of Success II		1
A2	ENGL 102	English Composition		3
C1				3
LD Major	MATH 130	Calculus I	One from the following:	1 3 3 4 4
LD Major	CS 101	Computer Science I	Mathematics/QR	
			Total:	15
-	T	Third Semester		
E	DLIV6 425	Dharing for French and I		1
B1/B3 LD Major	PHYS 135 MATH 131	Physics for Engineers I Calculus II	MATH 130 with grade C-	4
LD Major	CS 201	Computer Science II	better.	4
A3	PHIL 100	Workshop in Critical Thinking		3
F				
		Fourth Semester	Total:	18
I D Major	CS 211	Discrete Structures	or better.	2
LD Major LD Major/D2	CS 230	Computing and Social Responsibility	or better.	3
	ENGL 200 or PHYS 230	computing and Social Responsibility		3 3
LD Major	CS 221	Architecture	with grade C- or better.	3
נט ועומןטו	C3 221	Architecture	with grade C- or better.	3

LD Major	MATH 225	Numerical Algorithms and Linear Algebra	CS 101 and MATH 130.	3
			Total:	15
		Fifth Semester		
UD-B				3
Code 1				3
UD Major	STAT 316	Statistics for Science and Engineering	MATH 131	3
UD Major	CS 301	Data Structures	CS 201 and CS 211	3
UD Major	CS 321	Computer Architecture	with grade C- or better.	3
			Total:	15
		Sixth Semester		
C2				3
Code 2/D3				3
UD Major	CS 311	Programming Language Concepts	CS 201 and CS 221.	3
UD Major	CS 413	Analysis of Algorithms	301	3
UD Major	CS 441	Computer Networks	CS 301	3
			Total:	15
		Seventh Semester		
UD-D				3
UD Major	CS 401	Software Engineering	better.	3
UD Major	CS 421	Operating Systems	better.	3
UD Major	CS 411	Automata and Complexity	both with grade C- or	3
UD Major	CS Breadth			3
			Total:	15
		Eighth Semester		
Add'l C1 or C2*				3
UD-C				3
UD Major	CS Breadth			3
UD Major	CS Elective			3
UD Major	CS Elective			3
			Total:	15
Total Units:				123

Degree: Computer Science, B.S.							
Requirement Area	Course	Course Title	Prerequisites	Units			
		First Semester					
Е	GS 101A	Foundations of Success I		1			
A1	COMM 100	Communication		3			
B2				3			
B4	MATH 125	Precalculus with Algebra		5			
	ENGL 100 or 103			3			
	ENGL 109			1			
			Total:	16			
		Second Semester	lotal:	16			
E	GS 101B	Foundations of Success II		1			
A2	ENGL 101 or 104	I dulidations of Success if		3			
712	ENGL 109			1			
C1	21102 103			3			
LD Major	MATH 130	Calculus I	One from the following:	4			
LD Major	CS 101	Computer Science I	Mathematics/QR	4			
.,,,		1	Total:	16			
	L	Third Semester					
Е				1			
B1/B3	PHYS 135	Physics for Engineers I		4			
LD Major	MATH 131	Calculus II	MATH 130 with grade C-	3			
LD Major	CS 201	Computer Science II	better.	4			
A3	PHIL 100	Workshop in Critical Thinking		3			
F				3			
			Total:	18			
		Fourth Semester					
LD Major	CS 211	Discrete Structures	or better.	3			
LD Major/D1	CS 230	Computing and Social Responsibility		3			

Writing II/Second (Com ENGL 200 or PHYS 230			3
LD Major	CS 221	Architecture	with grade C- or better.	3
LD Major	MATH 225	Numerical Algorithms and Linear Algebra	CS 101 and MATH 130.	3
			Total:	15
		Fifth Semester		
UD-B				3
Code 1/D2				3
UD Major	STAT 316	Statistics for Science and Engineering	MATH 131	3 3 3
UD Major	CS 301	Data Structures	CS 201 and CS 211	3
UD Major	CS 321	Computer Architecture	with grade C- or better.	3
			Total:	15
		Sixth Semester		
C2				3
Code 2/D3				3
UD Major	CS 311	Programming Language Concepts	CS 201 and CS 221.	3
UD Major	CS 413	Analysis of Algorithms	301	3
UD Major	CS 441	Computer Networks	CS 301	3
			Total:	15
		Seventh Semester		
UD-D				3
UD Major	CS 401	Software Engineering	better.	3
UD Major	CS 421	Operating Systems	better.	3
UD Major	CS 411	Automata and Complexity	both with grade C- or	3
UD Major	CS Breadth			3
			Total:	15
		Eighth Semester		
Add'l C1 or C2*				3
UD-C				3
UD Major	CS Breadth			3
UD Major	CS Elective			3 3 3
UD Major	CS Elective			3
			Total:	15
Total Units:				125