

CENTX 3

Central Texas College

Lamar University

7/29/19

AS in Computer Science

Bachelor of Science in  
Computer Science

Core Area	Completed Courses	Hours	Hours	Course Options
<b>Communication</b>			6	
	ENGL 1301 Composition I	3		ENGL 1301 Composition I
				COMM 1315 Public Speaking I
	SPCH 1321 Business and Professional Speech	3		COMM 1321 Business and Professional Speech
				DSDE 1371 ASL I
				FREN 1311 Beginning French 1
				SPAN 1311 Beginning Spanish I
<b>Math</b>			4	
	MATH 2413 (Component Area Elective)	4		MATH 2413 Calculus and Analytical Geometry I
<b>Life/Physical Sciences</b>			8	
				BIOL 1406 General Biology (Majors)
				BIOL 1407 General Biology II (Majors)
				CHEM 1311 General Chemistry I
				CHEM 1312 General Chemistry II
				PHYS 2425 University Physics I
				PHYS 2426 University Physics II
	ENVR 1401 Environmental Sci I	4		

	PHYS 1415 Physical Science I	4		
<b>Language, Philosophy and Culture</b>				3
				ENGL 2300
				ENGL 2310
				ENGL 2320
				ENGL 2322
				ENGL 2326
				ENGL 2331
				ENGL 2371
				ENGL 2376
				PHIL 1370 Philosophy of Knowledge
				PHIL 2306
	ANTH 2351 Cultural Anthropology	3		
<b>Creative Arts</b>				3
				ARTS 1301
				ARTS 1303
				COMM 1375
				DANC 2304
				MUSI 1306
				MUSI 1310
				PHIL 1330
				THEA 1310
	HUMA 1315	3		
<b>History</b>				6
	HIST 1301	3		HIST 1301
	HIST 1302	3		HIST 1302
				HIST 2301
<b>Govern/Political Science</b>				6
	GOVT 2305	3		POLS 2301
	GOVT 2306	3		POLS 2302
<b>Social/Behavioral Science</b>				3
				ECON 1301

				ECON 2301
				ECON 2302
				INEN 2373
				PSYC 2301
				SOCI 1301
	PSYC 2315 Psychology of Adjustment	3		
<b>Component Area Option</b>			7	
				ENGL 1302
				MATH 2414
<b>Required Courses for Major</b>			56	
				COSC 1172 Think, Speak, Write
				COSC 1173 Fundamentals I Lab
				COSC 1174 Fundamentals II Lab
	COSC 1336 Programming Fundamentals I	3		COSC 1336 Programming Fundamentals I
	COSC 1337 Programming Fundamentals II	3		COSC 1337 Programming Fundamentals II
	COSC 2336 Programming Fundamentals III	3		COSC 2336 Programming Fundamentals III
	COSC 2325 Computer Organization	3		COSC 2372 Computer Organization Assembly Language
				COSC 2375 Discrete Structures
				COSC 3302 Intro to Computer Theory
				COSC 3304 Analysis and Design of Algorithms
				COSC 3308 Design Programming Languages

				COSC 3325 Computer Law and Ethics
				COSC 4272 Senior Assessment
				COSC 4302 Operating Systems
				COSC 4310 Intro to Computer Architecture
				CPSC4317 Computer Networks
				CPSC 4340 Database Design
				CPSC 4360 Software Engineering
				MATH 2318 Linear Algebra
				MATH 3370 Intro to the Theory of Statistical Inference
				MATH 2415 or MATH 3322
<b>COSC/CPSC Elective</b>			6	
				COSC 4301 Special Topics
				COSC 4307 Compiler construction
				COSC 4309 Intro to Simulation Technology
				COSC 4319 Computer Graphics
				COSC 4322 Internet Programming
				COSC 4324 Computer Game Dev I
				COSC 4345 Computer Network Security
				CPSC 3316
				CPSC 4315
				CPSC 4316
				CPSC 4320
				CPSC 4328
				CPSC 4330

				CPSC 4370
<b>COSC/CPSC/EL EN Elective</b>			<b>6</b>	
				COSC 4301 Special Topics
				COSC 4307 Compiler Construction
				COSC 4309 Intro to Simulation Technology
				COSC 4319 Computer Graphics
				COSC 4322 Internet Programming
				COSC 4324 Computer Game Dev I
				COSC 4345 Computer Network Security
				CPSC 3316
				CPSC 4315
				CPSC 4316
				CPSC 4320
				CPSC 4328
				CPSC 4330
				CPSC 4370
				ELEN 3381
				ELEN 4486
				ELEN 4387
				ELEN 4304
<b>Lab Science</b>			<b>4</b>	
				BIOL 1406 General Biology (Majors)
				BIOL 1407 General Biology II (Majors)
				CHEM 1311 General Chemistry I
				CHEM 1312 General Chemistry II
				PHYS 2425 University Physics I
				PHYS 2426 University Physics II

Academic Elective			3	
	MATH 1332, 1342, or 1314	3		
Transferable Hours	54		121	

COSC 1301 Intro to Computing 3  
 COSC 1315 Intro to Computer Programming 3

FOUR-YEAR DEGREE MAP 20 - 20

(RECOMMENDED) FIRST YEAR AT CENTRAL TEXAS COLLEGE	FALL			SPRING			SUMMER (IF APPLICABLE)		
	Course	Title	Credit Hours	Course	Title	Credit Hours	Course	Title	Credit Hours
	COSC 1301	Intro to Computing	3	COSC 1336	Program Fundamentals I	3			
	COSC 1315	Intro to Computer Programming	3	SPCH 1321	Business and Professional Communication	3			
	ENGL 1301	Composition I	3	PHYS 1415	Physical Sci I	4			
	MATH 1332, 1314 or 1342		3	ANTH 2351	Cultural Anthropology	3			
	HIST 1301	U S History I	3	HIST 1302	U S History II	3			
	Fall Total Credit Hours		15	Spring Total Credit Hours		16	Summer Total Credit Hours		

(RECOMMENDED) SECOND YEAR	FALL			SPRING			SUMMER (IF APPLICABLE)		
	Course	Title	Credit Hours	Course	Title	Credit Hours	Course	Title	Credit Hours
	COSC 1337	Program Fundamentals II	3	COSC 2336	Program Fundamentals III	3			

COSC 2325	Computer Organization	3	GOVT 2306	Texas Government	3			
HUMA 1315	Fine Arts Appreciation	3	ENVR 1401	Environmental Science I	4			
GOVT 2305	Federal Government	3	MATH 2413 (Component Area Elective)	Calculus I	4			
PSYC 2315	Psychology of Adjustment	3						
<b>Fall Total Credit Hours</b>		<b>15</b>	<b>Spring Total Credit Hours</b>		<b>14</b>	<b>Summer Total Credit Hours</b>		

**FOUR-YEAR DEGREE MAP 20 - 20**

Additional Coursework	FALL			SPRING			SUMMER (IF APPLICABLE)		
	Course	Title	Credit Hours	Course	Title	Credit Hours	Course	Title	Credit Hours
	COSC 1173	Fundamentals Lab I	1						
	COSC 1174	Fundamentals Lab II	1						
	MATH 2318	Linear Algebra	3						
	<b>Credit Hours</b>		<b>5</b>	<b>Spring Total Credit Hours</b>			<b>Summer Total Credit Hours</b>		

THIRD YEAR AT LAMAR UNIVERSITY	FALL			SPRING		
	Course	Title	Credit Hours	Course	Title	Credit Hours
	COSC 1172	Think Speak Write	1	COSC 3304	Algorithms	3
	COSC 2375	Discrete Structures	3	COSC 3325	Computer Law/Ethics	3
	BIOL 1406/1407, CHEM 1111&1311 or CHEM 1112 & 1312		4	COSC 3302	Intro Computer Theory	3
	COSC/CPSC/ELEN Elective		3	MATH 3322/2415		3-4

FOURTH YEAR AT LAMAR UNIVERSITY	COSC 4302	Operating Systems	3	MATH 2318	Linear Algebra	3
	COSC 1173	Fundamentals Lab I	1			
	<b>Fall Total Credit Hours</b>		<b>15</b>	<b>Spring Total Credit Hours</b>		<b>15-16</b>

**NOTES/COMMENTS:**

FOURTH YEAR AT LAMAR UNIVERSITY	FALL			SPRING		
	Course	Title	Credit Hours	Course	Title	Credit Hours
	COSC 3308	Programming Languages	3	COSC/CPSC Elective		3
	MATH 3370	Intro Theory Statistical Analysis	3	CPSC 4310	Computer Architecture	3
	CPSC 4317	Computer Networks	3	COSC/CPSC ELEN Elective		3
	COSC/CPSC Elective		3	COSC 4272	Senior Seminar	2
	CPSC 4360	Software Engineering	3	CPSC 4340	Database Design	3
				COSC 1174	Fundamentals Lab II	1
<b>Fall Total Credit Hours</b>			<b>15</b>	<b>Spring Total Credit Hours</b>		<b>15</b>