

COMPUTER SCIENCE
Louisiana Tech University
Curriculum as of 2019 to Current

Name _____

Date _____

CWID _____

Email _____@latech.edu

COURSE	PREREQUISITE	SCH	QTR	GRADE
CSC 130	MATH 101 or equivalent	3		R*
131	CSC 130 or CYEN 130	3		R*
132	CSC 131 or CYEN 131	3		R*
220	CSC 132 or CYEN 132, MATH 240o	3		R*
222	CSC 132 or CYEN 132, MATH 240o	3		R*
265	CSC 132 or CYEN 132	3		R*
310	CSC 220, MATH 311	3		R
325	CSC 220, MATH 311o	3		R*
330	CSC 325	3		R
345	CSC 222	3		R
364	CSC 265	3		R
403	CSC 325, Senior Standing	3		R*
405	CSC 403	2		R*
406	CSC 405	1		R
430	CSC 220	3		R
BISC 130		3		
131	BISC 130o	1		
COMM 101	FYE 100o	3		□
ENGL 101		3		
102	ENGL 101	3		
210, 211, 212	ENGL 102	3		
303	ENGL 102	3		
363	ENGL 303	3		
MATH 240	Math ACT > 26 or Math SAT > 609 or placement	3		*
241	MATH 240	3		*
242	MATH 241	3		*
311	MATH 242	3		*
PHYS 201	MATH 241	3		*
202	PHYS 201 MATH 242	3		
261	MATH 112 or 240	1		*
262	PHYS 261	1		
STAT 405	MATH 242	3		
ELECTIVES/ GER				
Fine Arts Appr.(ART 290, KINE 280, MUGN 290, or THTR 290)		3		
CSC Directed Elective		3		R
CSC Directed Elective		3		R
CSC Directed Elective		3		R
MATH Directed Elective		3		
Minor/Concentration		3		
Minor/Concentration		3		
Minor/Concentration		3		
Minor/Concentration		3		
Social Science		3		
Social Science		3		
TOTAL SEMESTER HOURS		120		

SUBSTITUTIONS		
COURSE	SCH	GRADE
1 _____		
2 _____		
3 _____		
4 _____		
5 _____		

ADDITIONAL COURSES		
COURSE	SCH	GRADE
1 _____		
2 _____		
3 _____		
4 _____		
5 _____		
6 _____		

GPA
Rubric GPA _____

NOTES
<ul style="list-style-type: none"> * requires grade of "C" or higher o credit or registration in R course in rubric □ must be taken within first year of enrollment <ol style="list-style-type: none"> 1 Directed electives must be selected in consultation with advisor. 2 Petitions must be filed for substitutions. 3 A student must have a minimum 2.0 GPA on all hours pursued in courses designated: CSC.

ADDITIONAL COMMENTS

Advisor: _____

COMPUTER SCIENCE
Louisiana Tech University

FRESHMAN YEAR											
Fall Quarter			Hr	Winter Quarter			Hr	Spring Quarter			Hr
CSC	130	* The Science of Computing I	3	CSC	131	* The Science of Computing II	3	CSC	132	* The Science of Computing III	3
MATH	240	* Precalculus	3	MATH	241	* Calculus I	3	MATH	242	* Calculus II	3
ENGL	101	Freshman Composition I	3	ENGL	102	Freshman Composition I	3	BISC	130	Biological Principles	3
FYE	100	Freshman Year Experience	1	COMM	101	□ Principles of Comm. Studies	3	BISC	131	Biological Principles Lab	1
			10				12				10

SOPHOMORE YEAR											
Fall Quarter			Hr	Winter Quarter			Hr	Spring Quarter			Hr
CSC	220	* Data Structures	3	CSC	222	* Systems Programming	3	CSC	345	Operating Systems	3
CSC	265	* Introduction to Digital Design	3	PHYS	201	* Physics for Engr & Science I	3	PHYS	202	Physics for Engr & Science II	3
MATH	311	Discrete Mathematics I	3	PHYS	261	* General Physics Laboratory	1	PHYS	262	General Physics Laboratory	1
Fine Arts Appreciation			3	Social Science**			3	Social Science**			3
			12				10				10

JUNIOR YEAR												
Fall Quarter			Hr	Winter Quarter			Hr	Spring Quarter			Hr	
CSC 325	*	Adv. Data Structures & Algorithms	3	CSC 330	Programming Languages			3	CSC 310	Theory of Computing		3
ENGL 210, 211, or 212			3	CSC 430	Database Mgmt. Systems			3	CSC 364	Computer Architecture		3
Math Elective†			3	CSC Directed Elective‡				3	Minor/Concentration		3	
				ENGL 303	Technical Writing			3				
			9				12				9	

SENIOR YEAR								
Fall Quarter		Hr	Winter Quarter		Hr	Spring Quarter		Hr
CSC 403 *		3	CSC 405 * Senior Capstone I		2	CSC 406 Senior Capstone II		1
CSC Directed Elective◊		3	STAT 405 Statistical Methods		3	ENGL 363 Scientific & Tech. Presentations		3
Minor/Concentration		3	Minor/Concentrartion		3	CSC Directed Elective◊		3
						Minor/Concentration		3
		9			8			10

* Requires grade of "C" or higher.

□ Must be taken within first year of enrollment.

Courses in **bold** are *typically* offered once per year.

**Social Science Electives can be selected from Anthropology, Criminal Justice, Economics, Geography, International Studies, Interdisciplinary, Political Science, Psychology, and Sociology.

◊Directe Electives are chosen in consultation with academic advisor.

‡ Math Elective must be above 242. Math 308 highly recommended.

COMPUTER SCIENCE CONCENTRATIONS
Louisiana Tech University

CLOUD COMPUTING AND BIG DATA CONCENTRATION				
COURSE		SCH	GRADE	PREREQUISITE
CSC 450 or 475 452 493 498	Computer Networks	3		CSC 325
	<i>Artificial Intelligence</i>			CSC 325
	Distributed and Cloud Computing	3		CSC 345
	Data Mining and Knowledge Discovery	3		CSC 325
	Advanced Data Mining, Fusion, and Application	3		CSC 325
TOTAL		12		

COMPUTER ENGINEERING CONCENTRATION				
COURSE		SCH	GRADE	PREREQUISITE
ELEN 242 333 423	Introduction to Microprocessors	3		MATH 242
	Introduction to Digital Design	3		ELEN 242
	Embedded Systems	3		ELEN 242
ENGR 221	Electrical Engineering and Circuits I	3		ENGR 122, MATH 242, PHYS 201
TOTAL		12		

CYBER SECURITY CONCENTRATION				
COURSE		SCH	GRADE	PREREQUISITE
CSC 442 450	Introduction to Cyber Security	3		CSC 220 & Permission of Instructor
	Computer Networks	3		CSC 325
Two of the following:				
CSC 443 444 446 447 448 452 454 475	Digital Forensics and Cyber Crime	3		CSC 442
	Applied Cryptography	3		CSC 442
	Access Control Logic and Covert Channels	3		CSC 442, MATH 311
	Wireless Mobile Security	3		CSC 442
	Reverse Engineering	3		CSC 442
	Distributed and Cloud Computing	3		CSC 345
	Advanced Computer Networks	3		CSC 450
	Artificial Intelligence	3		CSC 325
MATH 308	Introduction to Linear Algebra	3		MATH 243 or 311
TOTAL		12		

GRAPHICS AND GAME DESIGN CONCENTRATION				
COURSE		SCH	GRADE	PREREQUISITE
CSC 470 475 477	Computer Graphics	3		CSC 325
	Artificial Intelligence	3		CSC 325
	Game Design	3		CSC 220 & Permission of Instructor
MATH 308	Introduction to Linear Algebra	3		MATH 243 or 311
TOTAL		12		

* requires grade of "C" or higher.