

CYBER ENGINEERING
Louisiana Tech University
Curriculum as of 2021

Name _____

Date _____

CWID _____

Email _____@latech.edu

COURSE	PREREQUISITE	SCH	QTR	GRADE
CYEN 130	MATH 101 or equivalent	3		R*
131	CSC 130 or CYEN 130	3		R*
132	CSC 131 or CYEN 131	3		R*
301	CSC 220	3	Sp	R*
400	Junior Standing	3	Sp	R*
480	CSC 220, MATH 311	3		R*
481	CYEN 480 and Senior Standing	3	W	R*
483	CYEN 481, C or better in ENGR 220, 221, & 222	2		R*
484	CYEN 483	1		R
BISC 101		3		
COMM 101		3		
CSC 220	CSC 132 or CYEN 132, MATH 240o	3		R*
222	CSC 132 or CYEN 132, MATH 240o	3	W	R*
345	CSC 222	3	Sp	R*
450	CSC 345	3		R*
ENGL 101		3		
102	ENGL 101	3		
303	ENGL 102	3		
ELEN 242	MATH 242o	3		R*
333	ELEN 242	3		R*
423	ELEN 242	3	F	R*
ENGR 120	MATH 240o, CHEM 100o	2		*
121	ENGR 120, MATH 241o, CHEM 101o	2		*
122	ENGR 121, MATH 242o	2		*
220	ENGR 122, MATH 242, PHYS 201	3		
221	ENGR 122, MATH 242, PHYS 201	3		
222	ENGR 122, MATH 242	3		
INEN 300		2		
MATH 241	MATH 240	3		*
242	MATH 241	3		*
243	MATH 242	3		*
244	MATH 243	3		*
245	MATH 244	3		*
308	MATH 243 or 311	3		
311	MATH 242	3		
PHYS 201	MATH 241	3		*
202	MATH 242, PHYS 201	3		
STAT 405	MATH 242	3		*
ELECTIVES				
Fine Arts Appr. (ART 290, KINE 280, MUGN 290, or THTR 290)		3		
CYEN Directed Elective		3		*
CYEN Directed Elective		3		*
CYEN Directed Elective		3		*
History	Information Warfare (HIST 490)	3	W	
Social Science	Security Policy & Legal Issues (LBAR 389C)	3	Sp	
Social Science		3		
TOTAL SEMESTER HOURS		128		

SUBSTITUTIONS		
COURSE	SCH	GRADE
1		
2		
3		
4		
5		

ADDITIONAL COURSES		
COURSE	SCH	GRADE
1		
2		
3		
4		
5		

GPA	
Rubric GPA	_____
MATH 241-244 GPA	_____

NOTES	
*	requires grade of "C" or higher
o	credit or registration in
R	course in rubric
□	must be taken within first year of enrollment
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: CYEN.

ADDITIONAL COMMENTS	

Advisor Signature: _____

CYBER ENGINEERING
Louisiana Tech University

FRESHMAN YEAR					
Fall Quarter	Hr	Winter Quarter	Hr	Spring Quarter	Hr
ENGR 120 * <u>Engineering Problem Solving I</u>	2	ENGR 121 * <u>Engineering Problem Solving II</u>	2	ENGR 122 * <u>Engineering Problem Solving III</u>	2
MATH 240 * <u>Precalculus</u>	3	MATH 241 * <u>Calculus I</u>	3	MATH 242 * <u>Calculus II</u>	3
CYEN 130 * <u>The Science of Computing I</u>	3	CYEN 131 * <u>The Science of Computing II</u>	3	CYEN 132 * <u>The Science of Computing III</u>	3
COMM 101 □ <u>Principles of Communication</u>	3	ENGL 101 <u>Freshman Composition I</u>	3	ENGL 102 <u>Freshman Composition II</u>	3
FYE 100 <u>Freshman Year Experience</u>	1				
	12		11		11

SOPHOMORE YEAR					
Fall Quarter	Hr	Winter Quarter	Hr	Spring Quarter	Hr
CSC 220 * <u>Data Structures</u>	3	CSC 222 * <u>Systems Programming</u>	3	CSC 345 * <u>Operating Systems</u>	3
ELEN 242 * <u>Introduction to Microprocessors</u>	3	ENGR 220 <u>Statics & Mechanics of Materials</u>	3	CYEN 301 * <u>Computer Network Security</u>	3
MATH 243 * <u>Calculus III</u>	3	MATH 244 * <u>Calculus IV</u>	3	ELEN 333 * <u>Introduction to Digital Design</u>	3
PHYS 201 * <u>Physics for Engr. & Science I</u>	3	History <u>Information Warfare</u>	3	MATH 311 * <u>Discrete Mathematics I</u>	3
	12		12		12

JUNIOR YEAR					
Fall Quarter	Hr	Winter Quarter	Hr	Spring Quarter	Hr
ELEN 423 * <u>Embedded Systems</u>	3	CSC 450 * <u>Computer Networks</u>	3	CYEN 480 * <u>Theory of Cyber Science</u>	3
ENGR 221 <u>Electrical Engineering & Circuits I</u>	3	ENGR 222 <u>Thermodynamics</u>	3	PHYS 202 <u>Physics for Engr & Science II</u>	3
MATH 245 * <u>Differential Equations</u>	3	MATH 308 <u>Introduction to Linear Algebra</u>	3	Social Science <u>Security Policy & Legal Issues</u>	3
CYEN Directed Elective ◊	3	CYEN Directed Elective ◊	3	CYEN Directed Elective ◊	3
	12		12		12

SENIOR YEAR					
Fall Quarter	Hr	Winter Quarter	Hr	Spring Quarter	Hr
BISC 101 <u>Fundamentals of Biology I</u>	3	CYEN 483 * <u>Software Design and Engineering</u>	2	CYEN 400 * <u>Cyber Futures</u>	3
ENGL 303 <u>Technical Writing</u>	3	INEN 300 <u>Engineering Economics</u>	2	CYEN 484 * <u>Senior Capstone</u>	1
CYEN 481 * <u>Software Design and Engineering</u>	3	STAT 405 * <u>Statistical Methods</u>	3	Fine Arts Appreciation	3
Social Science Elective**	3				
	12		7		7

MATH 240 does not count towards the Cyber Engineering degree.

* Requires grade of "C" or higher.

□ Must be taken within first year of enrollment

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

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

◊Directed Electives are chosen in consultation with advisor.