

CIVIL ENGINEERING
Louisiana Tech University
Curriculum as of 2022

Name _____

Date _____

CWID _____

Email _____@latech.edu

COURSE	PREREQUISITE	SCH	QTR	GRADE
CVEN 200		1		R
254	MATH 112 or 240	3		R
302	ENGR 122 or MEMT 206	3		R
310	MEMT 313	3	Sp	R
314	CHEM 102	3	W	R
324	MEMT 212	3		R
325	CVEN 324	3	F	R
332	ENGR 122	3	F	R
333	CVEN 332	3	W	R
340	MEMT 212	3	F	R
343	CVEN 302, 340	3	W	R
344	CVEN 340	3		R
345	CVEN 492	1		R
393	ENGR 122, MATH 245	3	W	R
461	Jr Standing	3	Sp	R
492	4 out of 5 courses: CVEN 254, 310, 324, 332, 340	1	F	R
493	CVEN 492	1	W	R
494	CVEN 493	1	Sp	R
BISC 101		3		
CHEM 101	CHEM 100	2		*
102	CHEM 101	2		*
103	CHEM 100, 101○	1		*
104	CHEM 102○, CHEM 103	1		
COMM 101	FYE 100○	3		
ENGL 101		3		
102	ENGL 101	3		
303	ENGL 102	3		
ENGR 120	MATH 240○, CHEM 100○	2		*
121	ENGR 120, MATH 241○, CHEM 101○	2		*
122	ENGR 121, MATH 242○	2		*
220	ENGR 122, MATH 242, PHYS 201	3		R*
221	ENGR 122, MATH 242, PHYS 201	3		
222	ENGR 122, MATH 242	3		
MATH 241	MATH 240	3		*
242	MATH 241	3		*
243	MATH 242	3		*
244	MATH 243	3		*
245	MATH 244	3		
MEMT 203	ENGR 220	3		R
212	ENGR 220, MATH 241-243 GPA ≥ 2.0	3	W	R*
313	ENGR 222, MEMT 203, MATH 241-244 GPA ≥ 2.0	3		R*
PHYS 201	Math 241	3		*
ELECTIVES/ GER				
Art (ART 290, KINE 280, MUGN 290, or THTR 290)		3		
Directed Elective		3		
Directed Elective		3		
Directed Elective		3		
Humanity		3		
Social Science		3		
Social Science		3		
TOTAL SEMESTER HOURS		128		

SUBSTITUTIONS		
COURSE	SCH	GRADE
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

ADDITIONAL COURSES		
COURSE	SCH	GRADE
1		
2		
3		
4		
5		

GPA	
Rubric GPA	_____
MATH 241-244 GPA	_____

NOTES	
* requires grade of "C" or higher	
○ 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: CVEN.	

ADDITIONAL COMMENTS	

Advisor: _____

CIVIL ENGINEERING
Louisiana Tech University

FRESHMAN YEAR														
Fall Quarter				Hr	Winter Quarter				Hr	Spring Quarter				Hr
ENGR	120	*	Engineering Problem Solving I	2	ENGR	121	*	Engineering Problem Solving II	2	ENGR	122	*	Engineering Problem Solving III	2
MATH	240	*	Precalculus	3	MATH	241	*	Calculus I	3	MATH	242	*	Calculus II	3
CHEM	100	*	General Chemistry	2	CHEM	101	*	General Chemistry	2	PHYS	201	*	Physics for Engr & Science I	3
COMM	101		Principles of Comm Studies	3	CHEM	103	*	General Chemistry Laboratory	1	ENGL	102		Freshman Composition II	3
FYE	100		First Year Experience	1	ENGL	101		Freshman Composition I	3					
				11					11					11

SOPHOMORE YEAR											
Fall Quarter			Hr	Winter Quarter			Hr	Spring Quarter			Hr
ENGR	221	Electrical Engineering & Circuits I	3	CVEN	302	CVEN Construction Materials	3	CVEN	254	Plane Surveying	3
ENGR	220	* Statics & Mechanics of Materials	3	MATH	244	* Calculus IV	3	ENGR	222	Thermodynamics	3
MATH	243	* Calculus III	3	CHEM	102	* General Chemistry	2	MATH	245	Differential Equations	3
CVEN	200	Introduction to Civil Engineering	1	CHEM	104	General Chemistry Laboratory	1	ENGL	303	Technical Writing	3
				MEMT	212	* Inter. Statics & Mechanics of Materials	3				
			10				12				12

JUNIOR YEAR											
Fall Quarter			Hr	Winter Quarter			Hr	Spring Quarter			Hr
CVEN	332	Highway Engineering I	3	CVEN	314	Environmental Engineering	3	CVEN	310	Water Resources I	3
CVEN	340	Structural Analysis and Design	3	CVEN	333	Highway Engineering II	3	CVEN	324	Intro to Soils Engineering	3
BISC	101	Fundamentals of Biology	3	CVEN	343	Reinforced Concrete Design	3	CVEN	344	Steel Design	3
MEMT	203	Dynamics	3	MEMT	313 *	Elementary Fluid Mechanics	3	Social Science**			3
			12				12				12

SENIOR YEAR											
Fall Quarter			Hr	Winter Quarter			Hr	Spring Quarter			Hr
CVEN 325	Intro to Foundation Engineering		3	CVEN 393	Numerical Methods in CVEN		3	CVEN 461	Civil Engineering Construction Fun		3
CVEN 492	Civil Engineering Design I		1	CVEN 493	Civil Engineering Design II		1	CVEN 494	Civil Engineering Design III		1
Fine Arts Appreciation			3	CVEN 345	Fundamentals of Professional Eng		1	Directed Elective◊			3
Humanity†			3	Directed Elective◊			3	Social Science**			3
				Directed Elective◊			3				
			10				11				10

Neither MATH 240 nor CHEM 100 count towards the civil 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.

†Humanities electives can be selected from Classical Studies, Communications, Foreign Languages, History, Literature, Philosophy, Religious Studies, Interdisciplinary

◇Directed Electives are chosen by student in consultation with faculty advisor. Students must take at least two from CVEN 423, 427, 440, 450C, (Topics in Bridge Engineering), 450C (MEMT 577), 450C (CVEN 504), 455, 464, and 466.

Students may take one from: CVEN 355, 358, 435, 436, 437, 438, 442, 450C (Rehab and Managing Buried Structures), 456, and 480.