

# CHEMICAL ENGINEERING

Louisiana Tech University  
Curriculum as of 2019 to Current

Name \_\_\_\_\_

Date \_\_\_\_\_

CWID \_\_\_\_\_

Email \_\_\_\_\_@latech.edu

COURSE	PREREQUISITE	SCH	QTR	GRADE
CMEN 202	ENGR 122 <sup>o</sup> , MATH 241	3		R*
213	CMEN 202 <sup>o</sup> , MATH 243	3		R*
301	Sophomore Standing	1		R*
302	CMEN 202, 213	3		R*
304	CMEN 313, MATH 245, MATH GPA ≥ 2.0	3		R*
313	CMEN 202, 213, ENGR 222, MATH 245	3		R*
332	CMEN 202, ENGR 222	3		R*
354	CMEN 313 <sup>o</sup>	2		R*
402	CMEN 202, Senior Standing	3		R*
407	CMEN 202, Senior Standing	3		R*
413	CMEN 202, 213 <sup>o</sup> , ENGR 222	3		R*
425	CMEN 202, MATH 245 <sup>o</sup>	3		R*
431	ENGR 220, 221, CMEN 213, 313, 332, 413	3		R*
432	CMEN 431	2		R*
434	CMEN 432	2		R*
453	CMEN 313, 354, 413	2		R*
BISC 130		3		
CHEM 101	CHEM 100	2		*
102	CHEM 101	2		*
103	CHEM 100, 101 <sup>o</sup>	1		*
104	CHEM 103	1		*
250	CHEM 102	2		*
251	CHEM 250, CHEM 253 <sup>o</sup>	2		*
252	CHEM 251	2		*
253	CHEM 102, 251 <sup>o</sup>	1		*
COMM 101		3		<input type="checkbox"/>
ENGL 101		3		
102	ENGL 101	3		
303	ENGL 102	3		
ENGR 120	MATH 240 <sup>o</sup> , CHEM 100 <sup>o</sup>	2		*
121	ENGR 120, MATH 241 <sup>o</sup> , CHEM 101 <sup>o</sup>	2		*
122	ENGR 121, MATH 242 <sup>o</sup>	2		*
220	ENGR 122, MATH 242, PHYS 201	3		
221	ENGR 122, MATH 242, PHYS 201	3		
222	ENGR 122, MATH 242	3		R*
425		1		*
HIST		3		
MATH 241	MATH 240	3		*
242	MATH 241	3		*
243	MATH 242	3		*
244	MATH 243	3		*
245	MATH 244	3		*
PHYS 201	MATH 241	3		*
<b>ELECTIVES</b>				
Art (ART 290, KINE 280, MUGN 290, or THTR 290)		3		
ENGL 363(or COMM 378) Prerequisite for ENGL 363: ENGL 303		3		
Directed Elective		3		R*
Directed Elective		3		R*
Directed Elective		3		R*
Social Science		3		
Social Science		3		
<b>TOTAL SEMESTER HOURS</b>		<b>128</b>		

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 GPA (241-245)	_____

NOTES	
* requires grade of "C" or higher	
o credit or registration in	
R course in rubric	
<input type="checkbox"/> must be completed 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: CMEN, ENGR 222, and Directed Electives.	

ADDITIONAL COMMENTS	

Advisor: \_\_\_\_\_

# CHEMICAL 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	CHEM 102 * General Chemistry	2
COMM 101 □ Principles of Comm Studies	3	CHEM 103 * General Chemistry Lab	1	CHEM 104 * General Chemistry Lab	1
FYE 100 First Year Experience	1	ENGL 101 Freshman Composition I	3	ENGL 102 Freshman Composition II	3
	11		11		11

SOPHOMORE YEAR					
Fall Quarter	Hr	Winter Quarter	Hr	Spring Quarter	Hr
CMEN 202 * Chemical Engr Calculations	3	CHEM 251 * Organic Chemistry	2	<b>CMEN 213</b> * Unit Ops - Design I- Fluids	3
<b>CMEN 301</b> * CMEN Seminar	1	CHEM 253 * Organic Chemistry Lab	1	CHEM 252 * Organic Chemistry	2
CHEM 250 * Organic Chemistry	2	ENGR 222 * Thermodynamics	3	ENGR 221 Electrical Engineering & Circuits I	3
MATH 243 * Calculus III	3	ENGL 303 Technical Writing	3	MATH 245 * Differential Equations	3
PHYS 201 * Physics for Engr & Sci I	3	MATH 244 * Calculus IV	3		
	12		12		11

JUNIOR YEAR					
Fall Quarter	Hr	Winter Quarter	Hr	Spring Quarter	Hr
CMEN 413 * Unit Ops.-Design III -Separations	3	CMEN 313 * Unit Ops-Design II-Heat Transfer	3	<b>CMEN 302</b> * Process Safety in Chemical Ind.	3
BISC 130 Biological Principles	3	<b>CMEN 332</b> * CMEN Thermodynamics II	3	<b>CMEN 304</b> * Transport Phenomena	3
Directed Elective◇	3	<b>CMEN 354</b> * Junior Lab	2	<b>CMEN 425</b> * Numerical Methods for CMEN	3
Social Science**	3	ENGR 220 Statics & Mechanics of Materials	3	ENGL 363 Science & Technical Presentations	3
	12		11	(May take Comm 378 instead)	12

SENIOR YEAR					
Fall Quarter	Hr	Winter Quarter	Hr	Spring Quarter	Hr
<b>CMEN 402</b> * Chemical Reaction Engineering	3	<b>CMEN 407</b> * Instrum & Auto Process Control	3	<b>CMEN 434</b> * Chemical Plant Design III	2
<b>CMEN 431</b> * Chemical Plant Design I	3	<b>CMEN 432</b> * Chemical Plant Design II	2	Directed Elective ◇	3
<b>CMEN 453</b> * Senior Chemical Engineering Lab	2	Directed Elective ◇	3	Fine Arts Appreciation	3
ENGR 425 * Engr Ethics and Professionalism	1	History Elective	3	Social Science**	3
	9		11		11

Neither MATH 240 nor CHEM 100 count towards the chemical engineering degree.

\* Requires grade of "C" or higher.

□ Must be completed 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, 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 selected by student in consultation with academic advisor.