

# INDUSTRIAL ENGINEERING

Louisiana Tech University  
Curriculum as of 2019 to Current

Name \_\_\_\_\_

Date \_\_\_\_\_

CWID \_\_\_\_\_

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

COURSE	PREREQUISITE	SCH	QTR	GRADE
INEN 300		2		R
301		3		R
315	ENGR 122	3		R
400	MATH 242, 240-242 GPA $\geq$ 2.0	3		R
401	INEN 400	3		R
402	INEN 400 <sup>o</sup> , 240-242 GPA > 2.0	3		R
403	INEN 400, 401	3		R
404	INEN 400, 402	2		R
406	INEN 300	2		R
407	INEN 400, 402, 404	3		R
408	INEN 300	3		R
409	INEN 300	3		R
410	INEN 402	3		R
413	INEN 300	3		R
414	MATH 242	3		R
421	MATH 245, ENGR 220, INEN 401,409	1		R
422	INEN 421	1		R
423	INEN 422	1		R
BISC 101		3		
CHEM 101	CHEM 100	2		*
102	CHEM 101	2		*
103	CHEM 101 <sup>o</sup> , CHEM 100	1		*
COMM 101		3		
ENGL 101		3		
102	ENGL 101	3		
303	ENGL 102	3		
363	ENGL 303	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		
425		1		
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 MATH 311	3		
MEEN 215	MEMT 201 <sup>o</sup>	1		
321	MEMT 201	2		
MEMT 201	ENGR 122	2		
PHYS 201	MATH 241	3		*
202	PHYS 201, MATH 242	3		
<b>ELECTIVES</b>				
Fine Arts Appr. (ART 290, KINE 280, MUGN 290, or THTR 290)		3		
Directed Elective		3		*
HIST		3		
Social Science		3		
Social Science		3		
<b>TOTAL SEMESTER HOURS</b>		<b>128</b>		

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	
<sup>o</sup> credit or registration in	
R course in rubric	
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: INEN	

ADDITIONAL COMMENTS	

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

# INDUSTRIAL ENGINEERING

Louisiana Tech University

FRESHMAN YEAR								
Fall Quarter		Hr	Winter Quarter		Hr	Spring Quarter		Hr
ENGR 120	* Engr Problem Solving I	2	ENGR 121	* Engr Problem Solving 2	2	ENGR 122	* Engr Problem Solving 3	2
MATH 240	* Math for Engr & Science	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
ENGL 101	Freshmen Composition I	3	CHEM 103	* General Chemistry Lab	1	COMM 101	<input type="checkbox"/> Principles of Comm Studies	3
FYE 100	Freshman Year Experience	1	ENGL 102	Freshmen Composition II	3			
		11			11			11

SOPHOMORE YEAR								
Fall Quarter		Hr	Winter Quarter		Hr	Spring Quarter		Hr
ENGR 220	Statics & Mechs of Materials	3	ENGR 221	Electrical Engr & Circuits I	3	ENGR 222	Thermodynamics	3
MATH 243	* Calculus III	3	MATH 244	* Calculus IV	3	MATH 245	Differential Equations	3
INEN 300	Engineering Economics	2	<b>INEN 301</b>	<b>Industrial Cost Analysis</b>	3	MATH 308	Linear Algebra	3
MEMT 201	Engineering Materials	2	<b>INEN 315</b>	<b>Computer-Aided Engineering</b>	3	PHYS 202	Physics for Engr. & Science II	3
CHEM 102	* General Chemistry	2						
		12			12			12

JUNIOR YEAR								
Fall Quarter		Hr	Winter Quarter		Hr	Spring Quarter		Hr
<b>INEN 400</b>	<b>Engineering Statistics I</b>	3	<b>INEN 401</b>	<b>Engineering Statistics II</b>	3	<b>INEN 403</b>	<b>Design of Experiments</b>	3
<b>INEN 402</b>	<b>Intro to Operations Research</b>	3	<b>INEN 404</b>	<b>Operations Research</b>	2	<b>INEN 413</b>	<b>Robotics &amp; Automation</b>	3
<b>INEN 409</b>	<b>Work Design</b>	3	ENGL 303	Technical Writing	3	<b>INEN 414</b>	<b>Industrial Ergonomics</b>	3
Social Science **		3	MEEN 215	Engineering Materials Lab	1	ENGL 363	Scientific/Tech Presentations	3
			MEEN 321	Manufacturing Processes	2			
		12			11			12

SENIOR YEAR								
Fall Quarter		Hr	Winter Quarter		Hr	Spring Quarter		Hr
<b>INEN 407</b>	<b>Simulation</b>	3	<b>INEN 406</b>	<b>Project Management</b>	2	<b>INEN 410</b>	<b>Mfg. Systems Management</b>	3
<b>INEN 408</b>	<b>Mfg. Facilities Planning</b>	3	<b>INEN 422</b>	<b>Capstone Design II</b>	1	<b>INEN 423</b>	<b>Capstone Design III</b>	1
<b>INEN 421</b>	<b>Capstone Design I</b>	1	<b>ENGR 425</b>	<b>Engr. Ethics &amp; Professionalism</b>	1	Social Science**		3
History Elective		3	Fine Arts Appreciation		3	BISC 101	Fundamental of Biology I	3
			Directed Elective◇		3			
		10			10			10

Neither MATH 240 nor CHEM 100 count towards the Industrial Engineering degree.

\* Requires grade of "C" or higher.

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

Must be completed within first year of enrollment

◇Directed Electives chosen by student in consultation with faculty advisor and approved by the Industrial Engineering Program Chair.

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