

MECHANICAL ENGINEERING

Louisiana Tech University
Curriculum as of 2016

Name _____

Date _____

CWID _____

Email _____@latech.edu

COURSE	PREREQUISITE	SCH	QTR	R	GRADE
MEEN 215	MEMT 201○	1	F,W	R	
321	MEMT 201	2	W, SP	R	
332	ENGR 222, MATH 241-244 GPA ≥ 2.0	3	W, SP	R	
350	ENGR 220, MATH 241-244 GPA ≥ 2.0	1	F,SP	R	
353	MATH 313○, MEEN 350, MATH 245	3	W, SP	R	
361	MEEN 350 and MEMT 212	3	W, SP	R	
363	MEEN 350, MEMT 203	3	W	R	
371	MATH245,313,MEEN350,MEMT203,ENGR221	3	SP	R	
382	ENGR 221, MATH 241-244 GPA ≥ 2.0	2	F,W	R	
451	MEEN 353, MEMT 313	3	F,SP	R	
462	MEEN 361	3	F,SP	R	
480	MEEN 215, 321, 451○, 462○	1	F	R	
481	MEEN 480	1	W	R	
482	MEEN 481	1	SP	R	
BISC 101		3			
CHEM 101	CHEM 100 (or by placement)	2		*	
102	CHEM 101	2		*	
103	CHEM 100, 101○	1		*	
COMM 101		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		*R	
INEN 300		2			
416	INEN 300	3			
MATH 241	MATH 240 (or by placement)	3		*	
242	MATH 241	3		*	
243	MATH 242	3		*	
244	MATH 243	3		*	
245	MATH 244	3		*	
313	MATH 245○	3			
MEMT 201	ENGR 122	2		R*	
203	ENGR 220	3		R*	
212	ENGR 220, MATH 241-243 GPA ≥ 2.0	3		R*	
313	ENGR 222, MEMT 203, MATH 241-244 GPA > 2.0	3	F, W	R*	
PHYS 201	MATH 241	3		*	
202	PHYS 201, MATH 242	3		*	
ELECTIVES					
Fine Art (ART 290, KINE 280, MUGN 290, THTR 290)		3			
COES Directed Elective		2			
ECON 201, 202, or 215		3			
Humanity		3			
MEEN Directed Elective		3		R	
MEEN Directed Elective		3		R	
MEEN Directed Elective		3		R	
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 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: MEEN, MEMT, and ENGR 220 & 222.
4	All students must complete an International Education Requirement (IER). Courses acceptable: HIST 102, GEOG 205, and GEOG 210.

ADDITIONAL COMMENTS	

IER requirement met

Advisor: _____

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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>Math for Engr & Science</u>	3	MATH 241 * <u>Calculus I</u>	3	MATH 242 * <u>Calculus II</u>	3	
CHEM 100 * <u>General Chemistry</u>	2	CHEM 101 * <u>General Chemistry</u>	2	CHEM 102 * <u>General Chemistry</u>	2	
COMM 101 □ <u>Principles of Communication</u>	3	CHEM 103 * <u>General Chemistry Lab</u>	1	PHYS 201 * <u>Physics for Engr & Sci I</u>	3	
FYE 100 <u>First Year Experience</u>	1	ENGL 101 <u>Freshman Composition I</u>	3			
	11		11		10	

SOPHOMORE YEAR						
Fall Quarter	Hr	Winter Quarter	Hr	Spring Quarter	Hr	
ENGR 220 * <u>Statics & Mechanics of Materials</u>	3	ENGR 221 * <u>Electrical Engineering Circuits I</u>	3	ENGR 222 * <u>Thermodynamics</u>	3	
MATH 243 * <u>Calculus III</u>	3	MATH 244 * <u>Calculus IV</u>	3	MATH 245 * <u>Differential Equations</u>	3	
MEEN 215 <u>Engineering Materials Lab</u>	1	MEMT 203 * <u>Dynamics</u>	3	PHYS 202 * <u>Physics for Engr & Sci II</u>	3	
MEMT 201 * <u>Engineering Materials</u>	2	ENGL 102 <u>Freshman Composition II</u>	3	ENGL 303 <u>Technical Writing</u>	3	
BISC 101 <u>Fundamentals of Biology</u>	3					
	12		12		12	

JUNIOR YEAR						
Fall Quarter	Hr	Winter Quarter	Hr	Spring Quarter	Hr	
MEEN 350 <u>Computer-Aided Modeling</u>	1	MEEN 321 <u>Manufacturing Processes</u>	2	MEEN 353 <u>Heat Transfer</u>	3	
MEEN 382 <u>Basic Measurements</u>	2	MEEN 332 <u>Thermodynamics II</u>	3	MEEN 361 <u>Advanced Mechanics of Materials</u>	3	
MEMT 212 * <u>Intermed. Strength of Materials</u>	3	MEEN 363 <u>Dynamics of Machine Elements</u>	3	MEEN 371 <u>Dynamic Systems</u>	3	
MEMT 313 * <u>Fluid Mechanics</u>	3	MATH 313 <u>Intro. Numerical Analysis</u>	3	INEN 300 <u>Engineering Economics</u>	2	
Social Science	3					
	12		11		11	

SENIOR YEAR						
Fall Quarter	Hr	Winter Quarter	Hr	Spring Quarter	Hr	
MEEN 451 <u>Thermal Design</u>	3	MEEN 481 <u>Capstone Design Project II</u>	1	MEEN 482 <u>Capstone Design Project III</u>	1	
MEEN 462 <u>Machine Element Design</u>	3	MEEN Directed <u>Elective**</u>	3	MEEN Directed <u>Elective**</u>	3	
MEEN 480 <u>Capstone Design Project I</u>	1	MEEN Directed <u>Elective**</u>	3	COES Directed <u>Elective***</u>	2	
INEN 416 <u>Project Management</u>	3	Humanity	3	Fine Arts	3	
	10		10	ECON 201, 202, or 215	3	
					12	

Neither MATH 240 nor CHEM 100 count towards the mechanical 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

** must be a 400 level MEEN/MEMT course, or approved by program

*** must be a 400 level COES course approved by the program

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

All students must complete an International Education Requirement prior to graduation. A list of courses can be found in the university catalog.

Courses that do not have any pre-requisite requirement are: GEOG 205, GEOG 210, HIST 102.