

# Department of Mechanical Engineering ~ North Dakota State University

## Standard Curriculum Guide ~ Required Degree Credits for Graduation: 130

Name: \_\_\_\_\_

ID: \_\_\_\_\_

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

**NO GRADES LESS THAN A "C" WILL BE ACCEPTED TO FULFILL A COURSE REQUIREMENT**

FALL				SPRING				Gen. Ed. Electives [category]			
Course	Course Title	Cr.	Gr.	Course	Course Title	Cr.	Gr.				
<b>BASIC</b>	MATH 165	Calculus I*	4		MATH 166	Calculus II	4	* Humanities/Fine Arts [A]			
	ENGL 110 [C]	College Composition I*	3		ENGL 120	College Composition II*	3	Social/Behavioral Sciences [B]			
	CHEM 121	General Chemistry I*	3		CHEM 122	General Chemistry II*	3	*			
	ME 111 <sup>1</sup>	Intro to Mechanical Engr	2		ME 212	Fund. Visual Communications	3	*			
	Hum. Elect. [A]	*	3		ME 221	Engineering Mechanics I	3	*Global Perspective [G]			
					Wellness [W]	*	2	<b>Ethics Requirement</b>			
			<b>15</b>				<b>18</b>	<b>Extra Courses</b>		<b>Cr.</b>	<b>Gr.</b>
	MATH 129	Basic Linear Algebra	3		MATH 266	Intro/Differential Equations	3				
	MATH 259	Multivariate Calculus	3		COMM 110	Fundamentals of Public Speaking*	3				
	IME 330	Manufacturing Processes	3		PHYS 252	University Physics II*	4				
	ME 222	Engineering Mechanics II	3		PHYS 252L	University Physics Lab II*	1				
	ME 223	Mechanics of Materials	3		ME 213	Modeling of Engineering Systems	3				
	Soc. Sci. Elect. [B]	*	3		ME 351	Thermodynamics I	3				
			<b>18</b>				<b>17</b>				
	<b>PROFESSIONAL</b>	ECE 301	Electrical Engineering	3		ECE 306	Electrical Engineering Lab	1			
ENGL 321		Writing in the Technical Professions*	3		ME 361	Product Design and Development	3				
ME 331		Materials Science & Engineering	4		ME 442	Machine Design I	3				
ME 352		Fluid Dynamics	3		ME 454	Heat & Mass Transfer	3				
Technical Elective		^	3		ENGR 327 [A/D]	Ethics, Engr. & Technology	3				
					Technical Elective	^	3				
			<b>16</b>				<b>16</b>				
ME 421		Theory of Vibrations	3		ME 412	Engineering Measurements	3				
ME 443		Machine Design II	3		ME 462	Design Project II	3				
ME 457		Thermal Systems Laboratory	3		TE/Grad Elec 1	•	3				
ME 461		Design Project I	3		TE/Grad Elec 2	•	3	Total Major Credits earned		<b>130</b>	
Technical Elective	^	3		Soc. Sci. Elect. [B]	*	3					
		<b>15</b>				<b>15</b>					

<b>Key:</b>	<b>GPA:</b>							
"T" indicates requirement satisfied with transfer course.	Cumulative GPA for basic program entry: 2.7							
"IP" indicates a course currently in progress.	Engr GPA for professional program entry: 2.7							
* Course fulfills a general education requirement.	Cumulative GPA for graduation: 2.5							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;"><b>GPA</b></td> </tr> <tr> <td style="width: 80%;">Basic Program Credits</td> <td style="text-align: right;"><b>0</b></td> </tr> <tr> <td style="width: 80%;"><b>Engr GPA</b></td> <td style="text-align: right;"><b>54</b></td> </tr> </table>			<b>GPA</b>		Basic Program Credits	<b>0</b>	<b>Engr GPA</b>	<b>54</b>
<b>GPA</b>								
Basic Program Credits	<b>0</b>							
<b>Engr GPA</b>	<b>54</b>							

^ No more than nine credits of approved Technical Electives may be taken outside the ME department.

[ ] General education category - see academic catalog for details.

[C] Students with ACT sub-test score of 18+ (or SAT of 430+) may enroll in ENGL 120. A passing grade will be awarded for 110 by completing 120 with a "C" or better.

<sup>1</sup>Students who have earned ≥ 30 transfer credits are not required to take ME 111

**Disclaimer: Every effort is made to provide accurate and current information, however, errors do occur. To ensure accuracy, please review this document carefully, reporting discrepancies to the ME Office.**