Mechanical Engineering Four Year Academic Plan

Name:_____ **UID:**_____

Year 1	Fall		
Gateway requirements include: ENGL 101, CHEM 135, MATH 141, PHYS 161 and an approved Distributive Studies course. (Directly admitted freshman must successfully complete these courses and ENES 100 by 45 UM credits.)	***Course***	***Credit***	***Grade***
	ENES 102 or ENES 100 (SP)	3	
	MATH 140 (AR)	4	
	CHEM 135	3	
	ENGL 101 (AW)	3	
	Total	**13**	

Spring		
Course	***Credit***	***Grade***
ENES 100 (SP) or ENES 102	3	
MATH 141	4	
PHYS 161 (NS)	3	
Hist & Social Sciences (HS)*	3	
ORAL COMM (OC)	3	
Total	**16**	

Year 2	Fall		
	Course	***Credit***	***Grade***
	ENES 220	3	
	ENES 221	3	
	MATH 241	4	
	MATH 206	1	
	PHYS 260 and PHYS 261 (NL)	3 & 1	
	Total	**15**	

Spring		
Course	***Credit***	***Grade***
ENES 232	3	
ENME 272	2	
MATH 246	3	
PHYS 270 and PHYS 271	3 & 1	
Scholarship in Practice (SP)*	3	
Total	**15**	

Year 3	Fall		
	Course	***Credit***	***Grade***
	ENME 331	3	
	ENME 350	3	
	ENME 382	3	
	ENME 392	3	
	ENME 201 (optional)	1	
	Hist & Social Sciences (HS)*	3	
	Total	**16**	

Spring		
Course	***Credit***	***Grade***
ENME 332 or ENME 400	3	
ENME 351	3	
ENME 361	3	
ENME 371	3	
ENGL 393 (PW)	3	
Total	**15**	

Year 4	Fall		
	Course	***Credit***	***Grade***
	ENME 400 or ENME 332	3	
	ENME 472	3	
	Technical Elective	3	
	Technical Elective	3	
	Humanities (HU)*	3	
	Total	**15**	

Spring		
Course	***Credit***	***Grade***
ENME 462	3	
Technical Elective	3	
Technical Elective	3	
Technical Elective	3	
Humanities (HU)*	3	
Total	**15**	

*All students must complete two Distributive Studies courses that are approved for I-series courses. The Understanding Plural Societies and Cultural Competence courses may also fulfill Distributive Studies categories.

NAME: _____

UID: _____ __ A.A. __ A.S. __ Post-Bac

MECHANICAL ENGINEERING

GENERAL EDUCATION REQUIREMENTS			
Fundamental Studies			
Academic Writing (AW)	ENGL 101		3
Professional Writing (PW)	ENGL 393		3
Oral Communication (OC)			3
Distributive Studies			
History/Social Sciences (HS*)			3
History/Social Sciences (HS*)			3
Humanities (HU*)			3
Humanities (HU*)			3
Scholarship in Practice (SP*) out of major			3
I-Series Courses			
I-Series (IS*)			0/3
I-Series (IS*)			0/3
Diversity			
Understanding Plural Societies (UP*)			0/3
Understanding Plural Societies (UP*) OR Cultural Competency (CC*)			0/3
MAJOR REQUIREMENTS			
Basic Sciences			
CHEM 135-Chem Engr OR 131 & 134 -Fund & Prin			3/3&1
PHYS 161 - General Physics I (NS)			3 or 4
PHYS 260 and PHYS 261 - Gen Physics II & Lab			3 & 1
PHYS 270 and PHYS 271 - Gen Physics III & Lab			3 & 1
MATH 140 - Calculus I (MA/AR)			4
MATH 141 - Calculus II			4
MATH 206 - Intro to MATLAB			1
MATH 241 - Calculus III			4
MATH 246 - Differential Equations			3
Engineering Sciences			
ENES 100 - Intro to Eng Design (SP)			3
ENES 102 - Mechanics I			3
ENES 220 - Mechanics II			3
ENES 221 - Dynamics			3
ENES 232 - Thermodynamics			3

MAJOR REQUIREMENTS		
ENME 272 - Intro to CAD		2
ENME 331 - Fluid Mechanics		3
ENME 332 - Transfer Processes		3
ENME 350 - Electronics & Instrumentation I		3
ENME 351 - Electronics & Instrumentation II		3
ENME 361 - Vibrations, Controls, & Opt I		3
ENME 371 - Product Eng & Manufacturing		3
ENME 382 - Intro to Materials Eng		3
ENME 392 - Stat Methods for Prod & Proc Dev		3
ENME 400 - Machine Design		3
ENME 462 - Vibrations, Controls, & Opt II		3
ENME 472 - Integrated Product P & Design		3
Technical Requirements		
ENME 4XX - Tech Elective**		3
ENME 4XX - Tech Elective**		3
ENME 4XX - Tech Elective**		3
TECH 4XX - Tech Elective**		3
TECH 4XX - Tech Elective**		3

Requirements for Graduation:

- ☐ Final 30 credits must be earned at UMD
- ☐ 15 of the final 30 credits must be earned at the 300-400 level
- ☐ 12 of the final 30 credits must be upper level major coursework
- ☐ A minimum 2.00 cumulative UM GPA and satisfactory completion of all degree requirements are required for graduation
- ☐ Students matriculating after Fall 2012 must have a 2.0 minimum GPA for all degree requirements, minor requirements, and undergraduate certificate requirements *(Major courses are defined as: departmental courses, basic sciences, engineering sciences, specified degree tracks, technical requirements/ technical electives and ENGL 393)*
- ☐ A minimum of 120 credits is required to earn the degree

* May satisfy more than one requirement. See www.gened.umd.edu

**See Mechanical Advisor for information about appropriate technical electives and approval. http://www.enme.umd.edu

For Degree Clearance Only

Degree: B.S. ENME Advisor: _____

Date:_____ GPA/Credits: _____