

NAME: \_\_\_\_\_

# MECHANICAL ENGINEERING

UID: \_\_\_\_\_ \_\_ A.A. \_\_ A.S. \_\_ Post-Bac

## GENERAL EDUCATION REQUIREMENTS

Fundamental Studies			
Academic Writing (AW)	ENGL 101		3
Professional Writing (PW)	ENGL 39X		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
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 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 202 - Computing Fundamentals for Engineers			3
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 Professional Writing (PW))*
- A minimum of 120 credits is required to earn the degree

\* May satisfy more than one requirement. See [www.gened.umd.edu](http://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: _____	Credits/GPA: _____

# 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	
	Hist & Social Sciences (HS)*	3	
	<b>Total</b>	<b>16</b>	

Spring		
Course	Credit	Grade
ENES 100 (SP) or ENES 102	3	
MATH 141	4	
PHYS 161 (NS)	3	
ENME272	2	
ORAL COMM (OC)	3	
<b>Total</b>	<b>15</b>	

Year 2	Fall		
	Course	Credit	Grade
	ENES 221	3	
	ENME 202	3	
	MATH 241	4	
	PHYS 260 and PHYS 261 (NL)	3 & 1	
	Hist & Social Sciences (HS)*	3	
	<b>Total</b>	<b>17</b>	

Spring		
Course	Credit	Grade
ENES 220	3	
ENES 232	3	
MATH 246	3	
PHYS 270 and PHYS 271	4	
Scholarship in Practice (SP)	3	
<b>Total</b>	<b>16</b>	

Year 3	Fall		
	Course	Credit	Grade
	ENME 331	3	
	ENME 350	3	
	ENME 382	3	
	ENME 392	3	
	GenEd	3	
	<b>Total</b>	<b>15</b>	

Spring		
Course	Credit	Grade
ENME 332 or ENME 400	3	
ENME 351	3	
ENME 361	3	
ENME 371	3	
Professional Writing (PW)	3	
<b>Total</b>	<b>15</b>	

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

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

\*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.