

# 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	3	
	MATH 140 (AR)	4	
	CHEM 135	3	
	ENGL 101 (AW)	3	
	<b>Total</b>	<b>13</b>	

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

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	
	<b>Total</b>	<b>15</b>	

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	
<b>Total</b>	<b>15</b>	

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	
	<b>Total</b>	<b>16</b>	

Spring		
Course	Credit	Grade
ENME 332	3	
ENME 351	3	
ENME 361	3	
ENME 371	3	
ENGL 393 (PW)	3	
<b>Total</b>	<b>15</b>	

Year 4	Fall		
	Course	Credit	Grade
	ENME 462	3	
	ENME Tech Elective	3	
	ENME Tech Elective	3	
	Technical Elective	3	
	Humanities (HU)*	3	
	<b>Total</b>	<b>15</b>	

Spring		
Course	Credit	Grade
ENME 472	3	
ENME Tech Elective	3	
ENME Tech 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.

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 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*)			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 for Eng			3
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 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 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
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](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: _____	GPA/Credits: _____