

MECHANICAL ENGINEERING

NAME:

A.A., A.S., Post-Bac

UID:

GENERAL EDUCATION REQUIREMENTS			
Fundamental Studies			
Academic Writing (AW)	ENGL 101		3
Professional Writing (PW)	ENGL 39X		3
Oral Communication (OC)			3
Mathmatics (MA)	MATH 140		4
Analytic Reasoning (AR)	MATH 140		0
Distributive Studies			
History/Social Sciences (HS*)			3
History/Social Sciences (HS*)			3
Humanities (HU*)	ENES/ENEE200		3
Humanities (HU*)			3
Natural Sciences No Lab (NS)	PHYS 161		3
Natural Sciences w/Lab (NL)	PHYS 260/261		4
Scholarship in Practice (SP*) in major	ENES 100		3
Scholarship in Practice (SP*) out of major			3
Big Question Courses			
Big Question (SCIS*)	ENES/ENEE200		0
Big Question (SCIS*)			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)			0
PHYS 260 and PHYS 261 - Gen Physics II & Lab			0
PHYS 270 and PHYS 271 - Gen Physics III & Lab			3 & 1
MATH 140 - Calculus I (MA/AR)			0
MATH 141 - Calculus II			4
MATH 241 - Calculus III			4
MATH 246 - Differential Equations			3
Engineering Sciences			
ENES 100 - Intro to Eng Design (SP)			0
ENES 102 - Mechanics I			3
ENES 220 - Mechanics II			3
ENES 221 - Dynamics			3
ENES 232 - Thermodynamics			3

MAJOR REQUIREMENTS		
ENES 200 or ENEE 200 -Tech & Consequences (HU/I-Series)		0
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
ENME 4XX or TECH 4XX**		3
ENME 4XX or TECH 4XX**		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

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

Mechanical Engineering Graduation Plan

Name:

UID:

Current Engineering Students: <https://eng.umd.edu/services/academic-policies>

Prospective Engineering Students: <https://lep.umd.edu/>

Year 1	Fall		
	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	
	Total	16	

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

Year 2	Fall		
	Course	Credit	Grade
	ENES 221	3	
	ENME 202	3	
	MATH 241	4	
	PHYS 260 and PHYS 261 (NL)	3 & 1	
	ENEE/ENES200 (HU/SCIS)	3	
	Total	17	

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

Year 3	Fall		
	Course	Credit	Grade
	ENME 331	3	
	ENME 350	3	
	ENME 382	3	
	ENME 392	3	
	GenEd	3	
	Total	15	

Spring		
Course	Credit	Grade
ENME 332 or ENME 400	3	
ENME 351	3	
ENME 361	3	
ENME 371	3	
Professional Writing (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	
	Hist & Social Sciences (HS)*	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 Big Question courses. The Understanding Plural Societies (UP) and Cultural Competence (CC) courses may also fulfill Distributive Studies categories.