## **MECHANICAL ENGINEERING**

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GENERAL EDUCATION REQUIREMENTS			MAJOR REQUIREMENTS			
Fundamental Studies			ENES 200 or ENEE 200- Tech & Consequences (HU/I-Series)		3	
Academic Writing (AW) ENGL 101		3	ENME 202 - Computing Fundamentals for Engineers		3	
Professional Writing (PW) ENGL 39X		3	ENME 272 - Intro to CAD		2	
Oral Communication (OC)		3	ENME 331 - Fluid Mechanics		3	
Distributive Studies			ENME 332 - Transfer Processes		3	
History/Social Sciences (HS*)		3	ENME 350 - Electronics & Instrumentation I		3	
History/Social Sciences (HS*)		3	ENME 351 - Electronics & Instrumentation II		3	
Humanities (HU*)		3	ENME 361 - Vibrations, Controls, & Opt I		3	
Scholarship in Practice (SP*) out of major		3	ENME 371 - Product Eng & Manufacturing		3	
I-Series Courses			ENME 382 - Intro to Materials Eng		3	
I-Series (IS*)	C	0/3	ENME 392 - Stat Methods for Prod & Proc Dev		3	
Diversity			ENME 400 - Machine Design		3	
Understanding Plural Societies (UP*)	C	0/3	ENME 462 - Vibrations, Controls, & Opt II		3	
Understanding Plural Societies (UP*) OR		0/3	ENME 472 - Integrated Product P & Design		3	
Cultural Competency (CC*)		J/ 5	Technical Requirements			
MAJOR REQUIREMENTS			ENME 4XX - Tech Elective**		3	
Basic Sciences			ENME 4XX - Tech Elective**		3	
CHEM 135-Chem Engr OR 131 & 134 -Fund & Prin	3/3	3&1	ENME 4XX - Tech Elective**		3	
PHYS 161 - General Physics I (NS)		3	TECH 4XX - Tech Elective**		3	
PHYS 260 and PHYS 261 - Gen Physics II & Lab	3 8	<u>&amp;</u> 1	TECH 4XX - Tech Elective**		3	
PHYS 270 and PHYS 271 - Gen Physics III & Lab	3 8	<u>3</u> 1				
MATH 140 - Calculus I (MA/AR)		4	Requirements for Graduation:			
MATH 141 - Calculus II		4	Final 30 credits must be earned at UMD			
MATH 241 - Calculus III		4	15 of the final 30 credits must be earned at the 300-400 level			
MATH 246 - Differential Equations		3	12 of the final 30 credits must be upper level major coursework			
Engineering Sciences			A minimum 2.00 cumulative UM GPA and satisfactory completion of all	degree		
ENES 100 - Intro to Eng Design (SP)		3	requirements are required for graduation			
ENES 102 - Mechanics I		3	Students matriculating after Fall 2012 must have a 2.0 minimum GPA for	all		
ENES 220 - Mechanics II		3	degree requirements, minor requirements, and undergraduate certificate requ	uirement	ts	
ENES 221 - Dynamics		3	(Major courses are defined as: departmental courses, basic sciences, engineer	ing		
ENES 232 - Thermodynamics		3	sciences, specified degree tracks, technical requirements/ technical electives a	nd		
	·		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

For Degree Clearance Only		
Degree: B.S. ENME	Advisor:	 
Date:	Credits/GPA:	

GenEd-2023-2024

## Mechanical Engineering Four Year Academic Plan

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Year 1		Fall	
https://lep.umd.edu/	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	

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	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		ENES 2
	ENME 202	3		ENES 2
	MATH 241	4		MATH
	PHYS 260 and PHYS 261 (NL)	3&1		PHYS 2
	ENEE/ENES200 (HU/I-Series)	3		Scholar
	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	Course
	ENME 331	3		ENME 332 or ENME 400
	ENME 350	3		ENME 351
	ENME 382	3		ENME 361
	ENME 392	3		ENME 371
	GenEd	3		Professional Writing (P
	Total	15		Т

	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)*	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 I-series courses. The Understanding Plural Societies and Cultural Competence courses may also fulfill Distributive Studies categories.