

MECHANICAL ENGINEERING

Department of Mechanical Engineering



Last update: 4/3/2025

Sample Four-Year Plan

First Year

1st Semester		sh	2nd Semester		sh
ALL	CHEM:1110 Principles of Chemistry I <i>(P: ALEKS score ≥ 55 or MPT Level 3 score ≥ 9)</i>	4	F/S	ENGR:1300 Intro to Engineering Computing <i>(C: MATH:1550)</i>	3
F	ENGR:1000 Engineering Success for First-Year Students <i>(First semester standing)</i>	1	ALL	MATH 1560 Math II: Multivariable Calculus <i>(P: MATH:1550 with a minimum grade of C-)</i>	4
F	ENGR:1100 Intro to Engineering Problem Solving	3	ALL	MATH:2550 Math III: Matrix Algebra <i>(P: MATH:1550 or MATH:1560)</i>	2
F/S	MATH:1550 Math I: Single Variable Calculus <i>(P: ALEKS score ≥ 75 or MPT Level 3 score ≥ 9)</i>	4	ALL	PHYS:1611 Introductory Physics I / Lab <i>(C: MATH:1550)</i>	4
ALL	RHET:1030 Rhetoric	4	ALL	General Education Course #1	3
		16			16

Second Year

3rd Semester		sh	4th Semester		sh	
ALL	ENGR:2110 Statics <i>(P: MATH:1550; C: MATH:1560 & PHYS:1611)</i>	2	ALL	ENGR:2710 Dynamics <i>(P: ENGR:2110 & MATH:1550)</i>	3	
ALL	ENGR:2120 Electrical Circuits <i>(C: MATH:2560)</i>	3	OR	ALL	ME:2200 Introduction to Mechanical Engineering Design <i>(P: ENGR:1100)</i>	2
ALL	ME:2200 Introduction to Mechanical Engineering Design <i>(P: ENGR:1100)</i>	2	ALL	ENGR:2120 Electrical Circuits <i>(C: MATH:2560)</i>	3	
ALL	ENGR:2130 Thermodynamics <i>(P: CHEM:1110 & PHYS:1611; C: MATH:1560)</i>	3	ALL	ENGR:2720 Materials Science <i>(P: CHEM:1110; C: MATH:1550)</i>	3	
ALL	MATH:2560 Math IV: Differential Equations <i>(P: MATH:1560 & MATH:2550)</i>	3	ALL	ENGR:2750 Mechanics of Deformable Bodies <i>(P: ENGR:2110; C: MATH:2560)</i>	3	
F	ME:2020 Mechanical Engineering Program Seminar	0	F/S	ME:2300 Manufacturing Processes <i>(C: ENGR:2720 & (ME:2200 or BME:2710))</i>	3	
F/S	PHYS:1612 Introductory Physics II / Lab <i>(P: PHYS:1611; C: MATH:1560)</i>	4	OR	ALL	STAT:2020 Probability & Statistics For Engr & Phys Sci <i>(P: MATH:1560)</i>	3
ALL	General Education Course #2	3	F/S	Elective #1: Focus Area, Minor, Certificate, etc.	3	
		17/18			17/18	

Third Year

5th Semester		sh	6th Semester		sh
F/S	ENGR:2510 Fluid Mechanics <i>(P: MATH:2560 & ENGR:2710; C: ENGR:2130)</i>	4	S	ME:3045 Heat Transfer <i>(P: ENGR:2510, MATH:3550 & ENGR:1300)</i>	3
F/S	MATH:3550 Engineering Math V: Vector Calculus <i>(P: MATH:1560 & MATH:2550; C: MATH:2560)</i>	3	S	ME:3052 Mechanical Systems <i>(P: ENGR:2750; C: ENGR:2720 & ME:2300 & STAT:2020)</i>	4
F	ME:3091 Professional Seminar: Mechanical Engineering <i>(P: ME:2020)</i>	0	F/S	Elective #2: Focus Area, Minor, Certificate, etc.	3
F	ME:3351 Engineering Instrumentation <i>(P: ENGR:2120 & PHYS:1612)</i>	2	F/S	Elective #3: Focus Area, Minor, Certificate, etc.	3
F	ME:3600 Control of Mechanical Engineering Systems <i>(P: ENGR:2710 & MATH:2560)</i>	3	ALL	General Education Course #3	3
ALL	STAT:2020 Probability & Statistics For Engr & Phys Sci <i>(P: MATH:1560)</i>	3	OR		
F/S	ME:2300 Manufacturing Processes <i>(C: ENGR:2720 & (ME:2200 or BME:2710))</i>	3			
		15			16

Fourth Year

7th Semester		sh	8th Semester		sh	
F	ME:4048 Energy Systems Design <i>(P: ME:3045)</i>	4	F/S	Elective #6: Focus Area, Minor, Certificate, etc.	3	
F	ME:4055 Mechanical Systems Design <i>(P: ENGR:2710 & ME:3052)</i>	3	F/S	Elective #7: Focus Area, Minor, Certificate, etc.	3	
F/S	Elective #4: Focus Area, Minor, Certificate, etc.	3	OR	F/S	ME:4080 Experimental Engineering <i>(P: ME:3351, ME:3045 & ME:3052)</i>	4
F/S	ME:4080 Experimental Engineering <i>(P: ME:3351, ME:3045 & ME:3052)</i>	4	F/S	Elective #4: Focus Area, Minor, Certificate, etc.	3	
F/S	Elective #5: Focus Area, Minor, Certificate, etc.	3	OR	F/S	ME:4086 Mechanical Engineering Design Project <i>(C: ME:4048 or ME:4055)</i>	3
F/S	ME:4086 Mechanical Engineering Design Project <i>(C: ME:4048 or ME:4055)</i>	3	F/S	Elective #5: Focus Area, Minor, Certificate, etc.	3	
ALL	General Education Course #4	3	ALL	General Education Course #5	3	
		16/17			15/16	