

(Starting Sept. 2024)

MECHANICAL ENGINEERING PROGRAM (No Options/ 4 yr) – 163 ch

(rev. Aug, 2024)

Classification	1 Fall '24	2 Winter '25	3 Su'25	4 Fall '25	5 Winter '26	6 Su'26	7 Fall '26	8 Winter '27	9 Su'27	10 Fall '27	11 Winter '28	
Math, Stats & Numerical	MATH 1003 (4C) Intro to Calc I	MATH 1013 (4C) Intro to Calc II	Summer Term	MATH 2513 (4C) Calc for Eng	MATH3503 (3C1T) Diff'l Eqns for Eng	Summer Term	CS 3113 / MATH 3413 (3C) Numerical Methods	Summer Term	Summer Term			
	MATH 1503 (4C) Intro to Lin Alg				STAT 2593 (3C) Prob & Statist							
CS, Chem, Physics & ECE	CS 1003 (3C) Prog & Prob Solv for Eng	ECE1813 (3C1T) Elec & Magnet		ECE 2711 (3C,1T) Electric Circuits & Electronics						ECE 3612 (3C,1T) Electric Circuits & Machines		
	PHYS 1081 (3C) Intro Physics for Eng	CHEM 1982 (3C1T) Gen'l Chemistry										
Applied Mechanics		ENGG 1082 (3C,1T*) Mechanics for Engineers		ME 2111 (3C,1T) Mech of Mat. I	ME2122 (3C2T*) Mech of Mat. II	ME 3611 (3C,1T) System Dynamics	ME 3622 (3C,1T) Auto. Controls I					
				ME 2003 (3C,1T) Dynamics for Eng	ME2143 (3C2T*) Kinematics & Dyn.		ME 3612 (3C)3 Mech Vibration					
Thermo & Heat Transfer					ME 2413 (3C,1T) Thermodynamics		ME 3433 (3C,1T) Heat Transfer	ME 4421 (3C,1T) Applied Thermo				
Fluid Mechanics							ME 3511 (3C) Fluid Mechanics	ME 3522 (3C,1T) App Fluid Mech				
Mat'rls and Manufacturing				CHE 2501 (3C,1T) Materials Science			ME3221 (3C1T*) Manufacturing Eng. I			ME 4281 (3C) Manufact. Eng. II		
Laboratories (mostly part of courses)	Intr. Physics for Eng. Lab (3L)	CAD Lab (3L)		CHE 2506* (3L*) Mat'rl Science Lab		ME 3701 (2C*,3L*) ME Lab 1	ME 3703 (2C*,3L*) ME Lab 2				ME 4701 (2C*,3L*) ME Lab 3	
	Programming Lab (3L*)	Elec and Mag. Lab (2L)		Electric Circuits Laboratory (3L*)								
	Design & Prob. Solv. Lab (2L)	CHEM 1987*(3L) Chemistry Lab		Dynamics Laboratory (2L)								
	Tech. Commun. Lab (3L)	Mech for Eng Lab (3L*)										
Design and Synthesis	ENGG 1015 (1C) Intro. Design & Problem Solving				ME 2352 (3C,2L) Design Optimization		ME3341(3C,2T*) Machine Design			ME 4424*(1C,2L) Sustainable Energy Systems Design		
Design Projects		ME 1312 (3C) CAD		ME 2145* (2L*) Kin Dyn Des Proj	ME 3345* (4L*) Machine Design Proj	ME 3524*(1C,1L) Fluid Syst. & Design			ENGG 4000 (1C,2T,4L) Senior Design Project	ENGG 4000 (1C,2T,4L) Senior Design Project		
									ME 2125* (2L*) Mech. of Materials Design Project			
Complimentary Studies	ENGG 1001 (1C) Eng. Pro Lec I	ENGG 1002 (1C) Eng. Pro Lec II					One Compl. Studies Elective (3C)		ENGG 4001 (1C) Eng. Pro Lec III	ENGG 4002 (1C) Eng. Pro Lec IV		
	ENGG 1003 (2C) Tech. Commun.								ME 4861(1C) Mech Health and Safety	ENGG 4013 (3C) Law and Ethics		
										ME 3232 / CE 3963 (3C) Eng. Economics		
Technical Electives								One Tech Elec (3 C)	Two Tech Elective (6 C)			
Credit Hours	21	20		19	21		19	19		22	22	

*Laboratory or project course co-requisite with a lecture course.

C*/ L* - lecture/ labs on alternate weeks

NOTES:(1) Students must take at least 9 ch of technical electives (3 courses), including at least 6 ch (2 courses) of ME technical electives.

(2) Students must take at least 9 ch of complementary studies electives; one of which has to be either HIST3925 or SOCI2534 (or equivalent), at least 3 ch must be "humanities" – see regulations for definition.

(3) All courses must be passed with a grade of at least a **C**.

(4) Some courses are available online and may be taken during May-August: e.g. CE 3963, ENGG 4013.