

(Starting Sept. 2022)

MECHANICAL ENGINEERING PROGRAM (No Options) – 163 ch

(rev. Aug.15, 2022)

Classification	1 Sep '22	2 Jan '23	3 May'23	4 Sep '23	5 Jan '24	6 May'24	7 Sep '24	8 Jan '25	9 May'25	10 Sep '25	11 Jan '26		
Math, Stats & Numerical	MATH 1003 (4C)3 Intro to Calc I	MATH 1013 (4C)3 Intro to Calc II	Summer Term	MATH 2513 (4C)4 Calc for Eng	MATH3503 (3C1T)3 Diff'l Eqns for Eng	Summer Term	CS 3113 / MATH 3413 (3C)3 Numerical .Methods		Summer Term				
	MATH 1503 (4C)3 Intro to Lin Alg				STAT 2593 (3C)3 Prob & Statist								
CS, Chem, Physics & ECE	CS 1003 (3C)3 Prog & Prob Solv for Eng	ECE1813 (3C1T)3 Elec & Magnet		ECE 2711 (3C,1T)3 Electric Circuits								ECE 3612 (3C,1T)3 Electric Machines & Design	
	PHYS 1081 (3C)3 Intro Physics for EnG	CHEM 1982 (3C1T)3 Gen'l Chemistry											
Applied Mechanics		ENGG 1082 (3C,1T*)3 Mechanics for Engineers		ME 2111 (3C,1T)3 Mech of Mat. I	ME2122 (3C2T*)3 Mech of Mat. II		ME 3613 (3C,1T)3 System Dynamics	ME 3623 (3C,1T)3 Auto. Controls I					
				ME 2003 (3C,1T)3 Dynamics for Eng	ME2143 (3C2T*)3 Kinematics & Dyn.			ME 4613 (3C)3 Mech Vibration					
Thermo & Heat Transfer					ME 2413 (3C,1T)3 Thermodynamics			ME 3433 (3C,1T)3 Heat Transfer			ME 4421 (2C,1T)2 Applied Thermo		
Fluid Mechanics								ME 3511 (3C)3 Fluid Mechanics		ME 3522 (2C,1T)2 App Fluid Mech			
Mat'rls and Manufacturing				CHE 2501 (3C,1T)3 Materials Science			ME3222 (3C1T*)3 Manufacturing Eng. I				ME 4283 (3C)3 Manufact. Eng. II		
Laboratories (mostly part of courses)	Intr. Physics for Eng. Lab (3L)2	CAD Lab (3L)2		CHE 2506* (3L*)1 Mat'rl Science Lab	ME 2415* (3L*)1 Thermodynamics Lab		ME 3515* (3L*)1 Fluid Mech Lab	ME 3435* (3L*)1 Heat Transfer Lab		Manuf. II Lab (3L*)1			
	Programming Lab (3L*)1	Elec and Mag. Lab (2L)1		Electric Circuits Laboratory (3L*)1			Sys Dynamics Lab (1L*)1	Auto Controls Lab (1L*)1		Electric Machines Lab (3L*)1			
	Design & Prob. Solv. Lab (2L)1	CHEM 1987*(3L)2 Chemistry Lab		Dynamics Laboratory (2L)1			Manuf. Eng. I Lab (2L*)1	Vibration Lab (3L*)1					
	Tech. Commun. Lab (3L)1	Mech for Eng Lab (3L*)1											
Design and Synthesis	ENGG 1015 (1C)1 Intro. Design & Problem Solving				ME 2352 (3C,2L)4 Design Optimization		ME3341(3C,2T*)3 Machine Design				ME 4424*(1C,2L)2 Sustainable Energy Systems Design		
Design Projects		ME 1312 (3C)3 CAD			ME 2145* (2L*)1 Kin Dyn Des Proj		ME 3345* (4L*)2 Machine Design Proj	ME 3524*(1C,1L)2 Fluid Syst. & Design			ENGG 4000 (1C,2T,4L)4 Senior Design Project	ENGG 4000 (1C,2T,4L)4 Senior Design Project	
				ME 2125* (2L*)1 Mech. of Materials Design Project									
Complimentary Studies	ENGG 1001 (1C)0 Eng. Pract Lec							One Compl. Studies Elective (3C)3		Zero or one Compl. Studies Elective (0 or 3 C)	ENGG 4013 (3C)3 Law and Ethics		
	ENGG 1003 (2C)3 Tech. Commun.							ME 4861(1C)1 Mech Health and Safety		ME 3232 / CE 3963 (3C)3 Eng. Economics	Two or one Compl. Studies Elec** (6 or 3C)		
Technical Electives										Two or one Tech Elec (6 or 3 C)	One or two Tech Elective (3 or 6 C)		
Credit Hours	21 (17C, 0T, 9.5L)	20(16C,2.5T,9.5L)			19 (16C, 4T, 5L)		22 (18C, 4T, 5.5L)			20 (15C, 2.5T, 5L)	19 (15C, 3T, 4.5L)		22 (17C, 3T, 9L)

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

L* - 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, 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.