

MECHANICAL ENGINEERING CURRICULUM – GREEN 4-YEAR PLAN

1	Humanities & Social Science (3) Lower Division	GEEN 1400 (3) First-Year Engineering Projects	MCEN 1024 (3) Chemistry of Energy & Materials	APPM 1350 (4) Calculus 1 For Engineers		
2	Humanities & Social Science (3) Lower Division	Humanities & Social Science (3) Lower Division	PHYS 1110 (4) General Physics 1 (Coreq: Calc 1)	APPM 1360 (4) Calculus 2 For Engineers (Prereq: Calc 1)	CSCI 1300 (4) Computer Science 1 (Coreq: Calc 1)	
3	Free Elective (3)	PHYS 1140 (1) Experimental Physics (Coreq: PHYS 1120)	PHYS 1120 (4) General Physics 2 (Prereq: PHYS 1110) (Coreq: Calc 2)	APPM 2350 (4) Calculus 3 For Engineers (Prereq: Calc 2)	MCEN 1025 (4) Computer-Aided Design & Fabrication	MCEN 2000 (1) Mechanical Engineering as a Profession
4	Humanities & Social Science (3) Upper Division	Free Elective (3)	MCEN 2023 (3) Statics & Structures (Prereqs: Calc 2, PHYS 1110)	APPM 2360 (4) Linear Algebra & Differential Equations (Prereq: Calc 2)	MCEN 3017 (3) Circuits & Electronics (Prereq: PHYS 1120) (Coreq: APPM 2360)	MCEN 2024 (3) Materials Science (Prereqs: MCEN 1024, PHYS 1110)
5	Writing Requirement (3)	MCEN 2063 (3) Mechanics of Solids (Prereqs: MCEN 2023, Calc 2)	MCEN 2043 (3) Dynamics (Prereq: MCEN 2023, Calc 2)	MCEN 3012 (3) Thermodynamics 1 (Prereq: Calc 2)	MCEN 4026 (3) Manufacturing Processes & Systems (Prereq: MCEN 2024)	
6	Humanities & Social Science (3) Upper Division	MCEN 3021 (3) Fluid Mechanics (Prereq: MCEN 2023, Calc 3)	MCEN 3030 (3) Computational Methods (Prereqs: CSCI 1300, APPM 2360)	MCEN 3025 (3) Component Design (Prereqs: MCEN 1025, MCEN 2024, MCEN 2063)	MCEN 3047 (4) Data/Measurements (Prereqs: MCEN 2063, APPM 2360, PHYS 1140) (Coreqs: Writing, MCEN 3030, MCEN 3017)	
7	Math/Science Requirement (3)	MCEN 4045 (3) Mechanical Engineering Design Project 1 (Fall Only)	MCEN 3022 (3) Heat Transfer (Prereqs: MCEN 3012, MCEN 3021, APPM 2360)	MCEN 4043 (3) System Dynamics (Prereqs: MCEN 2043, MCEN 3017, APPM 2360) (Coreq: MCEN 3030)	Mechanical Technical Elective (3)	
8	MCEN 3032 (3) Thermodynamics 2 (Prereqs: MCEN 3012, MCEN 3021, APPM 2360)	MCEN 4085 (3) Mechanical Engineering Design Project 2 (Spring Only)	General Technical Elective (3)	General Technical Elective (3)	Mechanical Technical Elective (3)	

-  == Can be taken any semester pending completion of any applicable pre/co-requisites.
-  == Must be taken as a pre-requisite to MCEN 4045.
-  == Must take at least one of MCEN 3047, MCEN 3022 or MCEN 4043 as a pre-requisite to MCEN 4045. Remaining two can be taken as a co-requisite to MCEN 4045. All courses must be taken as a pre-requisite to MCEN 4085.
-  = == Can be taken as a pre-requisite or co-requisite to MCEN 4045.
-  == Mechanical Engineering Design Project Sequence.