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 (CR: APPM 1350)	APPM 1360 (4) Calculus 2 For Engineers (PR: APPM 1350)	MCEN 1030 (4) Engineering Computing (CR: APPM 1235 or APPM 1350)	
3	Free Elective (3)	PHYS 1140 (1) Experimental Physics (CR: PHYS 1120)	PHYS 1120 (4) General Physics 2 (PR: PHYS 1110) (CR: APPM 1360)	APPM 2350 (4) Calculus 3 For Engineers (PR: APPM 1360)	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 (PR: APPM 1360, PHYS 1110)	APPM 2360 (4) Linear Algebra & Differential Equations (PR: APPM 1360)	MCEN 3017 (3) Circuits & Electronics (PR: PHYS 1120) (CR: APPM 2360)	MCEN 2024 (3) Materials Science (PR: MCEN 1024, PHYS 1110)
5	Writing Requirement (3)	MCEN 2063 (3) Mechanics of Solids (PR: MCEN 2023, APPM 1360)	MCEN 2043 (3) Dynamics (PR: MCEN 2023, APPM 1360)	MCEN 3012 (3) Thermodynamics 1 (PR: APPM 1360)	MCEN 4026 (3) Manufacturing Processes & Systems (PR: MCEN 2024)	
6	Humanities & Social Science (3) Upper Division	MCEN 3021 (3) Fluid Mechanics (PR: MCEN 2023, APPM 2350)	MCEN 3030 (3) Computational Methods (PR: MCEN 1030, APPM 2360)	MCEN 3025 (3) Component Design (PR: MCEN 1025, MCEN 2024, MCEN 2063)	MCEN 3047 (4) Data/Measurements (PR: MCEN 2063, APPM 2360, PHYS 1140) (CR: Writing, MCEN 3030, MCEN 3017)	
7	Math/Science Foundations (3)	MCEN 4045 (3) Mechanical Engineering Design Project 1 (*Fall Only*)	MCEN 3022 (3) Heat Transfer (PR: MCEN 3012, MCEN 3021, APPM 2360)	MCEN 4043 (3) System Dynamics (PR: MCEN 2043, MCEN 3017, APPM 2360) (CR: MCEN 3030)	MCEN Technical Elective (3)	
8	MCEN 3032 (3) Thermodynamics 2 (PR: MCEN 3012, MCEN 3021, APPM 2360)	MCEN 4085 (3) Mechanical Engineering Design Project 2 (*Spring Only*)	General Technical Elective (3)	General Technical Elective (3)	MCEN Technical Elective (3)	

Example

Course (Credits)
Course Name
(PR: Prerequisites)
(CR: Corequisites)

== 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.

Effective: Fall 2024