

MECHANICAL ENGINEERING CURRICULUM – BLUE 4-YEAR PLAN

1

GEEN 1400 (3) First-Year Engineering Projects	CSCI 1300 (4) Computer Science 1 (CR: APPM 1235)	APPM 1350 (4) Calculus 1 For Engineers	PHYS 1110 (4) General Physics 1 (CR: APPM 1350)
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MCEN 1025 (4) Computer-Aided Design & Fabrication	MCEN 1024 (3) Chemistry of Energy & Materials	APPM 1360 (4) Calculus 2 For Engineers (PR: APPM 1350)	PHYS 1120 (4) General Physics 2 (PR: PHYS 1110) (CR: APPM 1360)	PHYS 1140 (1) Experimental Physics (CR: PHYS 1120)
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Humanities & Social Science (3) Lower Division	MCEN 2000 (1) Mechanical Engineering as a Profession	MCEN 2024 (3) Materials Science (PR: MCEN 1024, PHYS 1110)	APPM 2350 (4) Calculus 3 For Engineers (PR: APPM 1360)	Math/Science Requirement (3)	MCEN 2023 (3) Statics & Structures (PR: APPM 1360, PHYS 1110)
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Humanities & Social Science (3) Lower Division	Free Elective (3)	MCEN 3012 (3) Thermodynamics 1 (PR: APPM 1360)	APPM 2360 (4) Linear Algebra & Differential Equations (PR: APPM 1360)	MCEN 2063 (3) Mechanics of Solids (PR: MCEN 2023, APPM 1360)	MCEN 2043 (3) Dynamics (PR: MCEN 2023, APPM 1360)
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Humanities & Social Science (3) Lower Division	MCEN 3025 (3) Component Design (PR: MCEN 1025, MCEN 2024, MCEN 2063)	MCEN 3030 (3) Computational Methods (PR: CSCI 1300, APPM 2360)	ECEN 3010 (3) Circuits & Electronics (PR: PHYS 1120) (CR: APPM 2360)	MCEN 3021 (3) Fluid Mechanics (PR: MCEN 2023, APPM 2350)
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Writing Requirement (3)	MCEN 4026 (3) Manufacturing Processes & Systems (PR: MCEN 2024)	General Technical Elective (3)	MCEN 3022 (3) Heat Transfer (PR: MCEN 3012, MCEN 3021, APPM 2360)	MCEN 4043 (3) System Dynamics (PR: MCEN 2043, ECEN 3010, APPM 2360) (CR: MCEN 3030)
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Humanities & Social Science (3) Upper Division	MCEN 4045 (3) Mechanical Engineering Design Project 1 (Fall Only)	MCEN 3032 (3) Thermodynamics 2 (PR: MCEN 3012, MCEN 3021, APPM 2360)	Mechanical Technical Elective (3)	MCEN 3047 (4) Data/Measurements (PR: MCEN 2063, APPM 2360, PHYS 1140) (CR: Writing, MCEN 3030, ECEN 3010)
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Humanities & Social Science (3) Upper Division	MCEN 4085 (3) Mechanical Engineering Design Project 2 (Spring Only)	Free Elective (3)	Mechanical Technical Elective (3)	General Technical Elective (3)
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== 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.

MECHANICAL ENGINEERING SEMESTER X SEMESTER PLAN