MECHANICAL ENGINEERING

CMU/CU BOULDER PARTNERSHIP 2022 – 2023

Semester							Credits
1	F S MATH 135 4 * Engineering Calculus I	F S CHEM 151 4 * Engineering Chemistry	F S CHEM 151L 1 * Engineering Chemistry Laboratory	F ENGR 101 1 Introduction to Engineering	F S ENGR 125 3 * Computer-Aided Design & Fabrication	F S MAMT 102 1 Machining Fundamentals	14
2	F S MATH 136 4 * Engineering Calculus II	F S PHYS 131 4 * Fundamentals of Mechanics	F S PHYS 131L 1 Fundamentals of Mechanics Laboratory	F S CSCI 130 4 * Introduction to Engineering Computer Science	S ENGR 140 3 * First-Year Engineering Projects (MATH 119 with "C")		16
3	F S MATH 253 4 * Calculus III	F S PHYS 132 4 * Electromagnetism & Optics	F S PHYS 132L 1 * Electromagnetism & Optics Laboratory	F S ENGR 224 2 * Materials Science	F S ENGR 224L 1 * Materials Science Laboratory	F S ENGR 261 3 * Statics & Structures	F S SOCI 120 3 Technology & Society or other LD H&SS 18
4	F S MATH 236 4 * Linear Algebra & Differential Equations	F S SCIENCE 3 Basic Science Elective (see Program Sheet)	F S ENGR 263 3 * Mechanics of Solids	F S ENGR 343 3 * Dynamics			F S ELECTIVE 3 Lower-Division Humanities/Social Science Elective 16
5	F S MCEN 3012 3 * Thermodynamics	F ECEN 3010 3 * Circuits & Electronics	F MCEN 3021 3 * Fluid Mechanics	F MCEN 3030 3 * Computational Methods	F MCEN 2000 1 * Mechanical Engineering as a Profession		F S ELECTIVE 3 Lower-Division Humanities/Social Science Elective 16
6	S MCEN 3022 3 ** Heat Transfer	S MCEN 3025 3 * Component Design	S MCEN 3032 3 Thermodynamics 2	S MCEN 3047 4 ** Data Analysis & Experimental Methods			F S ENGL 325 3 ** Writing for Engineers 16
7	F MCEN 4026 3 ** Manufacturing Processes & Systems	F MCEN 4043 3 ** System Dynamics	F MCEN 4045 3 Mechanical Engineering Design Project 1		F S MCEN XXXX 3 Mechanical Engineering Elective	F S ELECTIVE 3 General Technical Elective (Can be MCEN course)	F S ELECTIVE 3 Upper-Division Humanities/Social Science Elective 18
8	F S FREE 1 Elective		S MCEN 4085 3 Mechanical Engineering Design Project 2	S MCEN 4086 1 Writing for Design Project	F S MCEN XXXX 3 Mechanical Engineering Elective	F S ELECTIVE 3 General Technical Elective (Can be MCEN course)	F S ELECTIVE 3 Upper-Division Humanities/Social Science Elective 14

Prerequisite → Co-/Pre-requisite ⇢ *Complete before MCEN 4045 **Complete before, or with, MCEN 4045 CMU Course CU Course F offered in Fall S offered in Spring **TOTAL CREDITS = 128**