MECHANICAL ENGINEERING CURRICULUM (4-Year Plan) Sp = Semester usually taught F GEEN 1400-3 Sp CSCI1320-4 Sp F APPM 1350-4 Sp PHYS 1110-4 Introduction to First-Year Calculus 1 General Physics 1 **Engineering Computing Engineering Projects** For Engineers F MCEN 1024-4 Sp F MCEN 1025-4 Sp **트 APPM 1360-4** Sp PHYS 1120-4 PHYS 1140-1 Chemistry of Computer-Aided Calculus 2 General Physics 2 **Experimental Physics Energy and Materials** Design & Fabrication For Engineers MCEN 2023-3 Sp APPM 2350-4 Sp Sp PHYS 2130-3 Sp MCEN 2024-3 MCEN 2000-1 H&SS-3 Calculus 3 Lower Division Professionalism Seminar General Physics 3 Statics & Structures Materials Science For Engineers APPM 2360-4 Sp MCEN 2063-3 Sp MCEN 3012-3 MCEN 2043-3 MCEN 3021-3 Linear Algebra & **Thermodynamics** Fluid Mechanics **Dynamics** Mechanics of Solids Differential Equations Sp MCEN 3030-3 Sp MCEN 3037-2 Sp Writing-3 MCEN 3032-3 MCEN 3022-3 MCEN 3025-3^L 5 Data Analysis Thermodynamics 2 Component Design See Reverse Heat Transfer Computational Methods Sp F MCEN 4026-3 Sp GEN TECH-3 Sp H&SS-3 MCEN 4037-2 ECEN 3010-3 6 Manufacturing Processes Lower Division Circuits & Electronics Measurements Lab Elective & Systems Sp MCEN 4043-3 Sp H&SS-3 H&SS-3 MCEN 4045-3 MCEN 4047-2 ME Tech-3 **Upper Division** Lower Division ME Design Project 1 Elective Measurements 2 System Dynamics Sp GEN TECH-3 Sp H&SS-3 MCEN 4085-3 FREE-3 ME Tech-3 Upper Division ME Design Project 2 Elective Elective Elective First course, if not Second course, if not Co-requisite ←→ Blue Version - Effective Fall 2015 Prerequisite --taken as co-requisites taken as co-requisites

Standard Course Substitutions

CSCI1320 – ECEN1310, or CSCI 1300 (Note: COEN1300 and GEEN1300 are also accepted, if completed prior to Fall 2015)

GEEN1400 - ASEN1400, COEN1400, COEN1410, ECEN1400, GEEN2400, or GEEN3400

MCEN1024 - CHEM1113&1114 or CHEN1211&CHEM1221

PHYS2130 - PHYS2170, CHEM3311&3321, APPM3310, or CSCI2270

Writing Requirement

The Writing Requirement can be fulfilled by HUEN1010 (freshmen only), HUEN3100, WRTG3035, or WRTG3030.

Humanities & Social Science Electives

Please see http://www.colorado.edu/engineering/node/288/.

General Technical Electives

3000 and 4000 level courses in the following subjects are considered to be General Technical Electives: APPM, AREN, ASEN, ASTR, ATOC, CHEM, CHEN, CSCI, CVEN, EBIO, ECEN, EVEN, EMEN, GEOL, IPHY, MATH, MCDB, MCEN, and PHYS. In addition, GEEN3400 and NAVR3030 have been approved to fulfill the requirement.

ME Technical Electives

4000 level MCEN courses not otherwise required for the major are considered to be ME Technical Electives. BS/MS students have the same course options, but should complete the classes at the 5000 level.

Tech Elective Exceptions

You may use one of the following courses as an ME Tech Elective, provided your second ME Tech Elective is completed within Mechanical Engineering: APPM4350, ASEN4123, GEEN3400, EMEN4030, EMEN4050, EMEN4100, EMEN4200, EMEN4800, EMEN4825, EMEN4830

Grade Requirements

Beginning with the incoming class of Fall 2015, the minimum passing grade for prerequisite and corequisite classes in our curriculum is a C. This includes courses completed outside the department (APPM, PHYS, etc.). The minimum passing grade for standalone classes is a D-. In addition, students need to have a cumulative and major GPA of at least 2.25 in order to graduate from the College of Engineering.