#### MECHANICAL ENGINEERING CURRICULUM (4-Year Plan) Sp = Semester usually taught F COEN 1300-3 Sp F MCEN 1024-4 Sp F APPM 1350-4 Sp F MCEN 1025-4 Sp COEN 1500-1 Computer-Aided Chemistry of Introduction to Calculus 1 Intro to Engineering **Energy and Materials** Design & Fabrication **Engineering Computing** For Engineers F GEEN 1400-3 Sp F\_APPM 1360-4 Sp F ELECTIVE (3) Sp PHYS 1110-4 First-Year Calculus 2 Humanities / General Physics 1 **Engineering Projects** For Engineers Social Science (LD) ELECTIVE (3) Sp APPM 2350-4 Sp JELECTIVE (3) Sp MCEN 2000-1 PHYS 1140-1 PHYS 1120-4 3 Calculus 3 Humanities / **Experimental Physics** General Physics 2 Free Professionalism Seminar For Engineers Social Science (LD) MCEN 2024-3 Sp APPM 2360-4 Sp MCEN 2023-3 Sp JELECTIVE (3) Sp PHYS 2130-3 Linear Algebra & Humanities / Materials Science Statics & Structures General Physics 3 **Differential Equations** Social Science (LD) MCEN 3012-3 Sp MCEN 2063-3 Sp ECEN 3010-3 Sp MCEN 3021-3<sup>1</sup> MCEN 2043-3 5 **Thermodynamics** Fluid Mechanics Circuits & Electronics **Dynamics** Mechanics of Solids MCEN 4043-3 Sp MCEN 3030-3 Sp MCEN 3037-2 Sp MCEN 3025-3 Sp MCEN 3022-3 Writing Reg 6 System Dynamics **Heat Transfer** Computational Methods Component Design Writing on Science Data Analysis ELECTIVE-3 Sp F MCEN 4026-3 F ELECTIVE (3) Sp MCEN 4045-3 MCEN 4037-2 **ELECTIVE-3** Manufacturing Processes Humanities / ME Technical ME Design Project 1 Measurements Lab General Technical Social Science (UD) & Systems MCEN 4085-3 Sp MCEN 4047-2 Sp ELECTIVE (3) Sp **ELECTIVE-3** MCEN 3032-3 **ELECTIVE-3** 8 Humanities / Thermodynamics 2 General Technical ME Design Project 2 ME Technical Measurements 2 Social Science (UD) First course, if not Second course, if not Co-requisite ←→ Yellow Version - Effective Fall 2014 Prerequisite --taken as co-requisites taken as co-requisites

## **Standard Course Substitutions**

COEN1300 - GEEN1300, ECEN1310, or CSCI 1300

GEEN1400 - COEN1400, COEN1410, or GEEN2400

MCEN1024 - CHEM1113&1114 or CHEN1211&CHEM1221

PHYS2130 - PHYS2170 (Physics Minor), IPHY3410 (Biomed Option), CHEM3311&3321 (Environmental Option), APPM3310 (Applied Math Minor), or CSCI2270 (Computer Science Minor)

# **Writing Requirement**

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

### **Humanities & Social Science Electives**

Please see <a href="http://www.colorado.edu/engineering/node/288/">http://www.colorado.edu/engineering/node/288/</a>.

# **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.