ME 360 System Modeling and Control
Instructor: tbd
Modeling and simulation of physical systems. Transfer functions, block diagrams, step responses and stability. Design of feedback control systems in the Laplace domain. May be taken for ECE or ME credit, but not both. PREREQ: MATH 333, PHYS 212.

ME 420 Thermodynamics II
Instructor: James Ferguson
Advanced topics and applications of thermodynamics include power and refrigeration cycles, combustion, mixed gas properties, chemical equilibrium, and psychrometric applications. PREREQ: ENGR 320 or ME 302, and MATH 275.

ME 442 Corrosion Engineering
Instructor: Mike Hurley
Electrochemical principles, thermodynamics, types of corrosion, corrosion measurements, and corrosion prevention with examples from selected industries. Cross-listed with MSE 488.

ME 460 Computer Aided Design
Instructor: Stephen Tennyson
Computer programs used to develop 3-D CAD database for design, analysis, simulation, and manufacturing. Machinery design to meet functional, performance, reliability and manufacturing requirements. Design projects reinforce concepts and methodologies. For students desiring higher level CAD skills prior to taking ME 481, ME 482. PREREQ: ME 320 and ME 352.

ME 472 Vibrations
Instructor: Joe Guarino
Theory and methods for analysis of vibrating physical systems. Natural frequencies, mode shapes, damping, forced vibrations, and frequency-response functions are analyzed by using computer simulation. PREREQ: ENGR 220 and MATH 333.

ME 477 Biomaterials
Instructor: Gunes Uzer
Theory of biomaterials science. Medical and biological materials and their applications. Selection, properties, characterization, design and testing of materials used by or in living systems. May be taken for BIOL, ME, or MSE credit, but not from more than department. PREREQ: ENGR 245 or CHEM 112.

ME 479 Vertically Integrated Projects
Vertically Integrated Projects unite undergraduate education and faculty research in a team-based context. There are 4 ME VIP projects next fall.
- Autonomous Robotic Systems (Steve Swanson)
- Microgravity (Steve Swanson)
- Plasma Medicine (Jim Browning)
- Shelter Lab (Lynn Catlin)

For more information on a degree from the Mechanical and Biomedical Engineering Department, contact your advisor or email AdviseME@boisestate.edu.