

**TECHNICAL ELECTIVES FOR THE  
BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING**

- MENG 4306 Intermediate Mechanics of Materials (MENG 3306 or CENG 3306)
- MENG 4316 Introduction to Building Energy Simulation (Prereq. MENG 3301 or Coreq. MENG 3316)
- MENG 4317 Vibrations (ENGR 2302 and MATH 3305)
- MENG 4318 Heating Ventilation and Air Conditioning (MENG 3304 and MENG 3316)
- MENG 4320 Design for Manufacturing (MENG 3319)
- MENG 4322 CAD/CAM (Prereq. Math 3403 and MENG 1201)
- MENG 4323 Introduction to Industrial Robotics (MENG 3309, MATH 3203 and MATH 3305)
- MENG 4325 Digital Control of Mechanical Systems (Coreq. MENG 4312)
- MENG 4326 Finite Element Methods in Mechanical Engineering (MATH 3203, MENG 3306, MENG 3316)
- MENG 4330 Process Control and Automation (Prereq or Coreq MENG 4312)
- MENG 4350 Topics in Mechanical Engineering (Max 3 credits, Prereq. depends on topic)
- MENG 4370 Undergraduate Internship (Max 3 credits, Consent of Department Chair)
- MENG 4395 Undergraduate Research (Max 3 credits, Consent of Department Chair)
- MENG 4399 Independent Study (Max 3 credits, Consent of Department Chair)
- ENGR 4398\* Directed Engineering Practice Project (Consent of Instructor and Dean of Engineering)
- EENG 4302\* Instrumentation and Measurement Systems (Prereq or Coreq. EENG 4309)
- EENG 4308\* Automatic Controls (EENG 1201, EENG 3305 (or EENG 3304 for non-EE), and Math 3305)

\* Requires approval in advance by the student's mentor and the Department Chair.  
Prerequisites and other requirements are shown in parentheses.  
Other senior level CENG, EENG, MATH, PHYS courses (up to 3 credits) may be taken for technical elective with the prior approval of student's mentor and the Department Chair.

Approved by ME Faculty on May 8, 2017 and revised on October 26, 2017.