

# CIEG 104: Civil Eng Software & Design

Civil engineering involves the planning, design, construction, and operation of facilities that support the quality of life for all people, from road networks to water treatment systems to buildings and their foundations. This course will utilize a variety of teaching and learning techniques to introduce students to the civil engineering discipline, including the concentration areas of transportation, environmental, water resources, structural, and geotechnical engineering. Students will work individually to conduct research on civil engineering topics and familiarize themselves with skills/tools needed for success in the field including the following: technical writing, MathCAD, and AutoCAD. By the end of the course, students will be able to: Use MathLab, MathCAD and AutoCAD to complete basic engineering analyses and design. Identify and describe the civil engineering disciplines. Prepare and deliver effective oral presentations. Demonstrate technical writing competencies appropriate for civil engineering practice.

**Credits:** 3

**Program:**

## Civil Engineering

### **COURSE DESCRIPTIONS**