

School of Engineering

Degree Programs

Civil Engineering BSCIE

Electrical Engineering BSEE

Mechanical Engineering BSME

ENGR 1414 Elementary Engineering Design: 2 semester hours

Prerequisites: MATH 1030 and MATH 1035, or MATH 1045, or a satisfactory score on the UMSL Math Placement Examination, obtained at most one year prior to enrollment in this course, or consent of instructor.

The course presents fundamental concepts and processes (project planning, design practices, teamwork, innovation, and systems integration) involved in designing engineering systems as it relates to civil engineering, electrical engineering, and mechanical engineering. Students work in teams either as competing design teams or complementary sub-system design teams to apply the concepts to design, build, and test series of engineering projects. The students will submit a design report and give a project presentation at the end of semester.