

Course Catalog - Spring 2010

Civil and Environmental Engineering

408 ***Railroad Transportation Engrg*** credit: 3 or 4 hours.

Principles and analysis of railroad transportation efficiency, economics, energy, and engineering; effect on production and markets. Introduction to railroad infrastructure; locomotive and rolling stock design, function, and operation. Computation of train speed, power, and acceleration requirements; introduction to railway traffic control and signaling. Quantitative analytical tools for rail-transportation decision-making and optimization. Field trip to observe railroad infrastructure, equipment and operations. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CEE 310.