

# EGR 8310: Optimization for Engineers

Linear programs, non-linear programs, and integer programs. Gradient and steepest descent methods and Newton's method for constrained and unconstrained problems. Interior point methods including cutting planes and branch bound methods. Combinatoric optimization. Heuristic methods. Engineering applications of optimization. Prerequisite: ME 7000 (concurrency allowed) or instructor's permission.

**Credits:** 3.0

**Prerequisites:**

ME 7000 :Y

**Program:** [Mechanical Engineering](#)