MATH 484  **Nonlinear Programming**  credit: 3 OR 4 hours.

Iterative and analytical solutions of constrained and unconstrained problems of optimization; gradient and conjugate gradient solution methods; Newton's method, Lagrange multipliers, duality and the Kuhn-Tucker theorem; and quadratic, convex, and geometric programming. 3 undergraduate hours. 3 or 4 graduate hours. 4 hours of credit requires approval of the instructor and completion of additional work of substance. Prerequisite: MATH 241 (formerly MATH 243) or MATH 242; MATH 347 or MATH 348; or equivalent; MATH 415 or equivalent; or consent of instructor.

This course satisfies the General Education Criteria for a:
Quantitative Reasoning II

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<th>Time</th>
<th>Days</th>
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<th>Instructor</th>
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<td>E13</td>
<td>01:00 PM - 01:50 PM</td>
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Credit Hours: 3 hours
Quant Reasoning II course.

Credit Hours: 4 hours
Quant Reasoning II course.
Instructor Approval Required
Restricted to Graduate - Urbana-Champaign.