Engr 674: Fracture Mechanics

SCHOOL OF ENGINEERING

Stress fields near crack tips; modes of fracture; stress intensity factors; numerical methods. Critical stress intensity; fracture toughness. Energy considerations; the J-Integral. Crack-tip plasticity; small-scale yielding; crack-opening displacement. Fatigue; cyclic deformation; fatigue crack initiation.

3 Credits

Prerequisites

- Engr 617: Continuum Mechanics (Minimum grade: C)

Instruction Type(s)

- Lecture: Lecture for Engr 674

Subject Areas

- Engineering, General
- Mechanical Engineering
- Civil Engineering, General

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