

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
- <u>Mechanical Engineering</u>
- Civil Engineering, General

The University of Mississippi is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award certificates and baccalaureate, master's, specialist, and doctoral degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097, call 404-679-4500, or visit online at www.sacscoc.org for questions about the accreditation.

