

Indian Institute of Science

Mechanical Engineering Indian Institute of Science Bengaluru, 560 012 India

E-mail: chair.me@iisc.ac.in URL: www.mecheng.iisc.ac.in Telephone: +91 (80) 2293 2332 (office)



ME 242 (AUG) 3:0 **Solid Mechanics**

Instructor(s): Chandrashekhar S Jog, R Narasimhan & Ramsharan Rangarajan

Course description:

Analysis of stress, analysis of strain, stress-strain relations, two-dimensional elasticity problems, airy stress functions in rectangular and polar coordinates, axisymmetric problems, energy methods, St. Venant torsion, elastic wave propagation, elastic instability and thermal stresses.

Prerequisites:

- Fung, Y.C., Foundations of Solid Mechanics, Prentice Hall. Srinath., L.S., Advanced Mechanics of Solids, Tata McGraw Hill., Sokolnikoff, I.S., Mathematical Theory of Elasticity, Prentice Hall. 1.
- Fung Y C
 Srinath. L. S.
- 4. Advanced Mechanics of Solids
- 5. Tata McGraw Hill.

Resources:

Outcomes:

Additional information:

Course website: