Subject Area: Solid Mechanics

Topics Covered

- Mechanics of Materials
  - Axial and shear stress
  - Torsion
  - Bending
  - Transverse shear
  - Beam statics
  - Principal stresses
  - Mohr's circle
  - Buckling
- Material Behavior
  - Stress-strain relationship
  - Hooke's law
  - Plasticity
  - Creep
- Machine Design
  - Failure theories
  - Fatigue
  - Shafts, key, interference
  - Bearings
  - Gears
  - Screws and fasteners

References


Related Courses

- ENME 2541 – Mechanics of Materials
- ENME 3511 – Machine Design