

# ME 7002: Continuum Mechanics

Tensor algebra and calculus; Lagrangian and Eulerian Kinematics of Deformation; Cauchy and Piola-Kirchhoff stresses; general principles including conservation of mass, conservation of linear and angular momentum and energy; constitutive theory, ideal fluids, Newtonian and non-Newtonian fluids, finite elasticity, and linear elasticity.

**Credits:** 3.0

**Program:** [Mechanical Engineering](#)