ME 8145: Thermoelasticity & Thermal Str

Heat transfer mechanisms in structures: conduction, convection and radiation. Fundamentals of thermoelasticity for isotropic and anisotropic materials. Thermal stresses in one-dimensional members and plane thermoelastic problems. Thermal stresses in plate, spherical and cylindrical structures. Thermally induced instability and thermally induced vibrations in engineering structures.

Credits: 3.0 Prerequisites: ME 7000:Y

Program: Mechanical Engineering