Intermediate Mechanics of Materials

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From the Publisher

Intermediate Mechanics of Materials provides an engaging treatment of three-dimensional stress and strain transformation, composites, non-linear and inelastic structural analysis, thin-walled structural members, energy methods, and the finite element method.

Concise and accessible, the text logically links complex ideas together while building on students' prior knowledge. It explains different concepts through the repetitive use of a symbolic model, which relates displacements, strains, stresses, and internal/external forces and moments to each other.

Intermediate Mechanics of Materials is designed for the second undergraduate course in mechanics of materials. Students should be already familiar with the basic concepts of stress, strain, axial rods, torsion of circular shafts, and symmetric bending of beams.