ME 544 Computational Mechanics Lab (0-0-2-2)

Introduction to Ansys modules including general steps for solving a problem. Simple mesh generation for one-dimensional or two-dimensional domain; Using appropriate commercial package: A simple 2-D heat conduction problem. Heat convection in a heated cavity. A problem from bluff body flows/shear flows; Using appropriate commercial package: One dimensional problem: A cantilevered beam/simply supported beam with distributed load/concentrated load. An I-beam under distributed/concentrated load. A two dimensional problem: plate under tensile loading. Truss, closed cylinder under pressure.