

SYLLABUS :-

Prerequisite: Partial Differential Equations Green s function of Laplace equation in 1-d, 2-d and 3-d; Green s function of Helmholtz equation; Integral representation, Hypersingular integrals; Boundary element discretization; Generalized single and double layer representations; Boundary element collocation method, higher order collocation methods; Three node flat triangles, six node curved triangles; Inhomogeneous, nonlinear, and time dependent problems; Applications in axisymmetric fields, viscous flows, Navier & Stokes and non-Newtonian flows; BEMLIB exercises.