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ME 257 (JAN) 3:0
Finite Element Methods

Instructor(s): Chandrashekhar S Jog

Course description:
Linear finite elements procedures in solid mechanics, convergence, isoparametric mapping and numerical integration. Application of finite element method to Poisson equation, calculus of variations, weighted residual methods, introduction of constraint equations by Lagrange multipliers and penalty method, solution of linear algebraic equations, finite element programming.

Prerequisites:

Resources:
Cook, R.D., Malkus, D.S., and Plesha, M.E., Concepts and Applications of Finite Element Analysis,,Third Edn, John Wiley, 1989.,Bathe, K.J., Finite Element Procedures, Prentice Hall of India, 1982.

Outcomes:

Additional information:

Course website: