SUBJECT NO-CE42002, SUBJECT NAME- THEORY OF ELASTIC STABILITY

LTP- 3-1-0,CRD- 4

SYLLABUS :-

Introduction Fundamental principles and models for elastic stability Stability of column; Classification of dynamical systems, linear and nonlinear eigen value problems. Stability of plates, frames, beams and arches Lateral buckling of beams, combined bending and axial, combined bending and torsion. Buckling of thin elements Torsional buckling of thin walled structures and open sections Column-strength curves. Buckling and post-buckling strength of plate elements with special references to the codal provisions. Behaviour of Light gauge steel structures. Introduction to Prestressing in steel structures