Course Name:
Theory of plates and shells

Course Number:
20133

Credit:
3

Course Content (outline):

1. Introduction:

   Overview of plates theory, Governing equations, boundary conditions

2. Circular plates:

   Governing differential equations, general solution, special cases

3. Rectangular plates:

   Navier and Levy's solution, strip method

4. Bukling of plates
5. Rectangular plates on elastic foundation
6. Energy approach
7. Orthotropic plates
8. Dynamic of plates
9. Numerical approach to rectangular plates
10. Shell theory :
    Differential equations, Special cases: cylindrical, spherical, funicular