Course Name:
Advanced concrete structures

Course Number:
20236

Credit:
3

Course Content (outline):

- Concrete behavior under multi-dimensional stresses
- Ductility of concrete structures
- Final deformations and element flexibility of structures
- Final deformations and element flexibility flexural and compressive members
- Calculation of $M - \delta$
- Stiffness and flexibility of frames
- Design for seismic loading
- Moment distribution
- Plastic design
- Design and analysis of shear walls
- Concrete slab analysis
- Calculation of column capacities under bi-axial moment
- Methods of strengthening of concrete structures