

## DESIGN OF RC ELEMENT LAB (BCEP-501)

## **Course Outcomes:**

- 1. Students will understand the general mechanical behavior of reinforced concrete.
- 2. Students will be able to analyze and design reinforced concrete flexural members.
- 3. Student will be able to analyze and design reinforced concrete compression members.
- 4. Students will be able to analyze and design for deflection and crack control of reinforced concrete members.
- 5. Students will be able to identify and apply the applicable industry. design codes relevant to the design of reinforced concrete members.

## List of Experiments:

- 1. Singly and Doubly reinforced rectangular & Flanged Beams.
- 2. Slabs spanning in one direction, Slabs spanning in two directions, Circular slabs
- 3. Staircases with waist slab having equal and unequal flights with different support conditions, Slabless tread-riser staircase. Design of staircases.
- 4. Square, Rectangular and Circular columns
- 5. Isolated and combined footings, Strap footing.
- 6. Retaining walls and basement walls

Department of Civil Engineering