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**EXPERIMENTAL TECHNIQUES IN STRUCTURAL  
ENGINEERING LAB**

Course Code: 13CE 2208

<b>L</b>	<b>P</b>	<b>C</b>
<b>0</b>	<b>3</b>	<b>2</b>

**Course Educational Objectives:**

To impart knowledge on experiments includes flexural, shear capacity of RC beams.

**Course Outcomes:**

The student should be capable of testing of RC beams for flexural and shear capacity.

1. Elastic properties of concrete.
2. Elastic properties of steel.
3. Shear capacity of R.C. beams.
4. Flexural test on R.C. Beams.
5. Modulus of rupture of concrete
6. Flexural capacities of R.C. slabs.
7. Flexural capacity of corrugated metal decks.
8. Non-Destructive testing of Concrete.
9. Double shear test on steel rod specimen.
10. Pre-stressing of beam (pre-tensioning)
11. Pre-stressing of beam (post-tensioning)
12. Strain measurement using strain gauges.

**REFERENCES**

1. Relevant IS Codes: 456-2000, IS: 800-2007, IS: 10262-2009.
2. Shetty M.S; “Concrete Technology” , 3<sup>rd</sup> Edition, S chand Publications – 2008.
3. Neville A.M. “Properties of Concrete”, 4<sup>th</sup> Edition, S Chand Publications.