

GUJARAT TECHNOLOGICAL UNIVERSITY

M.E. Semester: III

Civil Engineering (Computer Aided Structural Analysis & Design)

Subject Name: **Structural and Earthquake Engineering Lab**

Sr. No	Course content
1.	Basic understanding of experimental simulation and scaling of structures, Geometrical and material modeling aspect of masonry walls, reinforced concrete elements and steel elements
2.	Use of theoretical concept of structural engineering in model preparation.
3.	Introduction to data acquisition and various accessories for it
4.	Testing of various models to understand their behavior under dynamics load using shake table, Use of vibration analyzer and interpretation of test results.
5.	Survey/Field investigation of structures under construction or post construction and technical report preparation.

Reference Books:

1. Seismic Design of Reinforced Concrete and Masonry Buildings - Paulay T and Priestley, John Wiley & Sons
2. Guidelines for E.Q. Resistant Non-engineered Construction - Arya AS, IAEE Committee