



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY: KAKINADA
KAKINADA – 533 003, Andhra Pradesh, India

DEPARTMENT OF CIVIL ENGINEERING

III Year – II Semester		L	T	P	C
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CAD LAB					

Course Objectives: The objectives of the course are to

1. **Learn** the usage of any fundamental software for design
2. **Create** geometries using pre-processor
3. **Analyse** and Interpret the results using post processor
4. **Design** the structural elements

Course Outcomes

After the completion of the course student should be able to

- a) **Model** the geometry of real-world structure Represent the physical model of structural element/structure
- b) Perform **analysis**
- c) **Interpret** from the Post processing results
- d) **Design** the structural elements and a system as per IS Codes

LIST OF EXPERIMENTS

1. Analysis & Design determinate structures using a software
2. Analysis & Design of fixed & continuous beams using a software
3. Analysis & Design of Plane Frames
4. Analysis & Design of space frames subjected to DL & LL
5. Analysis & Design of residential building subjected to all loads (DL,LL,WL,EQL)
6. Analysis & Design of Roof Trusses
7. Design and detailing of built up steel beam
8. Developing a design programme for foundation using EXCEL Spread Sheet
9. Detailing of RCC beam and RCC slab
10. Detailing of Steel built up compression member

Note: Drafting of all the exercises is to be carried out using commercially available designing software's.