



**BONAM VENKATA CHALAMAYYA INSTITUTE OF TECHNOLOGY & SCIENCE
(AUTONOMOUS)
DEPARTMENT OF CIVIL ENGINEERING**

Regulation	BR23				
III B. TECH II SEMESTER	Course Code: 23SC6LO1	L	T	P	C
Course Title:	CAD LAB	0	1	2	2

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. **Analyze** 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 software
2. Analysis & Design of fixed & continuous beams using 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 program 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.

Dr M C S MADAN HOD & BOS, Department of Civil Engineering, BVCITS Batlapalem	Dr G Yesuratnam Professor of Civil Engineering JNTU Kakinada. (University Nominee)	Dr A Murali Krishna, Professor, Department of Civil Engineering, IIT Tirupathi.	Dr B Raghuram kadali, Asst Assistant Professor, Department of civil Engineering, NIT Warangal.	Mr P Rajesh Sr Engineer(P)SDVVL Survey & Constructions, Kakinada (Industrial Expert)	Mr Chakradhar Prasad Assistant Professor, Department of civil DNR College of Engineering Technology Bhimavaram. (Alumni Member)