3/4 B.Tech. SIXTH SEMESTER

CE6L2 CIVIL COMPUTER AIDED DESIGN (CCAD) LAB Credits: 2

Lecture: -- Internal assessment: 25 marks
Lab : 3 periods/week Semester end examination: 50 marks

Objectives:

- To know the behavior of structural elements and shape of shear force bending moment, axial force and deflections.
- To design structures using Software packages like STAADPro / GTSTRUDL / STRAP.

Learning outcomes:

After performing the experiments listed in the syllabus, the students will be able to

- Use of Stadd pro software for the analysis and design of beams, building frames and trusses.
- Use of software for the design of slabs, footings and retaining walls.

PART - A

Students are required to Analysis and Design any four of the following structures using Software packages like STAAD Pro / GT STRUDL / STRAP

1. Analysis & design of continuous beam.
2. Analysis & design of plane frame.
3. Analysis and design of space frame.
4. Analysis and design of roof truss.
5. Design of two – way slabs.
6. Design of isolated column footing.
7. Design of retaining wall.

PART - B

Working out rates using estimation software for the different items in a single story building (Minimum Three Exercises).

Learning resources

Web Reference books: vlab.co.in