## 2/4 B.Tech. FOURTH SEMESTER

# CE4L3 SURVEYING FIELD WORK – II

Credits: 2

Lecture: --Internal assessment: 25 marksLab: 3 periods/weekSemester end examination: 50 marks

\_\_\_\_\_

#### Objectives:

• To survey areas, measure coordinates and elevations of points by advanced methods and instruments.

### Learning outcomes:

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

- Use Total Station for field surveying to determine the distances, directions and elevations, height of the objects, area and boundaries of fields.
- Set out simple curves using tape, Theodolite, Total Station, set out for building.
- Mark out Plans, Sewer lines, Water supply lines, etc. using Total Station.

### **1. TOTAL STATION:**

- 1. Study of Instrument Determination of Distances, Directions and Elevations
- 2. Determination of Boundaries of a Field and computation of area.
- 3. Determination of Heights of objects.

### 2. SETTING OUT OF CURVES & LAYOUT OF BUILDING:

- 1. Setting of simple curve using tape or/and theodolite.
- 2. Setting of a simple curve using Total Station.
- 3. Setting out for Building.

Survey Camp is to be conducted for a minimum period of seven days Using Total Station to train in one of the following areas:

- 1. Preparation of a contour Plan/ Map.
- 2. Earth work Computations for a high way / canal projects
- 3. Marking of a Sewer line/ Water supply line.
- 4. Any type of Execution works.