|| Jai Sri Gurudev|| Sri Adichunchanagiri Shikshana Trust (R) ADICHUNCHANAGIRI UNIVERSITY BGS Institute of Technology

B. E. CIVIL ENGINEERING Choice Based Credit System (CBCS) and Outcome Based Education (OBE)

| 18 | BCVL47 | Course Code | SURVEY PRACTICE II | Course Title | IV | Semester |
|----|---------|----------------|-----------------------|--------------------|----------|--------------------|
| | 02 | Credits | 1-0-2-3 | L – T – P – TL* | 42 Hours | Teaching Period |
| 10 | 0 Marks | Total | 60 Marks | SEE* | 40 Marks | CIE* |

*NOTE: L – Lecture; T – Tutorial; P – Practical; TL – Total;

CIE – Continuous Internal Evaluation; SEE – Semester End Examination

| Course Learning Objectives: 1. To provide knowledge of Total Station. 2. To develop skills in using Total Station and analyse data. 3. To develop skills to conduct traverse survey & to find the area. | Number of Lecture Hours/Week |
|---|------------------------------------|
| Experiments: | |
| 1. Study of Total station for measurement of distance and angles | |
| 2. To determine area of a field using Total Station | |
| 3. Traversing using Total Station | 03 = (1 Hour) |
| 4. Contouring using Total Station | Instruction + |
| 5. Determination of Remote height using Total station | 2 Hours |
| 6. Staking out using Total station | Laboratory) |
| 7. Distance, gradient, difference in height between two inaccessible points using | • |
| Total station | |
| 8. Preparation of Topo map using Total station data. | |

Course outcomes: At the end of the course, the student will be able to

- 1. Apply the principle of surveying for civil engineering applications.
- 2. Calculate areas of field, drawing plans and contour maps using Total station.
- 3. To prepare the topographical map which shows the hills, valleys, rivers, villages, towns, forests etc. of a country.
- 4. To prepare an engineering map which shows the details of engineering work such as roads, railways, reservoirs, irrigation canals etc.
- 5. To prepare a contour map to determine the capacity of a reservoir and to find the best possible route for roads, railways etc.

Question paper pattern:

Questions for CIE and SEE will be designed to evaluate the various educational components such as:

| Sl. No | Bloom's taxonomy | % in Weightage |
|--------|------------------------------------|-------------------|
| 1 | Remembering and Understanding | 20 |
| 2 | Remembering and Understanding | 50 |
| 3 | Analysis | 10 |
| 4 | Synthesis (Creating new knowledge) | 10 |
| 5 | Evaluation | 10 |