

19CE3352- Surveying Lab

Course Code	19CE3352	Year	II	Semester	I
Course Category	Program Core	Branch	CE	Course Type	Lab
Credits	1.5	L-T-P	0-0-3	Prerequisites	Surveying
Continuous Internal Evaluation:	25	Semester End Evaluation:	50	Total Marks:	75

Course Outcomes

Upon successful completion of the course, the student will be able to

CO1	Determine the chain survey and inaccessible points of an area with chain and compass.	L4
CO2	Survey and plotting of an area by compass and plane table	L4
CO3	Determine the Traversing, fly leveling and contouring.	L4
CO4	Determine the Distance, Height, Boundaries of a Field and computation of area	L5
CO5	Determine the Setting out of Curves & Layout of Building	L5

Syllabus

Unit No.	Contents	Mapped CO
I	1. Survey of an area by chain survey (closed traverse) & Plotting 2. Chaining across obstacles 3. Determination of distance between two inaccessible points with compass	CO1
II	1. Surveying of a given area by prismatic compass (closed traverse) and plotting after adjustment. 2. Radiation method by plane Table survey 3. Intersection method by plane Table survey	CO2
III	1. Fly leveling (differential leveling) 2. An exercise of L.S and C.S and plotting 3. An exercise on contouring	CO3
IV	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.	CO4
V	1. Setting of simple curve using tape or/and theodolite. 2. Setting of a simple curve using Total Station. 3. Setting out for Building	CO5

Learning Resources

Text Books

1. B.C. Punmia, A.K. Jain, Arun Jain, Surveying I and II, 16/e, Laxmi Publications, 2017.
2. R. Subramanian, Surveying and Levelling, 2/e, Oxford University Press, 2014.

Reference Books

1. S.K. Roy, Fundamentals of Surveying, 2/e, Prentice Hall of India, 2011.
2. T.P. Kanetkar, Surveying and Levelling, Part I and II, 4/e, New Central Book Agency 2012.

e-Resources & other digital material

1. <https://nptel.ac.in/courses/105/101/105101201/>
2. <http://jntuk-coeerd.in/>

Contribution of Course Outcomes towards achievement of Program Outcomes & Strength of correlations (3:High, 2: Medium, 1:Low)														
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	2	3				3		2				2	3	3
CO2	2	3				3		2				2	3	3
CO3	2	3				3		2				2	3	3
CO4	2	3				3		2				2	3	3
CO5	2	3				3		2				2	3	3