

**INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI**  
**PROFORMA FOR NEW COURSE**

1.	Title of the Course	Surveying Practical
2.	Course Number	CE2191
3.	Status of the Course	Core
4.	Structure of Credits	0-0-3-2
5.	Offered To	UG
6.	New Course/Modification to	New
7.	To be Offered by	Department of Civil & Environmental Engineering
8.	To take effect from	July 2018
9.	Prerequisite	Nil
10.	Whether approved by the Department	Yes
11.	<b>Course Objective:</b> The course gives exposure to students on practical use of surveying instruments including measuring tapes, chain, compass, levels, theodolites and total station. The course would help the students to understand and apply measurement error, accuracy, precision and techniques to improve accuracy of surveys. The students will gain knowledge on several methods for the computation of areas and volumes.	
12.	<b>Course Content:</b> Introduction to various instruments: chains, tapes, levels, theodolites, total station; Measurement of distances, directions and elevations; Traversing; Levelling; Contouring; Measurement of areas and volumes; Errors of measurements and their adjustments; Setting out curves	
13.	Text book(s): 1. Arora K R, <i>Surveying Vol-I and II</i> , Standard Book House (2016). 2. Schofield W and Breach M, <i>Engineering Surveying</i> , Spon Press (2017).	
14.	Reference(s): 1. Punmia P C, <i>Surveying Vol. I and II</i> , Laxmi Publications (2005).	