

## INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI

## भारतीय प्रौद्योगिकी संस्थान तिरुपति

1.	Title of the course	Building Drawing
2.	Course number	CE205P
3.	Structure of credits	0-0-3-2
4.	Offered to	UG
5.	New course/modification to	Modification To CE2294/8
6.	To be offered by	Department of Civil and Environmental Engineering
7.	To take effect from	July 2022
8.	Prerequisite	Nil
9.	Course Objective(s): This course explores drafting as a tool for technical communication. Upon completing this course, students will able to read and create the construction and working drawings. Further, this course will enhance the drafting skills of students using computer tools such as Auto CAD and Autodesk Revit, etc. In addition, this course also introduces various advanced techniques such as BIM, Parametric modelling etc., with reference to building drawing and visualization.	
10.	<b>Course Content:</b> Introduction to Building drawing - universal signs and symbols, line types, scale, building elements; Building floor plans, elevations and sections, vocabulary based on building drawing; Substructure - types of foundation, footing layouts, marking drawings; Super structure - types of wall systems, openings, arches, construction details, column locations, grid layouts, working drawings; Vertical transportation systems - construction, dimensions and standards, lintels and beams, roof slab drawings, trusses, service drawings - electrical and plumbing and HVAC layouts	
11.	Textbook(s):  1. Balagopal T S, Prabhu K, Vincent P and Vijayan C, Building Drawing and Detailing, Spades Publishers (1987).  2. Shah M G, Kale C M and Patki S Y, Building drawing with an integrated approach to built environment, 4th Edition, Tata McGraw Hill (2002).	
12.	Reference(s): 1. Ching F D K, Building construction Illustrated, John Wiley & Sons (2008). 2. Mckay W B and Mckay J M, Building construction Volumes 1 to 4, Orient Blackswan (1974).	