

Course No
CE 272

Course Name
BASIC CIVIL ENGINEERING

L-T-P-Credits
(2- 0- 0: 2)

Prerequisite: nil;

Co requisite: nil

Course Objectives:

1. To inculcate the essentials of Civil Engineering field to the students of all branches of Engineering.
2. To provide the students an illustration of the significance of the Civil Engineering Profession in satisfying societal needs

Course Outcomes:

1. To describe the role of engineer in the development of the society and explain relationship of civil engineering with other branches of engineering and technology
2. To discuss types of buildings and select materials of constructions
3. The students will be able to plan and perform building drawings
4. Able to perform basic surveying and related calculations
5. Get knowledge on various building components/finishes and other structural aspects of civil engineering.

SYLLABUS

Module	Contents	Hours
	General introduction to Civil Engineering	6
I	Introduction to types of buildings, Components of a residential building, Introduction to industrial buildings; Introduction to planning of residential buildings - Simple building plans; Introduction to the various building area terms; Setting out of a building;	
	Surveying	6
II	Principles, Objectives, Horizontal measurements with tapes, Ranging; Levelling – Instruments, Reduction of levels; Modern surveying instruments.	
	Building materials	8
III	Bricks, cement blocks, Cement, Cement mortar, Steel; Building construction.	
	Brief Study on	8
IV	Foundations, Brick masonry, Roofs, Floors, Decorative finishes, Plastering, Paints and Painting; Basic infrastructure and services – Elevators, Escalators, Ramps, Air conditioning, Sound proofing, Towers, Chimneys, Water Tanks; Intelligent buildings	

Essential Readings:

1. Shetty, M.S., Concrete Technology (Theory & Practice), S.Chand and Co, Revised edition, 2015
2. Gambhir, M.L., Concrete Technology, Tata McGraw Hill, fifth edition, 2013.
3. Basak NN. “Surveying & Levelling, McGraw Hill, second edition, 2014

Supplementary Readings:

1. R. Chudley and r. Greeno, building construction handbook, addison wesley, longman group, England, 6th edition, 2006
2. M. S. Mamlouk, and J. P. Zaniewski, Materials for Civil and Construction Engineers, Pearson, Prentice Hall, 2nd Edn., 2006.