

Lesson plan for 6th semester civil engineering

Discipline/Deptt: Civil Engineering

2024(5)

Subject (Practical): CADD Lab and Design & Detailing Practice

Semester: 6th

Total Periods: 45

No. of periods per week: 3

Week	Periods	Unit/Chapter	Topics to be covered
1 st	3	1.1	1.0 Structural Detailing Practice: Draw the following with necessary details and schedule of bars from supplied sketches or given references such as SP 34 1.1 Slab, beam and lintel with chajja as in a simple building (Help from Sections 8 & 9 of SP 34 may be taken) (Plate I)
2 nd	3	1.1	1.1 Slab, beam and lintel with chajja as in a simple building (Help from Sections 8 & 9 of SP 34 may be taken) (Plate I)
3 rd	3	1.2	1.2 Columns, column-beam connections with & without splicing, isolated footing, staircase (Help from sections 6, 7, 10 of SP 34 may be taken)(Plate 2)
4 th	3	1.2	1.2 Columns, column-beam connections with & without splicing, isolated footing, staircase (Help from sections 6, 7, 10 of SP 34 may be taken)(Plate 2)
5 th	3	1.3	1.3 Different types of bolt connections, welded connections. (Plat3)
6 th	3	1.3	1.3 Different types of bolt connections, welded connections. (Plat3)
7 th	3	1.4	1.4 Details of Pile and Pile cap
8 th	3	2.1	2.0 Use of STADD Pro Software: 2.1 2-D Modelling of structures, Use of Structure wizard, Geometry, Property, Support, Loads and combinations, Analysis
9 th	3	2.1	2.1 2-D Modelling of structures, Use of Structure wizard, Geometry, Property, Support, Loads and combinations, Analysis
10 th	3	2.2	2.2 Analysis of a Continuous beam with more than two span subjected to udl and point load
11 th	3	2.3	2.3 3-D modeling of building structures ,dead load, live load, earthquake and wind load analysis, design of a 3 storeyed building and preparation of reinforcement drawing and detailing
12 th	3	2.4	2.4 Introduction to STADD foundation.
13 th	3	3.1 3.2	3.0 Revit Architecture Software: 3.1 Basics- Modify, Wall, Door, Window, Component Room, Roof, Floor, Grid, Lines, Dimension, Section, Level, Text, View 3.2 Modelling- Ramp, Railing, Stair
14 th	3	3.3	3.3 Site- Topo surface- Parking Component, Site Component 3.4 Align, Split, Trim,

		3.4	offset, Match type, Line work, Paint, Scale, Unit
15 th	3	3.5	3.5 3D View
		3.6	3.6 Preparation of approval drawing of a double storied residential building from given specifications with its 3D view using above commands

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