

Lesson Plan on Civil Engineering Drawing - I (W-2A)

Total Contact Hours: 75 Hours

Weekly Practical Hours: 5 Hours

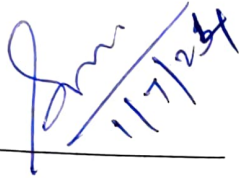
Duration: 15 Weeks (5 Hours/Week)

Faculty – Soubhagya Ranjan Mohanty

Week	Hours	Topic / Practical Work	Teaching-Learning Activities
Week 1	5	Introduction to AutoCAD Software: Interface, commands, coordinate system, drawing setup, units, layers	Demonstration of AutoCAD workspace; practice basic operations
Week 2	5	Recap of AutoCAD Commands: Draw, Format, Edit, Modify, Dimension commands	Practice line, circle, offset, trim, extend, copy, mirror, array, dimensioning commands
Week 3	5	2D Drawing of Building Components – I: Doors, Windows, wall cross-section	Preparation of architectural symbols and detailed component drawings
Week 4	5	2D Drawing of Building Components – II: Spread footing, column footing, staircase	Detailed drafting of structural components with dimensions
Week 5	5	R.C.C. Components Drawing: R.C.C. T-beam and slab; Isometric drawing of simple objects	Demonstration of isometric commands and 3D visualization techniques
Week 6	5	3D Drawing of Simple Objects using AutoCAD	Use 3D modeling commands, extrusion, views, rotation
Week 7	5	Plan, Elevation and Section of Flat Roof Building: Understanding line diagram and specifications	Explain building drawings, scale, symbols and prepare window sill level plan
Week 8	5	Single Storeyed RCC Roof Slab Building Drawing: Plan, elevation and sectional views	Preparation of complete architectural drawing using AutoCAD
Week 9	5	Double Storeyed Pucca Building Drawing with RCC Staircase	Develop detailed plan, elevation and section from line diagram
Week 10	5	Approval Drawing of Residential Building: Site plan, index plan and required details	Explain local authority drawing requirements and drafting procedure
Week 11	5	Inclined Roof Building Drawing: AC sheet/GCI/Tiles roof on wooden structure	Explain roof types; prepare gable and hipped roof drawings
Week 12	5	Detailed Drawing of Inclined Roof Building from given specifications	Create plan, elevation and sectional views using AutoCAD commands
Week 13	5	Building Planning – I: Cost-based planning using approximate plinth area rate; orientation of buildings	Discuss planning principles, economy and functional requirements

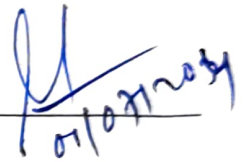
Week 14	5	Building Planning – II: Location of openings, living areas; Line plan of school and hostel buildings	Develop functional layouts based on requirements
Week 15	5	Building Planning – III: Market complex and dispensary building; Revision and final drawing submission	Practice final corrections, plotting, presentation and viva preparation

Faculty Civil: _____



11/7/2024

HOD Civil: _____



01/07/2024