SAP 2000 Level - 2

MEGA Academy
Not only courses .... but real Experience

CHAPTER Revision on Level 1 Sap2000

1.1 Design Beams
1.2 Design Frames
1.3 Design Multi-Story
1.4 Design Trusses

CHAPTER 2 The Analysis of Solid Slabs

2.1 Design a primary thickness with excel sheet
2.2 Get a primary straining actions with first principles
2.3 Define the slab shell
2.4 Define Area Sections
2.5 Edit Grids
2.6 Draw The slab
2.7 Joint Restrains
2.8 Load cases
2.9 Load combinations
2.10 Assign the loads
2.11 Mesh The Areas
2.12 Analyze
2.13 Straining Actions
2.14 Stresses
2.15 Reinforcement (Mesh and additional)
2.16 Home work

CHAPTER 3 The Analysis of Paneled Beams

3.1 Design a primary thickness for each individual slab
3.2 Get a guide Bending Moment to check the Results (Manual)
3.3 Edit Grids
3.4 Define the (Slab , Beams)
3.5 Then Draw the area
3.6 Load Combination (Ultimate-Working)
3.7 Define the girder beams and secondary beams
3.8 Analyze
3.9 Stress

Chapter 4 The Analysis of Hollow Blocks

4.1 Define of the Rips & Blocks & Solid part
4.2 Define The Main Criteria of Hollow Blocks
4.3 Edit Grids
4.4 Define properties of (slabs & beams)
4.5 Mesh the Areas

Chapter 5 The Analyze of Flat Slab

Sap Project

1-Steps of The Project

2-Analyze of Raft

Chapter 6 Analyze of Stairs (Two flight stair – Three flight stair-Helical Stairs)

6.1 Define the materials
6.2 Define the frames
6.3 Draw the levels
6.4 Load cases – Load combination
6.5 Loads
6.6 Draw the areas
6.7 Mesh the areas
6.8 Analyze
6.9 Straining Actions
6.10 Reinforcement

Chapter 7 Lateral Loads (Wind Loads – Earth Quake Loads)

Chapter 8 Tanks

8.1 Edit the grids
8.2 Define The Frames (Slabs-Beams)
8.3 Draw the area
8.4 Mesh the area
8.5 Join Restrains
8.6 Load Cases _ Load Combinations
8.7 Assign Loads
8.8 Replicate The Floors
8.9 Analyze
8.10 Reinforcement