



STAAD.Pro V8i		Total Duration : 60 Hours
Day	Topics	
1	<ul style="list-style-type: none"> • Overview of Structural Analysis and Design • Calculating Shear Force and Bending Moment values for various supports and load types • Introduction <ul style="list-style-type: none"> ○ STAAD.Pro V8i 	
2	<ul style="list-style-type: none"> • Co-ordinate Systems <ul style="list-style-type: none"> ○ Global Vs Local • Creating a New Project in STAAD.Pro • Units • Model Generation <ul style="list-style-type: none"> ○ Creating Nodes & Members • Select Menu 	
3	<ul style="list-style-type: none"> • Model Editing Tools <ul style="list-style-type: none"> ○ Translational Repeat ○ Circular Repeat ○ Move ○ Mirror ○ Rotate ○ Insert Node <ul style="list-style-type: none"> ▪ For a Single Member ▪ For Multiple Members ○ Add Beam <ul style="list-style-type: none"> ▪ Point to Point ▪ Between Midpoints ▪ Perpendicular Intersection ▪ Curved Member 	
4,5	<ul style="list-style-type: none"> • Model Editing Tools <ul style="list-style-type: none"> ○ Connect Beams Along ○ Stretch Selected Members ○ Intersect Selected Members ○ Merge Selected Members ○ Renumber ○ Split Beam ○ Break Beams at Selected Nodes 	

	<ul style="list-style-type: none"> • Creating Models by using Structure Wizard • Mini Project 1
6,7	<ul style="list-style-type: none"> • Support Specification • Member Property Specification • Member Offset • Material Specification • Group Specification • Loading <ul style="list-style-type: none"> ○ Creating a Primary Load ○ Adding Selfweight
8,9	<ul style="list-style-type: none"> • Loading <ul style="list-style-type: none"> ○ Nodal Load ○ Member Load <ul style="list-style-type: none"> ▪ Uniform Force and Moment ▪ Concentrated Force and Moment ▪ Linear Varying Load ▪ Trapezoidal Load ▪ Hydrostatic Load ▪ Pre/Post Stress ○ Area Load ○ Floor Load • Mini Project 2
10,11	<ul style="list-style-type: none"> • Loading <ul style="list-style-type: none"> ○ Wind Load ○ Creating Load Combination ○ Automatic Load Combination ○ Edit Auto Load Rules ○ Moving Load ○ Reference Load ○ Repeat Load • Mini Project 3
12,13	<ul style="list-style-type: none"> • Introduction to Analysis <ul style="list-style-type: none"> ○ Perform Analysis ○ Overview of Output Page ○ Pre-analysis Print ○ Post-analysis Print • Inactive or Delete Specification • General Guidelines for Design • Concrete Design in STAAD.Pro <ul style="list-style-type: none"> ○ Column Design ○ Beam Design

14	<ul style="list-style-type: none"> • RC Designer <ul style="list-style-type: none"> ○ Beam Design ○ Column Design • Project 1
15,16,17	<ul style="list-style-type: none"> • Seismology <ul style="list-style-type: none"> ○ Introduction ○ Terminologies ○ Standards for Earthquake Design ○ General Principals for Earthquake Design ○ Finding the Lateral Force (manual calculation) ○ Finding the Lateral Force by using STAAD.Pro • Dynamic Analysis <ul style="list-style-type: none"> ○ Response Spectrum Analysis • Mini Project 4
18	<ul style="list-style-type: none"> • Introduction to FEM • FEM Modelling in STAAD.Pro <ul style="list-style-type: none"> ○ Snap Plate ○ Add Plate ○ Create Infill Plates ○ Generate Surface Meshing ○ Generate Plate Mesh ○ Parametric Modelling
19,20	<ul style="list-style-type: none"> • Member Truss • Creating FEM models by using Structure Wizard • Adding Plate Thickness • Plate Load <ul style="list-style-type: none"> ○ Pressure on Full Plate ○ Concentrated Load ○ Partial Plate Pressure Load ○ Trapezoidal Load ○ Hydrostatic Load ○ Element Joint Load
21,22	<ul style="list-style-type: none"> • Water Tank Design • Slab Design <ul style="list-style-type: none"> ○ One-way Slab ○ Two-way Slab • Mini Project 5
23	<ul style="list-style-type: none"> • Staircase Design • Shear wall Modelling and Design

	<ul style="list-style-type: none"> • Solid Modelling and Analysis • Mini Project 6
24	<ul style="list-style-type: none"> • STAAD.Beava
25	<ul style="list-style-type: none"> • Cable Member Specification • Tension / Compression Specification • Table Member Property • Steel Design in STAAD.Pro
26	<ul style="list-style-type: none"> • Interactive Steel Design • Design of Overhead Transmission Line Towers • Pushover Analysis • Project 2
27	<ul style="list-style-type: none"> • Foundation Design <ul style="list-style-type: none"> ○ Isolated Footing ○ Combined / Strip Footing ○ Tool Kit <ul style="list-style-type: none"> ▪ Isolated Footing ▪ Combined Footing
28	<ul style="list-style-type: none"> • Foundation Design <ul style="list-style-type: none"> ○ Mat Foundation ○ Pile Cap Design • Mini Project 7
29,30	<ul style="list-style-type: none"> • Importing CAD Models • Report Setup • Plotting from STAAD.Pro • Final Project