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INFOBYTE®
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STAAD.Pro
(70Hrs) 35Days

No. of Days	Topic
Day 1	Overview of Structural Analysis andDesign □ Introduction STAAD.ProV8i □ Staad Pro Workspace □ Staad Pro Interface A. Menu bar B. Toolbar C. Mode Bar D. Page Control E. Datasheet
Day 2	□ Co-ordinateSystems o Global Co-ordinate o Local Co-ordinate □ Units o Input Unit o Graphical Display Unit □ Dimensions
Day 3	□ Labels o Node Labels o Beam Labels o Supports Labels □ Tools o Rotation Tools o Zoom Tools o View Tools
Day 4	Geometry creation Methods o Snap /Grid Method o A. Linear Grid o B. Radial Grid o Copy Cut Method
Day 5	Geometry creation Methods o Run Structure Wizard o Co-ordinate Method DXF Method/ Import CAD Models
Day 6	□ InsertNode o For a SingleMember o For MultipleMembers □ AddBeam o Point toPoint o BetweenMidpoints o PerpendicularIntersection
	o CurvedMember
Day 7	□ Model EditingTools o TranslationalRepeat o CircularRepeat
Day 8	□ Model EditingTools o Move o Mirror o Rotate o Copy
Day 9	□ Model EditingTools o Connect BeamsAlong o Stretch SelectedMembers o Intersect SelectedMembers o Create Collinear Bea
Day 10	□ Model EditingTools o Merge SelectedMembers o Renumber o SplitBeam Break Beams at SelectedNodes
Day 11	□ Section Properties o Circular o Tee o Trapezoidal o Tapered □ Section Database □ Assignment Method □ User table Beta Angle
Day 12	□ Structure Diagrams o Full Section o Section Outlines □ Cut Sections/Plane o Range By Joint o Range By Min/Max Select to View
Day 13	Supports Assignment □ Introduction of structural supports o Fixed Support o Pinned Support o Enforced o Enforced But

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	☐ Assignment Methods Member Offset
Day 14	Loading ☐ NodalLoad ☐ Nodal Moment ☐ MemberLoad o Uniform Force andMoment o Concentrated Force andMoment o Linear VaryingLoad o TrapezoidalLoad HydrostaticLoad ☐ AreaLoad FloorLoad
Day 15	Understanding & Calculating Building Loads ☐ Self-Weight of Members & Self Weight factor ☐ Linear Load- Wall Loads ☐ Calculation of Floor Dead Loads ☐ Distribution of Floor load One way & Two way Special Loads- Lift machine load, Sunken load
Day 16	☐ Introduction to Floor load & Live load as per IS 875-I & II ☐ Creation of Primary Load Cases o Primary Dead Load case o Primary Live Load case ☐ Load Combinations o Manual Combination Method o Auto Load Combination Method ☐ Analysis & Print Command ☐ Post Processing o Result setup o Node reaction & displacement o Beam Forces o Beam Graphs
Day 17	Understanding Staad Editor ☐ Job Information ☐ Input width ☐ Join Coordinates

	☐ Member incidences ☐ Finish ☐ Writing notes/ information in editor Geometry Verification ☐ Tools Menu o Orphan Nodes o Duplicates Nodes/ Members o Overlapping Collinear Members ☐ Unit Convertor ☐ Calculator ☐ Member Specifications ☐ Member Release ☐ Member Offset
Day 18	Introduction to RCC Design As per IS 456 ☐ Defining Various RCC Design Parameters ☐ Beam Design ☐ Column Design ☐ RCC Detailing Methods
Day 19	WindLoad Design As per IS 875 III ☐ Introduction to wind design ☐ Design factors and Coefficient
Day 20	Calculation of Wind load as per IS 875 Part 3 ☐ Create Wind definition ☐ Primary Load Case for Wind load ☐ Load combinations
Day 21	Seismic Analysis & Design as per IS-1893 ☐ Introduction ☐ Terminologies o Standards for EarthquakeDesign o General Principals for EarthquakeDesign
Day 22	Seismic Analysis & Design as per IS-1893 ☐ Static Analysis Method ☐ Seismic Definition ,Seismic Parameters ☐ Elementary Introduction – A. IS Code 1893(2002/2005)

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	B. IS Code 13920
Day 23	STEEL Design inSTAAD Pro As Per IS-800 ☐ Steel Design Mode o Load Envelopes o Member Setup o Member Restraints o Design Briefs Design Groups
Day 24	☐ Interactive SteelDesign ☐ Introduction Of Transmission Line Towers ☐ Design of Transmission LineTowers
Day 25	FEM Modelling inSTAAD.Pro ☐ FEM Modelling introduction o SnapPlate o AddPlate o Create InfillPlates o Create surfaces o Generate SurfaceMeshing o Generate PlateMesh o ☐ Adding PlateThickness ☐ PlateLoad o Pressure on FullPlate o ConcentratedLoad o Partial Plate PressureLoad o TrapezoidalLoad o HydrostaticLoad o
Day 26	Water Tank Design ☐ Creating a RCC underground rectangular tank using plates o Tank empty o Tank Full ☐ Creating circular water tank
Day 27	Shear Wall Design ☐ Introduction to Shear wall Shear wall Modeling andDesign
Day 28	Moving (Rolling) Loads ☐ Vehicle definition ☐ Primary load case for moving load ☐ Analysis of a RCC deck slab for moving

	load Viewing Influence line Diagram
Day 29-30	Foundation Design ☐ Introduction to structural foundation ☐ Importing files from Staad Pro to Staad Foundation I. Isolated Footing design o Basic of Isolated Footing o Creating a Isolated Footing job o Specification of design parameters o Design result o II. Combined Footing Design o Basic of combined Footing o Creating a Combined Footing job o Specification of design parameters o Design result o
Day 30-35	FINAL PROJECT