



IFS ACADEMY

Training For The Future!!

IFS Academy Career Program in Building Information Modeling & Structural Design for Civil Engineers

(Duration: 04 Months)

Course Curriculum

➤ **AutoCAD for Civil Engineers (2D & 3D)**

AutoCAD 2D:

Getting started; Object Property & Layer Management; Drawing Geometry; Tools for Creating Key Geometry; Tools for Manipulating Geometry; Creating Drawing Sheets; Dimensioning and Annotating Drawings; Setting Up a Layout; File Management; Plotting & Printing.

AutoCAD 3D:

The AutoCAD Civil 3D Interface; Project Management; Parcels; Survey; Surfaces; Alignments; Profiles; Corridors; Grading, Pipe Networks; Plan Production.

➤ **Building Information Modeling using Revit**

Introduction to BIM and Autodesk Revit; Basic Drawing and Editing Tools; Setting Up Levels and Grids; Modeling Walls; Working with Doors and Windows; Working with Curtain Walls; Working with Views; Adding Components; Modeling Floors; Modeling Ceilings & Roofs; Modeling Stairs, Railings, and Ramps; Construction Documents; Creating Tags, Schedules and Details.

Project 1: Structural Designing Project which involves Structural Grids and Columns, Foundations, Framing, Slabs and Reinforcement.

Project 2: Design for Building Energy Performance Analysis

➤ **Structural Design & Analysis using STAAD.Pro**

Introduction to Analysis of Structures; Introduction to STAAD.Pro; Structural Modeling; Functions to complete Geometry; Material Properties; Member

Specifications; Loading Particulars; Seismic Analysis; Wind Load Analysis; Post Processing; R. C. DESIGN; Steel Design; Finite Element Method and Staad.Pro.

Workshops & Case Study.

➤ **Structural Design & Analysis using ETABS**

Introduction to ETABS, Modeling in ETABS, Editing Properties, Defining Properties, Structural Objects, Selection Properties, Assign, Design, Detailing, Display and Generate Results.

Workshops & Case Study.

➤ **Soft Skills Training**

Résumé writing, Aptitude Test, Technical Test, Group Discussion Techniques, Interview techniques, Communication & Presentation Skills, Personality Development.

Note: For in depth contents of the above programs, please refer our individual Modular course curriculums.

IFS Academy, Pune

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