Revit Structure Syllabus **Duration : 120 Hrs (60 hours theory /60 hours Lab)**

1. **New Features**
    a. New Features
2. **New Features for Revit Structure**
    a. Introduction to Autodesk Revit Structure
    b. Basic Concepts and Principles
    c. The Revit Structure User Interface
    d. Building Information Modeling and Revit Structure, Getting Help
3. **Getting Started wit a Structural Project**
    a. Starting a New Structural Project
    b. Snaps Tool, Opening, Saving and Closing a Project
    c. Options Dialog Box
4. **Setting up a Structural Project**
    a. Creating Project Templates
    b. Using Levels
    c. Using Grids
    d. Working with Reference Planes
5. **Structural Columns and Walls**
    a. Structural Columns
    b. Structural Walls
6. **Foundations, Beams, Floors, and Open Web Joists**
    a. Understanding Foundations
    b. Adding Foundations
    c. Structural Floors
    d. Beams and Open Web Joists
7. **Editing Tools**
    a. Creating Selection Sets
    b. Moving and Copying
    c. Rotating, Mirroring and Arraying
    d. Additional Editing Tools, Creating Groups
8. **Documenting Models and Creating Families**
    a. Dimensioning
    b. Adding Text and Tags
    c. Creating Families
9. **Standard Views, Details, and Schedules**
    a. Standard Views
    b. Callout Views

c. Drafting Details
d. Graphical Column Schedules

10. **3D Views, Sheets, Analysis, Reinforcements, and Massing**
    a. 3D Views, Generating Shadows and Solar Studies
    b. Working with Sheets
    c. Understanding the Analytical Model
    d. Working with Analytical Models
    e. Adding Reinforcements, Linking Building Models
    f. Introducing Massing
    g. Editing Massing Geometry
    h. Creating Building Elements from Massing Geometry
11. **Linking Revit Models with Robot Structural Analysis**
    a. Linking Revit Models with Robot Structural Analysis
12. **Setting Up The Revit Structure Interface**
    a. Revit Structure 2015 Interface
    b. Setting up Revit Structure File Locations
13. **Family Concepts and Techniques**
    a. Family Types
    b. Adding to the Family
14. **Creating Custom Families**
    a. Creating a Composite Metal Deck Family
    b. Creating a Tapered Concrete Column Family
15. **Creating Trusses**
    a. Truss Techniques and Concepts
    b. Finishing the Truss Family
16. **Using Trusses in Projects**
    a. Adding a Truss to a Project
    b. Attaching a Truss to a Roof or Slab in a Project
17. **Creating Structural Walls and Floors**
    a. Architectural Walls and Structural Walls
    b. Structural Floor Placement and Options
    c. Using Structural Beam Systems
18. **Creating Foundations**
    a. Isolated and Wall Foundations
    b. Slab and Floor Slab Foundations
19. **Reinforcement**
    a. Rebar and Fabric Settings
    b. Reinforcement Settings

20. **Structural Column Families**
    a. Setting Up a Structural Column Family
    b. Inventor
21. **Creating Specific Family Types**
    a. Typical Concrete Corbelling Profile
    b. Typical Annotation Arrow Symbol
22. **Structural Analysis**
    a. Preparing Projects for Structural Analysis
    b. Creating Analytical Views
23. **Project Team Collaboration**
    a. Introduction to Worksets
    b. Working with Worksets