

**START YOUR
SYNCHRO 4D PRO
CAREER TODAY!!**

CREDO SYSTEMZ
**Synchro 4D Pro
Program**

SYNCHRO 4D PRO COURSE SYLLABUS

Duration : 40 hrs

✦ **Module 1: Introduction to Synchro 4D Pro**

- Overview of Synchro 4D and its role in 4D BIM
- Understanding 3D vs 4D modeling concepts
- Exploring the Synchro interface and workspace
- Key Synchro file types (.SP, .SPX, .SYNCPROJECT)
- Overview of Synchro ecosystem: Synchro Control, Synchro Field, Synchro Open Viewer

✦ **Module 2: Project Setup & File Management**

- Creating and saving new projects
- Setting project units, calendars, and time zones
- Importing 3D models (Revit, Navisworks, IFC, DGN, etc.)
- Understanding model hierarchy and geometry organization
- Model alignment and coordinate setup

✦ **Module 3: Scheduling Basics**

- Creating and managing project tasks
- Understanding work breakdown structure (WBS)
- Linking activities with logical relationships

- Assigning task durations, constraints, and priorities
- Importing schedules from MS Project or Primavera P6
- Understanding task properties and types

✦ **Module 4: Linking 3D Model with Schedule (4D Simulation)**

- Attaching 3D objects to tasks
- Using automatic vs manual linking methods
- Managing appearance profiles and simulation settings
- Playing, pausing, and analyzing construction simulation
- Updating progress and schedule changes in the model
- Visualizing construction sequences over time

✦ **Module 5: 4D Simulation Control**

- Working with 4D View tools and animation settings
- Setting construction logic visually
- Adding temporary works, site equipment, and resources
- Managing transparency, color coding, and filters
- Exporting simulation videos for presentations

✦ **Module 6: Resources and Cost Loading (5D Basics)**

- Introduction to resource management
- Assigning labor, material, and equipment resources
- Creating resource libraries
- Cost loading and time-based resource graphs
- Analyzing productivity and resource utilization

✦ **Module 7: Progress Tracking & Updating**

- Updating task progress and actuals
- Comparing baseline vs current progress
- Generating variance analysis and reports
- Tracking actual start/finish dates visually in 4D view
- Schedule impact and delay analysis

✦ **Module 8: Coordination & Clash Review**

- Importing multiple discipline models
- Visual inspection of coordination issues
- Managing model overlays and filters
- Coordination workflow between Synchro, Navisworks, and Revit

✦ **Module 9: Visualization & Animation**

- Creating walkthroughs and camera animations
- Applying materials, lighting, and scene effects
- Adding annotations, text, and logos to animation
- Exporting 4D videos for project presentations
- Best practices for presentation-ready visuals

✦ **Module 10: Reporting & Export**

- Creating custom reports and dashboards
- Exporting schedules, resource data, and progress tables
- Printing and exporting images and videos
- Integrating with Synchro Control for cloud collaboration
- Export to Excel, PDF, and MS Project formats

✦ **Module 11: Advanced Topics (Optional)**

- Managing federated BIM models
- Custom filters, user fields, and coding structure
- Automation with scripts and templates
- Clash visualization and resolution tracking
- Integration with Power BI or project dashboards

✦ **Module 12: Project Practice / Capstone**

- Full-scale 4D project workflow:
Import → Schedule → Link →
Simulate → Report
- Linking Revit/IFC model with P6
or MSP schedule
- Generating 4D simulation
video and progress tracking
- Final presentation with reports
and visuals

CHENNAI

VELACHERY

New # 30, Old # 16A, Third Main Road, Rajalakshmi Nagar, Velachery, (Opp. to Murugan Kalyana Mandapam), Chennai – 600 042.

 +91 98844 12301

OMR

Plot No.8, Vinayaga Avenue, Rajiv Gandhi Salai, (OMR), Okkiampettai, (Behind Okkiyampet Bus Stop) Chennai – 600 097.

 +91 96001 12302

OVERSEAS

USA

Houchin Drive, Franklin, TN -37064. Tennessee

UAE

Sima Electronic Building, LLH Opposite, Electra Street – Abu Dhabi