JUPITER PRIME

Consulting • Training • Advisory

جوبيتر برايم للاستشارات والتدريب

COURSE BROCHURE

# 4D BIM Construction Sequencing and Scheduling Training Course

8 – 12 November 2027
Amsterdam

# 4D BIM Construction Sequencing and Scheduling Training Course

**Ref:** 152_4220 **Date:** 8 – 12 November 2027 **Location:** Amsterdam **Fees:** 6200 GBP

4D BIM Construction Sequencing and Scheduling is a 1-week training course for planners, schedulers, construction managers and BIM coordinators, and it ends with a 4D construction sequence simulation for a live or sample project. Contractors now face tighter sites, overlapping trades and clients who want to see the build before it starts. Jupiter Prime Training presents 4D BIM Construction Sequencing and Scheduling as the bridge between the model and the programme.

## Why 4D BIM Construction Sequencing and Scheduling Matters Now

Three groups shape model-based planning today. Clients and lenders ask for visual proof that a programme is buildable before approving milestones; site teams work in congested urban plots where cranes, laydown areas and access routes compete for space; and design teams already deliver federated models under ISO 19650 information requirements that planners can reuse. A contractor that links the model to the programme spots out-of-sequence work, crane conflicts and unsafe overlaps on screen. One that keeps the Gantt chart and the model apart discovers the same problems on site, where each lost day costs far more.

## Who Gains Most from 4D BIM Construction Sequencing and Scheduling

- Planners who build and update the construction programme and its logic
- Schedulers who maintain activity codes, durations and progress updates
- Construction managers who decide site sequence, logistics and trade handovers
- BIM coordinators who prepare model breakdowns and selection sets for linking
- Project controls staff who report progress and forecast completion

A contractor's project team gains most when its planner, BIM coordinator and site manager attend together and agree one link between model zones and programme activities.

## 4D BIM Construction Sequencing and Scheduling Capabilities

Participants learn to turn a static model and a separate programme into one time-based simulation that site and client teams can question.

- Design a work breakdown aligned to model zones, levels and trades — planners and coordinators
- Build model-to-schedule links with selection sets and activity codes — scheduling teams
- Test construction sequences for logic errors and out-of-order work — construction managers
- Apply site logistics objects such as cranes, hoists and laydown areas — site safety and logistics leads
- Assess time-based clashes between temporary works and permanent elements — site managers

- Communicate sequence options through 4D animations and snapshots — clients and lenders

## Key 4D BIM Construction Sequencing and Scheduling Terms

- 4D BIM — the linking of three-dimensional model elements to programme activities so construction can be simulated over time.
- Work Breakdown Structure — the hierarchical split of the project into zones, trades and packages used to organise activities.
- Selection Set — a saved group of model elements that is linked to one or more programme activities.
- Sequence Simulation — an animation showing elements appearing, changing or being removed as programme dates progress.
- Time-Based Clash — a conflict that occurs only at a certain moment, such as a crane swing over a crew.
- Site Logistics Model — temporary objects such as cranes, hoardings, roads and laydown areas modelled alongside the permanent works.

## 4D BIM Construction Sequencing and Scheduling Day by Day

### Day 1: Planning With the Model

- 4D Use Cases — Choosing Where Simulation Adds Planning Value
- Programme Logic Review — Checking Dependencies Before Linking
- Model Readiness Checks — Confirming Zones, Levels and Element Properties
- Work Breakdown Alignment — Matching Model Zones to Activity Codes
- Level of Detail for Planning — Deciding How Fine Each Link Should Be

### Day 2: Linking Model and Schedule

- Programme Import Settings — Bringing Activities, Dates and Codes Into 4D
- Selection Set Creation — Grouping Elements by Zone and Trade
- Rule-Based Linking — Automating Links Through Shared Properties
- Task Types and Appearance Profiles — Showing Construct, Demolish and Temporary Work
- Unlinked Element Reports — Finding Gaps Between Model and Programme

### Day 3: Sequence Simulation and Logistics

- Sequence Playback Settings — Reviewing Construction Day by Day
- Site Logistics Objects — Modelling Cranes, Hoists and Laydown Areas
- Temporary Works Representation — Showing Scaffolds, Formwork and Propping
- Crane Reach and Swing Checks — Testing Lift Plans Against Sequence
- Access and Egress Routes — Keeping Deliveries and Emergency Paths Clear

## Day 4: Time-Based Clashes and Progress

- Time-Based Clash Tests — Detecting Conflicts Between Trades Over Time
- Workspace Conflict Zones — Preventing Crews Sharing the Same Area
- Planned Versus Actual Comparison — Visualising Progress Against Baseline
- Delay Scenario Testing — Showing Effects of Late Deliveries
- Recovery Sequence Options — Comparing Resequencing Choices

## Day 5: Practising the 4D Construction Sequence Simulation

- Sample Project Breakdown — Applying Zone and Trade Alignment to a Live Case
- Link Set Build — Applying Rule-Based Linking to the Programme
- Logistics and Clash Run — Applying Crane and Workspace Checks
- Client Presentation Package — Preparing Animations and Snapshots for Review
- 4D Construction Sequence Simulation — Completing the Work Product

## Applying 4D BIM Construction Sequencing and Scheduling After the Course

- Link the next look-ahead programme for one building zone to the federated model and run a time-based clash test with the site team
- Build a site logistics model of cranes, hoists and laydown areas for the coming phase and review it in the weekly planning meeting

## 4D BIM Construction Sequencing and Scheduling Questions FAQ

### What is 4D BIM Construction Sequencing and Scheduling and why does it matter now?

4D BIM Construction Sequencing and Scheduling links model elements to programme activities to simulate the build over time. It matters now because congested sites and demanding clients need sequences proven on screen before work starts.

### Which roles gain most from 4D BIM Construction Sequencing and Scheduling?

Planners, schedulers, construction managers and BIM coordinators gain most. They own the programme logic, model breakdown and site sequence decisions that the simulation tests and communicates.

### How does 4D BIM Construction Sequencing and Scheduling differ from a general planning software course?

It joins the programme to the model instead of teaching scheduling software alone. A planning software course builds activities and logic; this course tests that logic visually against geometry, logistics and time-based clashes.

## What do you bring back from 4D BIM Construction Sequencing and Scheduling?

You bring back a 4D construction sequence simulation with linked selection sets, logistics objects, time-based clash results and presentation snapshots ready for your next planning review.

## 4D BIM Construction Sequencing and Scheduling: The Way Forward

The 4D construction sequence simulation first informs which sequence goes forward for the next phase and where cranes and laydown areas sit. Planners, site managers and clients use it in progress meetings. After its first month on site, revisit the link granularity and logistics objects, since actual progress shows which details help decisions and which only slow updates.