



High-Rise Construction Equipment and Methods Cost Planning Course

24 – 28 January 2027
Johannesburg

High-Rise Construction Equipment and Methods Cost Planning Course

Ref: 547_142491 **Date:** 24 – 28 January 2027 **Location:** Johannesburg **Fees:** 6000 Euro

Overview

High-Rise Construction Equipment and Methods Cost Planning Course is a five-day intermediate course for construction planners, equipment managers, site engineers, project controls teams, estimators, and contractors who leave with a High-Rise Equipment and Methods Cost Plan. Participants connect work packages, floor cycles, lifting demand, vertical logistics, equipment capacity, utilization, temporary works, cost, constraints, and risk. The course compares scenarios without promising savings. Agile Leaders Training Center presents high-rise equipment planning through traceable production and cost evidence.

Who Should Attend

- Teams responsible for high-rise work packaging and construction-method planning
- Personnel who plan cranes, hoists, access, and vertical material flow
- Functions that estimate equipment productivity, utilization, ownership, and operating cost
- Staff who coordinate temporary works, logistics, safety, and trade interfaces
- Contractors who compare equipment and execution-method alternatives

The course assumes participants can read schedules, quantities, site layouts, and cost records, and it leaves out structural design, equipment maintenance repair, operator certification, and general project accounting.

Departments and Industries

The course supports departments and industries that plan equipment and execution methods for vertical construction.

- Construction planning, methods engineering, and project controls
- Equipment management, estimating, procurement, and commercial teams
- Building contractors, specialist trades, and lifting services
- Property development, healthcare, hospitality, and commercial towers
- Industrial facilities, mixed-use developments, and infrastructure interfaces

Learning Objectives

By the end of this course, participants will be able to:



- Analyze work packages, floor cycles, lifting demand, and logistics constraints
- Build equipment capacity, utilization, and productivity assumptions
- Evaluate ownership, operating, rental, and unit-cost scenarios
- Compare high-rise construction methods and temporary-works interfaces
- Prioritize equipment and logistics risks using evidence
- Develop a high-rise equipment and methods cost plan

Course Agenda

Day 1: Work Packages and Production Basis

- High-Rise Work Breakdown and Method Scope Map
- Floor-Cycle Takt and Zone Planning Board
- Quantity, Crew, and Production-Rate Input Sheet
- Site Access and Logistics Constraint Register
- Equipment Decision Criteria and Assumption Log

Day 2: Lifting and Vertical Logistics

- Tower Crane Demand and Coverage Study
- Construction Hoist Capacity and Cycle-Time Model
- Material Delivery, Staging, and Vertical Flow Map
- Crane, Hoist, and Trade Interface Matrix
- Lifting Constraint and Contingency Plan

Day 3: Equipment Capacity and Cost

- Equipment Sizing and Fleet-Balance Worksheet
- Utilization, Availability, and Standby Analysis
- Ownership and Operating Cost Model
- Purchase, Rental, and Replacement Option Grid
- Equipment Unit-Cost and Productivity Dashboard

Day 4: Methods and Scenario Comparison

- Formwork and Floor-Cycle Method Comparison
- Concrete Placement and Pumping Scenario Model
- Temporary Works and Equipment Interface Review
- Constructability, Cost, and Risk Evaluation Matrix
- Equipment and Method Selection Decision Record

Day 5: High-Rise Planning Practice

- Exercise: Map Work Packages and Floor Cycles
- Exercise: Size Cranes, Hoists, and Material Flow
- Exercise: Build Equipment Cost and Utilization Scenarios
- Exercise: Compare Methods, Constraints, and Risks
- Capstone Exercise: High-Rise Equipment and Methods Cost Plan

Practical Exercises

The course uses suggested activities to convert production, logistics, and cost evidence into a traceable high-rise equipment decision.

- Suggested activity: connect work packages, floor zones, production rates, and access constraints in a planning basis.
- Suggested activity: model tower-crane and hoist demand against lifting cycles and trade interfaces.
- Suggested activity: compare utilization, ownership, operating, rental, and unit-cost scenarios.
- Suggested activity: assemble selected equipment, methods, interfaces, risks, and assumptions in a High-Rise Equipment and Methods Cost Plan.

FAQs

Who suits the high-rise construction equipment planning course and what does it assume?

It suits teams responsible for methods, equipment, logistics, estimating, or project controls and assumes they can interpret schedules, quantities, site layouts, production records, and cost inputs.

How does high-rise equipment planning differ from general construction cost control?

High-rise equipment planning compares equipment capacity, utilization, logistics, methods, and unit cost, while general cost control tracks budgets, commitments, forecasts, changes, and financial performance across the project.

How are tower-crane and hoist requirements planned for high-rise construction?

Requirements are planned from work packages, load types, lifting quantities, cycle times, coverage, floor demand, delivery windows, access, trade interfaces, climbing or relocation needs, and contingency conditions.



How is construction equipment utilization evaluated?

Utilization is evaluated by comparing available time, productive time, standby causes, capacity demand, cycle performance, maintenance allowances, access constraints, crew readiness, and the effect of equipment imbalance.

How are high-rise construction methods compared for cost planning?

Methods are compared through production rate, cycle time, equipment capacity, labor and temporary-works interfaces, unit cost, logistics feasibility, constraints, risk exposure, and sensitivity to key assumptions.

Conclusion

Participants take back a High-Rise Equipment and Methods Cost Plan containing the production basis, logistics model, equipment scenarios, cost assumptions, method comparison, constraints, and risks. It makes equipment choices traceable to work demand and cost evidence. The plan supports project decisions without replacing site-specific engineering, safety planning, or commercial approval.