



Industrial Building Design and Renovation Planning Course

13 – 17 September 2027
Singapore



Industrial Building Design and Renovation Planning Course

Ref: 536_141855 **Date:** 13 – 17 September 2027 **Location:** Singapore **Fees:** 6500 Euro

Overview

Industrial Building Design and Renovation Planning Course is a five-day intermediate course for facility engineers, architects, project managers, plant teams, maintenance leaders, and owners' representatives who leave with an Industrial Renovation Basis-of-Design Pack. Participants translate production needs, existing conditions, workflows, structural and envelope options, utilities, safety interfaces, phasing, shutdowns, temporary works, constructability, cost, risk, quality, and handover into coordinated decisions. Agile Leaders Training Center connects industrial building renovation planning with operational continuity and maintainability.

Who Should Attend

- Teams responsible for industrial building requirements, layouts, and upgrade decisions
- Functions that coordinate structures, envelopes, utilities, and building services
- Personnel who survey existing conditions and assess renovation constraints
- Staff who plan phasing, temporary works, shutdowns, and live-site interfaces
- Leaders who govern constructability, quality, risk, cost, and handover

The course assumes participants can interpret building drawings, asset records, and operational requirements, and it leaves out detailed structural calculation, process-equipment design, architectural styling, and routine facilities maintenance.

Departments and Industries

The course supports departments that plan, design, coordinate, deliver, and accept industrial building work.

- Manufacturing, processing, warehousing, and logistics facilities
- Industrial engineering, plant projects, and capital delivery
- Architecture, civil, structural, and building-services coordination
- Operations, production, maintenance, reliability, and utilities
- Health and safety, quality, procurement, cost, and risk management

Learning Objectives

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



- Build operational requirements and existing-condition baselines
- Evaluate layout, structure, envelope, and service options
- Analyze safety, continuity, constructability, and maintainability risks
- Compare renovation phases, shutdowns, cost, and disruption
- Apply quality, inspection, commissioning, and handover controls
- Build an industrial renovation basis-of-design pack

Course Agenda

Day 1: Requirements and Existing Conditions

- Industrial Operations and Stakeholder Requirement Map
- Production Flow, Access, and Adjacency Diagram
- Existing-Condition Survey and Evidence Register
- Constraint, Assumption, and Unknowns Log
- Industrial Renovation Basis-of-Design Framework

Day 2: Building and Service Options

- Structural Grid, Loading, and Adaptability Option Matrix
- Envelope Performance, Durability, and Access Checklist
- Utility Demand, Capacity, and Connection Schedule
- Mechanical, Electrical, and Plumbing Interface Map
- Maintainability, Clearance, and Replacement Route Review

Day 3: Safety and Operational Continuity

- Fire and Life-Safety Interface Review
- Occupied-Area Segregation and Access-Control Plan
- Temporary Works and Temporary Services Register
- Shutdown, Isolation, and Restart Interface Matrix
- Dust, Noise, Vibration, and Contamination Control Plan

Day 4: Phasing, Constructability, and Assurance

- Renovation Zone and Phase Sequence Map
- Constructability and Logistics Review Checklist
- Cost, Schedule, Disruption, and Risk Comparison Model
- Inspection, Test, and Quality Hold-Point Plan
- Commissioning, Training, and Handover Readiness Matrix



Day 5: Industrial Renovation Practice

- Exercise: Build an Existing-Condition Evidence Register
- Exercise: Compare Building and Utility Options
- Exercise: Plan Phases, Shutdowns, and Temporary Controls
- Exercise: Review Constructability and Handover Readiness
- Capstone Exercise: Industrial Renovation Basis-of-Design Pack

Practical Exercises

The course uses suggested activities to turn operating constraints into coordinated industrial building decisions.

- Suggested activity: map production flows, access, adjacencies, stakeholders, evidence, assumptions, and unknown conditions.
- Suggested activity: compare structural, envelope, utility, services, durability, access, and maintainability options.
- Suggested activity: sequence renovation zones and document temporary works, shutdowns, isolation, safety, and contamination controls.
- Suggested activity: compare cost, schedule, disruption, and risk before assigning quality and handover requirements.

FAQs

Who suits the Industrial Building Design and Renovation Planning Course?

It suits professionals who plan or coordinate industrial building changes and assumes familiarity with drawings, facility records, operational needs, and project interfaces.

How does industrial building renovation planning differ from facilities maintenance training?

Industrial building renovation planning defines coordinated capital changes, phases, interfaces, temporary controls, risks, quality, and handover, while maintenance training focuses on recurring asset care and work execution.

What should an industrial existing-condition survey record?

An industrial existing-condition survey should record dimensions, structure, envelope, utilities, services, access, deterioration, hazards, operational constraints, evidence sources, discrepancies, assumptions, and areas requiring investigation.



How can industrial renovation protect operational continuity?

Operational continuity is protected through zoning, phasing, temporary services, isolation boundaries, controlled access, shutdown windows, contamination controls, fallback arrangements, communication, permits, verification, and restart criteria.

What belongs in an industrial renovation basis of design?

The basis of design records operational requirements, existing evidence, design assumptions, selected options, performance criteria, interfaces, phasing, risks, maintainability, quality controls, commissioning, training, and handover expectations.

Conclusion

Participants take back an Industrial Renovation Basis-of-Design Pack containing requirements, surveys, workflows, option comparisons, service interfaces, safety controls, phases, shutdowns, temporary works, cost-risk decisions, quality checks, and handover criteria. The pack makes renovation decisions traceable while protecting operations. It supports coordinated delivery without replacing discipline-specific engineering calculations.