Strategic Construction Planning and Control Training Course

Professional Development Training Course Outline

Category	Construction Institute	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Strategic Construction Planning and Control Training Course is designed to equip construction professionals with advanced project management strategies, digital construction technologies, strategic scheduling techniques, cost optimization methods, and performance control frameworks required to deliver complex projects successfully. In today’s competitive construction industry, organizations require professionals who can integrate BIM-based planning, Lean Construction principles, Primavera P6 scheduling, risk management, resource optimization, and data-driven decision-making to achieve world-class project outcomes. This course develops practical expertise in transforming traditional construction management practices into smart, agile, and sustainable project delivery systems.

The course focuses on developing strategic capabilities in construction project planning, execution control, productivity improvement, quality assurance, contract management, and project performance analytics. Participants will learn how to manage construction projects from concept to completion using modern planning tools, predictive analytics, digital transformation strategies, and international best practices. Through real-world case studies and practical applications, learners will gain the skills required to improve project efficiency, reduce delays, control costs, and enhance overall construction project success.

Programme Curriculum

Strategic Construction Planning and Control Training Course

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Course Duration

5 days

Course Objectives

By completing this Strategic Construction Planning and Control Training Course, participants will be able to:

1. Develop advanced strategic construction planning frameworks aligned with global project management standards.
2. Apply digital construction management techniques using BIM, AI, and data analytics.
3. Master project scheduling and time management strategies for complex construction projects.
4. Improve construction productivity through Lean Construction and workflow optimization.
5. Implement effective construction project control systems for cost, quality, and performance monitoring.
6. Use Primavera P6 and modern planning tools for critical path analysis and project forecasting.
7. Develop integrated risk management and mitigation strategies for construction projects.
8. Apply resource planning and optimization techniques for labor, equipment, and materials.
9. Enhance decision-making through real-time project dashboards and performance analytics.
10. Implement advanced cost control, earned value management (EVM), and financial forecasting.
11. Strengthen construction leadership through strategic project governance and stakeholder management.
12. Improve project delivery using sustainable construction and green building strategies.
13. Build expertise in future-ready construction management practices and Industry 5.0 technologies.

Target Audience

1. Construction Project Managers
2. Planning and Scheduling Engineers
3. Project Controls Professionals
4. Civil Engineers and Site Engineers
5. Construction Managers and Supervisors
6. Quantity Surveyors and Cost Engineers
7. Contractors and Consultants
8. Project Directors and Business Leaders

Course Modules

Module 1: Strategic Construction Planning Fundamentals

- Principles of **strategic construction project planning and execution**
- Construction project lifecycle management and delivery models

- Developing project objectives, milestones, and success indicators
- Strategic alignment between business goals and construction outcomes
- Case Study: **Large-scale infrastructure project planning optimization**

Module 2: Advanced Construction Scheduling and Time Control

- Developing effective **baseline schedules and project timelines**
- Critical Path Method (CPM), PERT, and schedule optimization
- Primavera P6 and digital scheduling techniques
- Delay analysis and recovery planning strategies
- Case Study: **High-rise building project schedule recovery after delays**

Module 3: Digital Construction Planning and BIM Integration

- BIM-based construction planning and coordination
- Digital twins and smart construction management
- AI-powered project forecasting and predictive analytics
- Construction technology integration strategies
- Case Study: **BIM implementation in a major commercial development**

Module 4: Construction Project Control Systems

- Establishing effective project monitoring frameworks
- Cost, time, quality, and productivity control methods
- Earned Value Management (EVM) applications
- Construction performance dashboards and reporting systems
- Case Study: **Project control improvement for a transportation project**

Module 5: Lean Construction and Productivity Improvement

- Lean Construction principles and waste elimination
- Last Planner System and workflow reliability
- Improving labor productivity and resource utilization
- Continuous improvement and operational excellence
- Case Study: **Lean implementation reducing construction waste**

Module 6: Construction Risk, Quality, and Safety Management

- Strategic construction risk identification and assessment
- Risk registers and mitigation planning
- Quality management systems and inspection strategies
- Safety leadership and zero-incident approaches
- Case Study: **Risk mitigation strategy for a mega construction project**

Module 7: Cost Management and Resource Optimization

- Construction cost planning and budget control
- Resource forecasting and allocation strategies
- Procurement planning and supply chain optimization
- Financial performance tracking techniques
- Case Study: **Cost reduction strategy for an industrial project**

Module 8: Future Trends in Construction Management

- Construction Industry 5.0 and automation trends
- Artificial Intelligence applications in construction
- Sustainable construction and ESG practices
- Smart project management technologies
- Case Study: **Smart city construction project transformation**

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com