

Microsoft Project for Construction Projects 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

Microsoft Project for Construction Projects Training Course is designed to equip construction professionals with advanced project planning, scheduling, cost control, resource management, risk analysis, and digital construction management skills. In today's rapidly evolving construction environment, organizations require professionals who can leverage Microsoft Project (MSP), Building Information Modeling (BIM) workflows, project analytics, automation, and data-driven decision-making to deliver projects on time, within budget, and with optimized resources. This course provides practical knowledge of construction project scheduling, Work Breakdown Structure (WBS), Critical Path Method (CPM), Gantt charts, baseline management, progress tracking, and earned value management (EVM).

Through practical exercises, real-world scenarios, and construction-based case studies, participants will learn how to create professional project schedules, monitor project performance, manage delays, forecast project outcomes, and improve collaboration among stakeholders. The training integrates modern project management best practices, digital transformation strategies, agile construction approaches, and industry-leading planning techniques to help professionals successfully manage complex construction projects using Microsoft Project. Participants will gain the confidence to apply MSP tools in infrastructure, commercial, residential, industrial, and engineering projects.

Programme Curriculum

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Course Objectives

By the end of this **Microsoft Project for Construction Projects Training Course**, participants will be able to:

1. Develop professional construction project schedules using Microsoft Project.
2. Apply advanced project planning techniques using WBS, milestones, and dependencies.
3. Master Critical Path Method (CPM) for construction time optimization.
4. Create and manage Gantt charts and project timelines effectively.
5. Implement resource allocation and resource leveling strategies.
6. Perform cost management and budget tracking within Microsoft Project.
7. Use baseline planning and variance analysis for project control.
8. Apply Earned Value Management (EVM) for performance measurement.
9. Manage construction delays, risks, and recovery schedules.
10. Integrate digital project management practices into construction workflows.
11. Improve collaboration using cloud-based project management solutions.
12. Generate professional project reports, dashboards, and progress analytics.
13. Enhance decision-making through data-driven construction project controls.

Target Audience

1. Construction Project Managers
2. Planning and Scheduling Engineers
3. Project Controls Professionals
4. Civil and Structural Engineers
5. Quantity Surveyors and Cost Engineers
6. Construction Supervisors and Site Managers
7. Consultants and Engineering Professionals
8. Contractors and Project Management Teams

Course Modules

Module 1: Introduction to Microsoft Project and Construction Project Management

- Overview of Microsoft Project for construction management

- Understanding project lifecycle and construction workflows
- Setting up project environments and calendars
- Creating project information and task structures
- Applying industry-standard project management principles
- **Case Study:** Development of a Microsoft Project schedule for a commercial building project from planning to handover.

Module 2: Construction Project Planning and Work Breakdown Structure (WBS)

- Developing effective construction **Work Breakdown Structures**
- Creating activities, tasks, and milestones
- Defining project phases and deliverables
- Establishing task relationships and dependencies
- Improving planning accuracy through structured scheduling
- **Case Study:** Creating a detailed WBS and project schedule for a highway construction project.

Module 3: Advanced Scheduling Techniques and Critical Path Method (CPM)

- Understanding CPM and project sequencing
- Identifying critical and non-critical activities
- Managing activity constraints and deadlines
- Optimizing project duration
- Performing schedule analysis and improvements
- **Case Study:** Reducing project completion time for a delayed residential development project using CPM analysis.

Module 4: Resource Management and Cost Control

- Creating labor, equipment, and material resources
- Resource assignment and optimization
- Managing resource conflicts using leveling tools
- Developing cost-loaded project schedules
- Monitoring construction budgets and expenditures
- **Case Study:** Resource optimization for a large infrastructure project with limited equipment availability.

Module 5: Project Monitoring, Tracking, and Performance Measurement

- Establishing project baselines
- Updating project progress effectively
- Tracking actual versus planned performance
- Applying Earned Value Management (EVM)
- Creating progress reports and dashboards
- **Case Study:** Monitoring performance of a high-rise construction project using Microsoft Project tracking tools.

Module 6: Risk Management, Delays, and Recovery Planning

- Identifying construction project risks
- Developing risk-based schedules
- Managing delays and variations
- Creating recovery and acceleration plans

- Improving project resilience through predictive planning
- **Case Study:** Developing a recovery schedule for a delayed airport construction project.

Module 7: Reporting, Analytics, and Digital Construction Integration

- Creating professional project reports
- Using visual dashboards and project analytics
- Exporting reports for stakeholders
- Supporting BIM and digital construction workflows
- Enhancing communication through data visualization
- **Case Study:** Using Microsoft Project reporting tools for executive reporting on an industrial construction project.

Module 8: Advanced Microsoft Project Applications and Industry Best Practices

- Advanced scheduling configurations
- Custom views, filters, and project templates
- Multi-project management techniques
- Integrating MSP with modern project controls
- Applying global construction management standards
- **Case Study:** Managing multiple construction projects using advanced Microsoft Project techniques.

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 DATASTAT CONSULTANCY LTD account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
07 Sep 2026	11 Sep 2026	Online	\$1,000
07 Sep 2026	11 Sep 2026	Physical	\$1,500
14 Sep 2026	18 Sep 2026	Online	\$1,000
14 Sep 2026	18 Sep 2026	Physical	\$1,500
21 Sep 2026	25 Sep 2026	Online	\$1,000
21 Sep 2026	25 Sep 2026	Physical	\$1,500
28 Sep 2026	02 Oct 2026	Online	\$1,000
28 Sep 2026	02 Oct 2026	Physical	\$1,500

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