

Monitoring & Evaluation (M&E) in Construction Training Course

Professional Development Training Course Outline

Category	Architectural Engineering	Duration	5 Days
Base Fee	\$1,500 USD	Delivery Mode	Online / On-site Hybrid

Course Introduction

Monitoring & Evaluation (M&E) in Construction Training Course is designed to equip professionals with advanced skills in construction project performance tracking, impact assessment, data-driven decision-making, and real-time project control systems. In today’s fast-evolving construction industry, organizations demand strong expertise in project monitoring frameworks, KPI development, digital construction analytics, and results-based management (RBM) to ensure efficiency, cost control, and timely delivery of infrastructure projects.

This training integrates modern methodologies such as Building Information Modeling (BIM), Construction Project Lifecycle Monitoring, ESG compliance tracking, and smart construction analytics. Participants will gain hands-on experience in evaluation frameworks, risk monitoring systems, sustainability reporting, and construction performance optimization tools, enabling them to improve accountability, transparency, and productivity across all construction phases.

Programme Curriculum

Monitoring & Evaluation (M&E) in Construction Training Course

Introduction

Monitoring & Evaluation (M&E) in Construction Training Course is designed to equip professionals with advanced skills in construction project performance tracking, impact assessment, data-driven decision-making, and real-time project control systems. In today’s fast-evolving construction industry, organizations demand strong expertise in project monitoring frameworks, KPI development, digital construction analytics, and results-based management (RBM) to ensure efficiency, cost control, and timely delivery of infrastructure projects.

This training integrates modern methodologies such as Building Information Modeling (BIM), Construction Project Lifecycle Monitoring, ESG compliance tracking, and smart construction analytics. Participants will gain hands-on experience in evaluation frameworks, risk monitoring systems, sustainability reporting, and construction performance optimization tools, enabling them to improve accountability, transparency, and productivity across all construction phases.

Course Duration

5 days

Course Objectives

1. Master Construction Monitoring & Evaluation (M&E) systems
2. Develop expertise in Key Performance Indicators (KPIs) for construction projects
3. Apply Results-Based Management (RBM) in infrastructure projects
4. Understand project lifecycle tracking and control mechanisms
5. Implement real-time construction progress monitoring tools
6. Analyze cost variance and schedule performance indexes (CPI & SPI)
7. Utilize BIM-based monitoring and digital twin technologies
8. Strengthen skills in risk assessment and mitigation tracking systems
9. Apply data analytics for construction performance evaluation
10. Develop sustainability and ESG reporting frameworks
11. Improve contractor and stakeholder performance evaluation
12. Enhance project reporting, dashboards, and visualization tools
13. Ensure compliance with international construction standards

Target Audience

1. Construction Project Managers
2. Civil Engineers & Site Engineers
3. M&E Officers & Project Analysts
4. Quantity Surveyors
5. Infrastructure Development Consultants
6. Government Construction Supervisors
7. NGO & Donor-Funded Project Officers
8. Urban Development & Planning Professionals

Course Modules (8 Modules with Case Studies)

Module 1: Fundamentals of Construction M&E Systems

- Introduction to M&E frameworks in construction
- Difference between monitoring and evaluation
- Project lifecycle integration of M&E
- Tools and templates for construction tracking
- Introduction to KPI development
- **Case Study:** Evaluation of a highway construction project delay analysis using baseline vs actual progress tracking.

Module 2: Project Planning, KPIs & Performance Measurement

- Setting SMART construction KPIs

- Defining milestones and deliverables
- Performance benchmarking in construction
- Cost, time, and quality indicators
- Dashboard reporting systems
- **Case Study:** High-rise building project KPI failure due to poor milestone tracking.

Module 3: Digital Construction Monitoring Tools (BIM & AI Systems)

- Introduction to BIM in monitoring
- AI-based construction analytics
- Drone surveillance for site progress tracking
- IoT-enabled construction monitoring
- Digital twin technology applications
- **Case Study:** Smart city infrastructure monitoring using BIM and IoT integration.

Module 4: Financial Monitoring & Cost Control Systems

- Budget tracking and forecasting tools
- Earned Value Management (EVM)
- Cost variance analysis techniques
- Procurement monitoring systems
- Financial reporting dashboards
- **Case Study:** Bridge construction project cost overrun due to weak financial monitoring.

Module 5: Risk Management & Compliance Monitoring

- Construction risk identification techniques
- Risk matrix and mitigation planning
- Safety compliance monitoring systems
- Legal and regulatory frameworks
- Audit and inspection processes
- **Case Study:** Construction site shutdown due to non-compliance with safety standards.

Module 6: Data Analytics & Reporting in Construction M&E

- Data collection methods in construction sites
- Use of Excel, Power BI, and dashboards
- Predictive analytics in construction delays
- Reporting structures and formats
- Data validation techniques
- **Case Study:** Data-driven delay prediction in a road rehabilitation project.

Module 7: Sustainability & ESG Monitoring in Construction

- Environmental impact tracking
- ESG compliance frameworks
- Green building certification monitoring
- Waste and resource efficiency tracking
- Carbon footprint reporting systems
- **Case Study:** Sustainable housing project achieving LEED certification compliance.

Module 8: Evaluation, Impact Assessment & Project Closeout

- Post-project evaluation techniques
- Impact assessment frameworks
- Lessons learned documentation
- Stakeholder feedback systems
- Final reporting and audit closure
- **Case Study:** Evaluation of a donor-funded water infrastructure project impact assessment.

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

- The participant must be conversant with English.
- Upon completion of training the participant will be issued with an Authorized Training Certificate
- Course duration is flexible and the contents can be modified to fit any number of days.
- The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.
- One-year post-training support Consultation and Coaching provided after the course.
- 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
21 Sep 2026	25 Sep 2026	Online	\$1,000
21 Sep 2026	25 Sep 2026	Physical	\$1,500
21 Sep 2026	25 Sep 2026	Physical	\$0
21 Sep 2026	25 Sep 2026	Physical	\$0
21 Sep 2026	25 Sep 2026	Physical	\$0
21 Sep 2026	25 Sep 2026	Physical	\$0
21 Sep 2026	25 Sep 2026	Physical	\$0
21 Sep 2026	25 Sep 2026	Physical	\$0

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

Register Online Now

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