Construction Quality Management 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

Construction Quality Management Training Course is designed to equip construction professionals with the latest quality assurance, quality control, digital construction, risk management, and project excellence strategies required for modern infrastructure and building projects. In today's competitive construction industry, organizations demand professionals who can implement ISO 9001 Quality Management Systems, construction quality plans, inspection and test plans (ITP), non-conformance management, lean construction principles, and continuous improvement frameworks to achieve superior project outcomes.

This industry-focused training program develops advanced capabilities in construction quality leadership, defect prevention, compliance management, sustainability standards, BIM-enabled quality monitoring, safety integration, and performance optimization. Through practical case studies, real-world project scenarios, and technology-driven learning approaches, participants gain the expertise to improve construction reliability, reduce rework costs, enhance stakeholder satisfaction, and deliver projects aligned with global quality benchmarks, smart construction trends, and operational excellence goals.

Programme Curriculum

Construction Quality Management Training Course

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Course Objectives

1. Develop expertise in Construction Quality Management Systems (CQMS) and modern quality frameworks.
2. Understand the principles of Quality Assurance (QA) and Quality Control (QC) in construction projects.
3. Implement ISO 9001:2015 Quality Management System requirements for construction organizations.
4. Create effective Construction Quality Plans (CQP) and project quality documentation.
5. Apply advanced Inspection and Test Plan (ITP) development and compliance monitoring techniques.
6. Improve project performance through Lean Construction and continuous improvement methodologies.
7. Manage construction defects using root cause analysis, corrective actions, and preventive strategies.
8. Apply digital quality management tools, BIM technologies, and construction analytics.
9. Enhance supplier, subcontractor, and material quality management processes.
10. Develop skills in risk-based quality planning and project compliance management.
11. Strengthen audit readiness, quality inspections, and regulatory compliance practices.
12. Integrate sustainability, green construction, and ESG quality principles.
13. Build leadership capabilities for achieving construction excellence and zero-defect project delivery.

Target Audience

1. Construction Project Managers
2. Site Engineers and Construction Engineers
3. Quality Control (QC) Engineers and Quality Managers
4. Civil, Structural, Mechanical, and Electrical Engineers
5. Contractors and Subcontractor Management Teams
6. Architects, Consultants, and Design Coordination Professionals
7. Project Controls and Risk Management Specialists
8. Government Infrastructure and Real Estate Development Professionals

Course Modules

Module 1: Fundamentals of Construction Quality Management

- Principles of modern construction quality management systems
- Difference between Quality Assurance (QA) and Quality Control (QC)
- Construction quality lifecycle from design to project handover
- Roles and responsibilities of quality professionals
- Quality culture development and operational excellence
- Case Study: Quality improvement transformation in a large-scale commercial building project through structured QA/QC implementation.

Module 2: Construction Quality Planning and Documentation

- Developing a comprehensive Construction Quality Plan (CQP)
- Creating Inspection and Test Plans (ITPs)
- Quality procedures, checklists, and inspection records
- Document control and digital quality documentation systems
- Managing project specifications and compliance requirements
- Case Study: Implementation of a digital quality documentation system for a major infrastructure project.

Module 3: ISO 9001 and Quality Management Systems

- Understanding ISO 9001:2015 principles and requirements
- Establishing construction-based Quality Management Systems
- Process approach and risk-based thinking
- Internal quality audits and continuous improvement
- Certification readiness and compliance strategies
- Case Study: How a construction contractor achieved ISO 9001 certification through improved quality processes.

Module 4: Quality Control, Inspection, and Testing Practices

- Material inspection and construction testing procedures
- Concrete quality control and structural inspections
- Welding, fabrication, and installation quality management
- Managing inspection reports and non-conformance reports (NCRs)
- Quality monitoring using digital inspection technologies
- **Case Study:** Reducing structural defects through advanced inspection and testing controls in a high-rise project.

Module 5: Defect Prevention and Non-Conformance Management

- Identifying construction defects and quality failures
- Root Cause Analysis (RCA) and problem-solving techniques
- Corrective and Preventive Actions (CAPA)
- Rework reduction and cost optimization strategies
- Achieving zero-defect construction performance
- **Case Study:** A residential development project that reduced defects by implementing proactive quality controls.

Module 6: Digital Construction Quality Management

- Application of BIM technology for quality monitoring
- Digital inspections and mobile quality applications
- Construction data analytics and quality dashboards
- Artificial Intelligence (AI) applications in construction quality
- Smart construction technologies and future trends
- Case Study: Using BIM-based quality coordination to identify design and construction issues before execution.

Module 7: Quality Risk Management and Sustainable Construction

- Quality risk identification and mitigation strategies

- Integrating safety, quality, and environmental management
- Sustainable construction standards and ESG requirements
- Green building quality practices
- Climate-resilient construction approaches
- **Case Study:** Quality risk management approach used in a sustainable infrastructure development project.

Module 8: Quality Leadership and Project Excellence

- Building a high-performance quality culture
- Managing stakeholders, suppliers, and subcontractors
- Quality audits and performance improvement programs
- Lessons learned and knowledge management
- Achieving construction project excellence
- **Case Study:** Improving project delivery performance through quality leadership and continuous improvement initiatives.

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:

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