Construction Risk Management and Mitigation Strategies Training Course



18 - 22 Oct 2026

Amman

3800 € (Per Person)

Ref: #CON9353_221719

Course Introduction / Overview:

The construction industry is inherently complex and fraught with uncertainties that can impact project timelines, budgets, and safety standards. Effective risk management is no longer an option but a critical competency for project success. This comprehensive training course is designed to equip professionals with the systematic processes and advanced techniques needed to identify, analyze, evaluate, and mitigate risks throughout the project lifecycle. Drawing on established frameworks and contemporary best practices, the curriculum delves into both qualitative and quantitative risk analysis. As influential author David Hillson discusses in works like the "Project Risk Analysis and Management (PRAM) Guide", a proactive approach is essential. Participants will learn to move beyond reactive problem-solving to implement robust risk response strategies, including contractual risk allocation, insurance optimization, and proactive safety protocols. BIG BEN Training Center has developed this program to provide a practical, hands-on learning experience, ensuring that theoretical knowledge is translated into actionable skills for managing financial, operational, contractual, and environmental risks effectively on any construction site.

Target Audience / This training course is suitable for:

- Project Managers and Directors.
- Construction Managers and Supervisors.
- Site Engineers and Planners.
- Contracts and Commercial Managers.
- Quantity Surveyors and Cost Engineers.
- Health, Safety, and Environment (HSE) Officers.
- Project Control Professionals.
- Procurement and Supply Chain Managers.
- Risk Management Professionals.

Target Sectors and Industries:

- General Construction and Contracting.
- Real Estate Development.
- Civil Engineering and Infrastructure Projects.
- Oil and Gas Sector Projects.
- Energy and Utilities.
- Governmental agencies and public works departments.
- Architectural and Engineering Consulting Firms.
- Manufacturing and Industrial Plant Construction.

Target Organizations Departments:

- Project Management Office (PMO).
- Engineering and Design.
- Operations and Site Management.
- Contracts and Legal Affairs.
- Finance and Accounting.
- Procurement and Supply Chain Management.
- Health, Safety, and Environment (HSE).
- Quality Assurance and Control (QA/QC).

Course Offerings:

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

- Identify and categorize the full spectrum of risks inherent in construction projects.
- Develop and maintain a comprehensive project risk register.
- Apply qualitative risk analysis techniques, including probability and impact assessments.
- Conduct quantitative risk analysis using methods like Monte Carlo simulation.
- Formulate effective risk response and mitigation strategies for various scenarios.
- Analyze and allocate risk through robust contractual agreements.
- Implement proactive risk monitoring and control systems throughout the project lifecycle.
- Manage construction claims and disputes arising from unforeseen events.
- Integrate risk management into the overall project management framework.

Course Methodology:

The training methodology at BIG BEN Training Center is designed to foster a dynamic and engaging learning environment that bridges theory with real-world application. This course utilizes a blended approach, combining expert-led presentations with highly interactive sessions. Participants will engage in practical workshops, analyzing detailed case studies drawn from actual construction projects to understand the consequences of both effective and poor risk management. Collaborative group exercises and brainstorming sessions will encourage the sharing of diverse experiences and perspectives, enriching the learning process for all attendees. The curriculum emphasizes hands-on application of risk analysis tools and the development of a complete risk mitigation plan for a sample project. Continuous feedback from the instructor and peer-to-peer discussions are integral components, ensuring that participants can confidently apply the learned strategies and techniques to their own professional challenges upon returning to the workplace.

Course Agenda (Course Units):

Unit One: Foundations of Construction Project Risk Management

- Introduction to Risk and Uncertainty in Construction.
- The Project Risk Management Lifecycle and Key Processes.
- Types of Construction Risks (Financial, Technical, Contractual, Environmental).
- Establishing a Risk Management Framework and Culture.
- Roles and Responsibilities in Project Risk Management.
- Key Terminology and International Standards (ISO 31000).
- The Importance of Stakeholder Analysis in Risk Identification.

Unit Two: Risk Identification and Qualitative Analysis

- Techniques for Systematic Risk Identification (Brainstorming, Checklists, Delphi Technique).
- Developing and Structuring a Comprehensive Risk Register.
- Introduction to Qualitative Risk Analysis.
- Probability and Impact Assessment Techniques.
- Creating and Interpreting the Probability-Impact Matrix.
- Risk Categorization and Prioritization.
- Documenting the Results of Qualitative Analysis.

Unit three: Quantitative Risk Analysis and Financial Modeling

- Principles and Applications of Quantitative Risk Analysis.
- Data Gathering for Quantitative Analysis.
- Expected Monetary Value (EMV) Analysis.
- Decision Tree Analysis for Project Choices.
- Introduction to Monte Carlo Simulation for Schedule and Cost Risk.
- Sensitivity Analysis to Identify Critical Risk Drivers.
- Contingency and Management Reserve Planning.

Unit Four: Risk Response Planning and Mitigation Strategies

- Developing Risk Response Strategies (Avoid, Mitigate, Transfer, Accept).
- Contractual Risk Allocation and Management.
- The Role of Insurance and Performance Bonds in Risk Transfer.
- Implementing Proactive Health, Safety, and Environmental (HSE) Risk Controls.
- Supply Chain and Procurement Risk Mitigation.
- Developing a Formal Risk Response Plan.
- Assigning Risk Owners and Defining Action Items.

Unit Five: Risk Monitoring, Control, and Advanced Topics

- Implementing the Risk Monitoring and Control Process.
- Techniques for Tracking Risks and Mitigation Actions.
- Risk Audits and Project Risk Reviews.
- Variance and Trend Analysis for Risk Control.
- Reporting Risk Information to Stakeholders.
- Managing Construction Claims and Disputes.
- Emerging Risks in Construction (Technology, Sustainability, Geopolitical Factors).

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

In an industry with inherently high uncertainty, can risk ever be truly 'managed,' or is it merely redistributed among stakeholders?

What unique qualities does this course offer compared to other courses?

This course distinguishes itself by moving beyond theoretical frameworks to provide a deeply practical and integrated approach to construction risk management. While many programs focus solely on identifying risks, our curriculum dedicates significant time to the entire lifecycle, emphasizing the critical and often-overlooked phases of response planning, monitoring, and control. We explore the intricate relationship between contractual language and risk allocation, empowering participants to use contracts as a proactive risk mitigation tool rather than a reactive legal document. The course integrates both qualitative and quantitative analysis, ensuring participants can not only prioritize risks conceptually but also model their financial and schedule impacts with techniques like Monte Carlo simulation. By focusing on building a proactive risk management culture and providing actionable strategies for real-world scenarios from supply chain disruptions to unforeseen site conditions this training equips professionals not just with knowledge, but with the strategic foresight and practical competence to safeguard project outcomes in a volatile industry.