Manufacturing Operational Risk Best Practices Training Course

Professional Development Training Course Outline

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

Course Introduction

The modern manufacturing landscape is defined by Industry 4.0, hyper-globalized supply chains, and accelerating digital transformation. While these trends unlock unprecedented efficiency and productivity, they simultaneously introduce complex and interconnected operational risks that can jeopardize business continuity and financial performance. Traditional risk management approaches, often reactive and siloed, are no longer sufficient. Companies must cultivate an enterprise risk management (ERM) culture and adopt proactive strategies grounded in best practices to build true operational resilience. Manufacturing Operational Risk Best Practices Training Course provides the definitive framework, tools, and expertise needed to navigate this dynamic environment, transforming operational risk management from a compliance exercise into a competitive advantage.

This specialized program dives deep into the four pillars of operational risk People, Process, Systems (Technology), and External Events specifically tailored for the manufacturing sector. Participants will master advanced techniques such as Risk and Control Self-Assessment (RCSA), Key Risk Indicator (KRI) development, and Scenario Analysis to identify, measure, mitigate, and monitor risks across the entire value chain. The emphasis is on adopting an integrated risk view, leveraging AI and predictive analytics to anticipate threats like cybersecurity risks, supply chain disruptions, and equipment failure. By institutionalizing a robust risk-aware culture and implementing future-proof controls, organizations can safeguard their assets, ensure regulatory compliance, and achieve sustainable operational excellence.

Programme Curriculum

Manufacturing Operational Risk Best Practices Training Course

Introduction

The modern manufacturing landscape is defined by Industry 4.0, hyper-globalized supply chains, and accelerating digital transformation. While these trends unlock unprecedented efficiency and productivity, they simultaneously introduce complex and interconnected operational risks that can jeopardize business continuity and financial performance. Traditional risk management approaches, often reactive and siloed, are no longer sufficient. Companies must cultivate an enterprise risk management (ERM) culture and adopt proactive strategies grounded in best practices to build true operational resilience. Manufacturing Operational Risk Best Practices Training Course provides the definitive framework, tools, and expertise needed to navigate this dynamic environment, transforming operational risk management from a compliance exercise into a competitive advantage.

This specialized program dives deep into the four pillars of operational risk People, Process, Systems (Technology), and External Events specifically tailored for the manufacturing sector. Participants will master advanced techniques such as Risk and Control Self-Assessment (RCSA), Key Risk Indicator (KRI) development, and Scenario Analysis to identify, measure, mitigate, and monitor risks across the entire value chain. The emphasis is on adopting an integrated risk view, leveraging AI and predictive analytics to anticipate threats like cybersecurity risks, supply chain disruptions, and equipment failure. By institutionalizing a robust risk-aware culture and implementing future-proof controls, organizations can safeguard their assets, ensure regulatory compliance, and achieve sustainable operational excellence.

Course Duration

5 days

Course Objectives

Upon completion of this course, participants will be able to:

1. Establish and Integrate an Enterprise Operational Risk Framework specific to the manufacturing environment.
2. Conduct advanced Risk and Control Self-Assessments (RCSA) across core production processes and the supply chain.
3. Identify and Mitigate critical Cybersecurity Risks associated with Industrial IoT (IIoT) and OT/IT Convergence.
4. Develop effective, data-driven Key Risk Indicators (KRIs) and Key Control Indicators (KCIs) for real-time monitoring.
5. Apply rigorous Root Cause Analysis (RCA) methodologies to analyze past incidents and near-misses (lessons learned).
6. Design robust Business Continuity Planning (BCP) and Disaster Recovery (DR) strategies for manufacturing operations.
7. Master the application of Scenario Analysis and Stress Testing for quantifying high-impact, low-frequency events (Black Swan risks).
8. Analyze and Control the risks of Third-Party Concentration and multi-tier Supply Chain Disruptions.
9. Implement Behavioral Risk Management strategies to foster a strong, risk-aware culture and reduce Human Error.
10. Assess the impact of ESG (Environmental, Social, and Governance) factors on manufacturing operational risk and reputation risk.
11. Leverage Predictive Analytics and AI/ML tools for Proactive Risk Forecasting and anomaly detection.
12. Ensure adherence to evolving Regulatory Compliance mandates, including specific industry standards.
13. Measure the Financial Impact of operational losses and optimize risk-adjusted Capital Allocation.

Target Audience

1. Chief Operating Officers (COOs) and Plant Managers
2. Risk Management and Enterprise Risk Management (ERM) Teams
3. Heads of Operations and Production
4. Supply Chain and Procurement Managers
5. Quality, Health, Safety, and Environment (QHSE) Leaders
6. Internal Auditors and Compliance Officers
7. IT/OT Security and Industrial Control System (ICS) Personnel
8. Process Improvement and Continuous Improvement Specialists

Course Modules

Module 1: Foundations of Manufacturing Operational Risk

- Understanding the People, Process, Systems, and External Events framework in manufacturing.
- Classifying risks from Equipment Failure to internal fraud and process deviation.
- Overview of industry-specific compliance requirements and standards
- Linking operational failures to Financial Performance and Reputation Risk.
- Case Study: The cost of a catastrophic Equipment Failure on production and stock price.

Module 2: Proactive Risk Identification and Assessment

- Risk & Control Self-Assessment (RCSA).
- Failure Mode and Effects Analysis (FMEA).
- Root Cause Analysis (RCA) Techniques.
- Quantifying the true level of risk exposure.
- Case Study: Analyzing a major Product Recall event to trace back to process design or human error root causes.

Module 3: Technology and Cyber Risk in Industry 4.0

- OT/IT Convergence Risks.
- Industrial IoT (IIoT) Security.
- Data Integrity and Availability.
- Automation and Robotics Risk.
- Case Study: The operational and financial fallout from a Ransomware Attack on a production line

Module 4: Supply Chain and Third-Party Risk Management

- Multi-Tier Supply Chain Mapping.
- Geopolitical and Climate Risk.
- Supplier Risk Due Diligence.
- Contractual Controls.
- Case Study: Lessons from a major Supply Chain Disruption on global manufacturing lead times.

Module 5: Metrics, Monitoring, and Reporting

- Key Risk Indicator (KRI) Development.
- Risk Appetite and Tolerance.
- Risk Heatmaps and Dashboards.
- Loss Data Collection.

- Case Study: Using KRI trends to Predictive Risk Forecasting.

Module 6: Human and Culture Risk Management

- Culture of Risk-Awareness.
- Competency and Skill Gaps.
- Whistleblowing and Internal Fraud.
- Workplace Safety and Health (WSH) Risk.
- Case Study: An event resulting from Human Error due to fatigue, poor training, or procedural non-compliance.

Module 7: Mitigation and Operational Resilience

- Risk Treatment Strategies.
- Control Optimization.
- Business Continuity Planning (BCP).
- Scenario Analysis and Stress Testing.
- Case Study: A company's successful or unsuccessful response and Resilience to a large-scale power outage or utility failure.

Module 8: The Future of ORM and Continuous Improvement

- Digital Transformation Risk.
- Behavioral Economics in ORM.
- Audit and Assurance.
- Continuous Improvement Loop.
- Case Study: Implementing a Digital Twin for Predictive Maintenance to proactively mitigate equipment breakdown risk.

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