

RISK-BASED OPERATIONAL DECISION MAKING TRAINING COURSE



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TRAINING CENTER



Introduction

Risk-Based Operational Decision Making Training Course helps professionals make daily operational choices with risk clearly in view. Participants learn how to assess uncertainty, weigh likelihood against impact, and choose actions that protect safety, cost, and continuity. The program combines risk frameworks with practical decision tools such as risk matrices, decision trees, and cost-benefit checks. As a result, learners gain a repeatable method for deciding under pressure without guesswork. Furthermore, the course strengthens judgement, documentation, and the ability to defend decisions to auditors and senior management.

Risk-Based Operational Decision Making Course Objectives

- Apply risk management principles from the ISO 31000 framework to operational choices.
- Assess likelihood and impact using risk matrices and scoring scales.
- Distinguish strategic, operational, financial, safety, and compliance risks.
- Use decision trees and expected value analysis to compare options.
- Apply ALARP (As Low As Reasonably Practicable) principles to safety decisions.
- Use cost-benefit analysis and risk-adjusted return thinking in trade-offs.
- Build and maintain risk registers with owners, controls, and review dates.
- Apply the hierarchy of controls to reduce operational risk.
- Set risk appetite, tolerance thresholds, and escalation criteria.
- Document decisions, assumptions, and rationale for audit and assurance.

Course Methodology

- Interactive sessions built on real operational decision cases.

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- Workshops on risk matrices, decision trees, and option appraisal.
- Group exercises on trade-offs between cost, safety, and continuity.
- Hands-on practice with risk registers and control design.
- Simulation of time-pressured decisions and escalation scenarios.
- Facilitator feedback and peer review on documented decision records.

Who Should Take This Course

- Operations managers and supervisors in industrial settings.
- Risk, compliance, and internal control professionals.
- Maintenance, production, and plant engineers.
- HSE officers and safety decision-makers.
- Project and program managers managing operational delivery.
- Auditors and assurance staff reviewing operational decisions.

Risk-Based Operational Decision Making Course Outlines

Day 1: Foundations of Risk-Based Decisions

- Why operational decisions need explicit risk thinking.
- Risk management principles and the ISO 31000 framework.
- Types of operational risk: safety, financial, compliance, and continuity.
- Risk versus uncertainty and how to treat each.
- Risk appetite, tolerance, and escalation thresholds.
- The cost of poor decisions and the value of prevention.
- Case study: analysing a costly operational decision.





Day 2: Risk Assessment Tools and Techniques

- Risk identification: checklists, HAZOP, and what-if analysis.
- Risk matrices, likelihood, and impact scoring.
- Bow-tie analysis linking causes, controls, and consequences.
- Risk registers: structure, ownership, and review cycles.
- Key risk indicators (KRIs) for early warning.
- Qualitative versus quantitative risk assessment.
- Workshop: assessing operational risks in a live process.

Day 3: Decision Analysis and Option Appraisal

- Decision trees and expected value analysis.
- Cost-benefit analysis and risk-adjusted comparison.
- Multi-criteria decision analysis for competing objectives.
- ALARP and the hierarchy of controls in safety decisions.
- Sensitivity analysis and dealing with incomplete data.
- Break-even and make-or-buy operational decisions.
- Exercise: choosing between three operational options.

Day 4: Controls, Mitigation, and Escalation

- The hierarchy of controls: elimination, substitution, engineering, administrative, PPE.
- Designing preventive, detective, and corrective controls.
- Control effectiveness testing and assurance.
- Contingency planning and business continuity basics.
- Escalation criteria and decision authority levels.

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- Managing decisions under time pressure and uncertainty.
- Simulation: a critical operational decision under pressure.

Day 5: Documentation, Assurance, and Decision Culture

- Decision records: rationale, assumptions, and evidence.
- Risk-based reporting to management and boards.
- Audit and assurance expectations for operational decisions.
- Learning from near misses and post-decision reviews.
- Building a risk-aware decision culture in teams.
- Continuous improvement and KRI trend monitoring.
- Capstone: presenting a documented risk-based decision.

Conclusion

By successfully completing Risk-Based Operational Decision Making, participants will gain a practical method for choosing actions with risk clearly assessed and documented. They will acquire skills in risk assessment, option appraisal, control design, and decision assurance. Gentex Training Center designs the program to help professionals make faster, safer, and more defensible operational decisions.

FAQs

Q1 What is the "Risk-Based Operational Decision Making" course about?

It teaches how to make daily operational choices by assessing risk first. The course covers risk matrices, decision trees, cost-benefit comparison, controls, escalation criteria, and decision documentation, so choices stand up to pressure and scrutiny.





Q2 What are the key benefits of the "Risk-Based Operational Decision Making" course?

You gain a repeatable method for deciding under uncertainty rather than relying on instinct. The course reduces avoidable failures, improves consistency across teams, strengthens audit readiness, and helps you justify trade-offs between cost, safety, and continuity.

Q3 What skills will I gain from the "Risk-Based Operational Decision Making" course?

You will develop four core skills: operational risk assessment with matrices and indicators, decision analysis and option appraisal, control design, mitigation, and escalation, and decision documentation with assurance and reporting.

Q4 What tools, methods, or standards are covered in the "Risk-Based Operational Decision Making" course?

The course covers the ISO 31000 risk framework, risk matrices, HAZOP, what-if analysis, bow-tie analysis, risk registers, key risk indicators (KRIs), decision trees, expected value analysis, cost-benefit analysis, multi-criteria decision analysis, ALARP principles, the hierarchy of controls, contingency planning, and decision records.

Q5 How is the "Risk-Based Operational Decision Making" course applied in real-world practice?

Participants apply it to real decisions such as whether to shut down a production line, choosing a maintenance approach, approving a supplier change, and escalating a safety concern. The same methods support shift decisions, capital trade-offs, and post-incident reviews.