



Management And Leadership

Decision Making Under Uncertainty and Complexity

Course Introduction

In today's dynamic business environment, decision-making often occurs under conditions of uncertainty and complexity. This training program is designed to provide participants with the essential tools and strategies to make effective decisions in such challenging contexts. Over the course of five days, participants will delve into decision analysis, risk management, scenario planning, adaptive decision-making, and innovation, gaining practical insights and skills through interactive workshops, case studies, and simulations. By the end of the training, participants will be equipped with the competencies needed to navigate uncertainty, mitigate risks, seize opportunities, and lead their organizations towards success in an ever-changing world.

Target Audience

This training is designed for professionals across industries seeking to enhance their ability to navigate intricate challenges and make informed decisions amidst unpredictable environments.

Learning Objectives

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

- Gain knowledge and skills to understand and navigate decision-making under conditions of uncertainty and complexity.
- Recognize various decision analysis and risk management techniques for evaluating alternatives and managing uncertainty.
- Familiarize oneself with scenario planning and simulation methods to anticipate future scenarios and develop robust strategies.

- Explore adaptive decision-making strategies and cognitive biases to enhance decision quality and resilience.
- Foster innovation and creativity in decision-making processes to adapt to changing environments and drive organizational success.

Course Outline

• 01 Day One

Understanding Uncertainty and Complexity

- Introduction to uncertainty and complexity in decision-making
- Types of uncertainty: risk, ambiguity, and ignorance
- Exploring complexity: interconnected systems and dynamic environments
- Decision-making models for uncertain and complex situations
- Tools and techniques for identifying and characterizing uncertainty and complexity

• 02 Day Two

Decision Analysis and Risk Management

- Fundamentals of decision analysis: identifying objectives, alternatives, and uncertainties
- Quantitative methods for decision analysis: decision trees, Monte Carlo simulation, and sensitivity analysis
- Risk management strategies: risk identification, assessment, mitigation, and monitoring
- Real options analysis: incorporating flexibility into decision-making under uncertainty
- Application of decision analysis and risk management techniques to real-world scenarios

• 03 Day Three

Scenario Planning and Simulation

- Introduction to scenario planning: anticipating alternative futures and building robust strategies
- Scenario development techniques: trend analysis, expert opinion, and scenario workshops
- Simulation modeling: agent-based modeling, system dynamics, and discrete event simulation
- Monte Carlo simulation for scenario analysis and decision support
- Using simulations to test the resilience of strategies in uncertain and complex environments

• 04 Day Four

Adaptive Decision-Making and Heuristics

- Adaptive decision-making strategies: agility, flexibility, and responsiveness
- Behavioral biases in decision-making under uncertainty and complexity
- Heuristics and cognitive shortcuts: their role in decision-making and potential pitfalls
- Strategies for overcoming cognitive biases and improving decision quality
- Adaptive leadership: leading teams and organizations in uncertain and complex environments

• 05 Day Five

Building Resilience and Innovation

- Building resilience in organizations: agility, robustness, and redundancy
- Innovation strategies for navigating uncertainty and complexity
- Design thinking and agile methodologies for innovation and problem-solving
- Collaborative decision-making: leveraging diverse perspectives and expertise
- Developing a culture of learning and experimentation to thrive in uncertain environments

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
June 23, 2025	June 27, 2025	5 days	4250.00 \$	UAE - Dubai
Sept. 1, 2025	Sept. 5, 2025	5 days	4250.00 \$	UAE - Dubai
Dec. 22, 2025	Dec. 26, 2025	5 days	4950.00 \$	Thailand - Bangkok