**Course Overview**

“Risk Management for senior level” is a course aiming at providing a platform for advanced analysis and research on risk and resilience in supply chains. It includes theories and methods of supply chain management with regard to risk and safety as well as introducing risk management with risk analysis and risk assessment and management of vulnerabilities in logistics and SC. In the course it is also addressed that analysis of how global crisis and changes affect the flow chain (including globalization, outsourcing, mergers, regionalization, customer requirements, legislation, e-commerce, international terrorism and demographic change) by preventive security at different levels, related to accidents, disasters and genuine uncertainty, through risk sharing, risk avoidance, risk reduction and risk transfer. Hence, the course is of importance to supply chain professionals expecting to deal with business and professional lives in the future. This course is designed to introduce and discuss various risk management concepts, tools, and techniques in global context. Using integrated approaches, the course will emphasize discussion on the design and implementation of risk management practices. Thus the course offers a comprehensive look at the risk management process, including tips to apply it and traps to avoid based upon real scenarios.

**Training Program Detail**

**Introduction**
- Risk is everywhere
- The Purpose of Technology
- Four Important Emerging Issues
- What Drives the Cost?
- Relevance of Supply Chains to Business
- Act of God

**Risk Defined**
- The Elephant Metaphor
- Risk Insights
- Opportunities vs. Threats
- Risk & Uncertainty
- Categories of Uncertainty
- Definitions of Risk
- Organizations under Threat
- Dimensions of Risk
Supply Chain under Risk
- Seller-Buyer Relationship
- Today’s Supply Chains are so Vulnerable
- Global Supply Chain Drivers
- The Supply Chain’s Strategic Importance
- Statistics on Supply Chain Disruptions
- Supply Chain Risk is Systemic

Concepts, Classification and Framework of Risk Management
- Defining Supply Chain Risk Management
- Risk Management in the SC
- Supply Chain Risk Perspectives
- Sources of Risks and Their Characteristics
- Risk Management Concepts & Philosophies
- Financial Crisis vs. Systemic Risk
- “Too Big to Fail” & “Too Interconnected to Fail”
- Risk Spiral in the SC
- The Five Sources of Supply Chain Risk
- The Challenge of Global Logistics
- Dimensions for Understanding Supply Chain Risks

Approaches to Risk Management
- Managing Supply Chain Risk – Industry Comparisons
- Approaches to Risk Management
- Supply Chain Risk Management Framework
- Structuring the Relationships of Supply Chain Risk
- Management of Risk
- Understanding Acquisition Risks/Make or Buy
- Inventory in the Pipeline
- Review of ISO 31000
- Global Supply Chain’s Impact on Finance: Managing Risk and Cost

Identifying Risks
- Most Common Risks
- Potential and Contemporary Risk
- Identifying Risk – Probabilistic Risk Distributions
- Some Methods for Identifying Risk
- Some Tools Used in Risk Identification
- Risk Identification Aids
• Identifying Risks in SC Operations
• Root Cause
• Downstream Effect
• Risk Statement

Risk Assessment and Modeling
• Risk Analysis: Exposure Table
• Bow-Tie Method for Linking Treatment to Cause and Consequence
• Risk Prioritization
• Supply Chain Risk Categories vs. Events
• Potential Obstacles
• Value @ Risk
• Industry Anti-Counterfeiting Strategies & Actions
• Industry Alliance with Public Sector

Risk Control and Monitoring
• Elements of Risk Management
• Risk Monitoring & Control Process
• Measure – Control – Manage
• Risk Control – Change Control Systems
• Purpose of Risk Monitoring
• Monitoring Supply Risks
• Enterprise Risk Management (ERM) – the COSO Model
• Monitoring and Control Tools

Responding to Risks
• The Need for Response
• The Ability to Respond
• Responding to Risks
• Alternative Responses
• Risk Response Strategy
• Typical Risk Response Planning Chart for Threats
• Flowchart of Risk Response Planning Actions for Threats
• What’s a Control Tower?

Mitigating Risks
• Six Most Common Announcements
• Using FMEA
Designing Strategies with Countermeasures
Risk Mitigation Strategies must Change
Crisis Events are Driving MTSC Adoption
Risks & Mitigation Matrix
Tailoring Reserves for Risk Mitigation
Adding Suppliers to Mitigate Risk

Risk Transfer
- Strategic Sourcing Methodology
- Transformation
- Transfer & Transform the Risks
- Risk Reduction Strategies
- Robust Strategies
- Risk Resolution
- Suggestions for Minimizing Risk
- Reducing Probability of Risk
- General Motivations for Risk Reduction
- Is Insurance a Remedy Action?

Creating Resilient Supply Chains
- Resilience
- Flexibility for Resilient Supply Chains
- Risk Pooling
- Regaining Stability
- Key Findings for Resilient Supply Chains
- Principles Underpinning Resilience
- Recommendations for Global SCs
- The Resilient Organization
- How to Improve Resilience?
- Risk and Reward
- Ten Steps to Risk Management Policy
- Boeing Case
- Supply Chain Risk Re-Engineering Case
- Country Risk
- VAR Example

Cases & Syndicate Groups’ Studies