

SYSTEM ANALYTICS CERTIFICATE

Program Overview: This certificate focuses on principles of risk analytics and decision-making for businesses using data-driven insights. Explore new concepts in data mining, optimization modeling, and supply chain related business interruptions as applied to enterprise risk management.



CE 8450: Data Mining for System Analytics:

Essential theoretical and practical techniques in data mining, including fundamental concepts in data mining, data pre-processing, data characterization and comparison, frequent pattern analysis, classification and prediction, cluster analysis, hypotheses evaluation, feature extraction, outlier analysis, and dimensionality reduction.



CE 8470 Optimization Support Systems:

Development of optimization models to aid in complex decision-making and risk mitigation. Risk measures of basic stochastic and robust optimization models. Soft constraints to measure risk. Implementation of models in software systems within decision support systems.



CE 8480 Risk Analytics in Supply Chains:

Supply chain risk management principles reviewed with an emphasis on the identification, mitigation and measurement of disruptions on potential supply chain scenarios. Disruptions and risks covered will include those linked to both natural and man-made risks.



CE 8490 Enterprise Risk Analytics:

Study of enterprise risk-management (ERM); ERM process; ERM frameworks including cooperate governance, line management, portfolio management, risk transfer, and risk analytics; ERM applications including: credit, market and operations within business and financial institutions; ERM implementation.

Scan for more information



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