MORS U.S. National Security Risk Analysis Certificate Course

Required: Computer with Excel and administrative privileges to download SIPMath (a simulation tool) and Netica (Bayesian network / Influence diagram)

Day 1

Theme: Definitions, Pillars of Modern Risk
Morning Developing your risk intelligence

Midday Introduction to quantitative risk concepts

Afternoon Calibration of probabilities

Day 2

Theme: Using Monte Carlo Simulation for Risk Analysis

Morning Model building

Midday Probability distributions
Afternoon Monte Carlo simulation

Day 3

Theme: Making Decisions with Risk and Uncertainty

Morning Verifying and validating your model Midday Decision making with uncertainty

Afternoon Intelligent adversary

Day 4

Theme: Risk Management and Risk Communication

Morning Value of information
Midday Examples of risk models
Afternoon Risk communication

Day 5

Theme: Risk Applications and Bayesian Models

Morning Computational creativity
Midday Bayesian updating

Afternoon Bayesian networks / influence diagrams / Netica