Course program*: **Introduction to Quantitative Project Cost and Schedule Risk Analysis**

EpiX Analytics, Boulder, CO

Participants are encouraged to prepare for the class by reviewing this document. However, this is not a pre-requisite for attendance.

The course runs from 09:00 to 17:00 each day, but registrations on the first day begin at 8:30am. Morning and afternoon coffee and lunch are provided. A social event will be provided at the beginning of the course. The course will be delivered in English.

| Day 1                          | Introduction to quantitative risk analysis, risk analysis software and Monte Carlo simulation  
|                               | Why risk models can give more realistic targets than single point estimate models  
|                               | Overview of main steps in planning and performing a Project Cost and Schedule Risk Analysis:  
|                               | o Obtaining data and inputs  
|                               | o Developing an accurate model  
|                               | o Presenting the results  
|                               | o Updating the model  
|                               | *Project Cost Risk Analysis example & exercise*  
|                               | The basics of building Project Cost and Schedule Models:  
|                               | o Distributions to use to reflect uncertainty  
|                               | o Assumptions and Forecasts  
|                               | o How to accurately interpret and present model outputs:  
|                               | • Standard graphics: relative and cumulative plots, tornado charts  
|                               | • Standard statistics: mean, percentiles, probabilities, etc.  
|                               | *Second exercise for participants*  

| Day 2                          | Two critically important aspects of Project Cost and Schedule Risk Analysis: Correlations and Expert Opinion  
|                               | How (and when) to accurately model correlations:  
|                               | o Probabilistic branding  
|                               | o If/Then branching  
|                               | o Rank-order correlations  

Incorporating external influence variables
How to consider expert opinion:
  o Interview techniques
  o Combining expert opinion

*Third exercise for participants*

Linking and analyzing cost and schedule models together:
  o Different approaches and techniques
  o Additional output charts
  o Good practices
  o Common pitfalls

*Fourth and final exercise for participants and course wrap-up*

*The program might be slightly modified based on relevance to audience.*