



1643 Spruce Street, Boulder, CO, 80302, USA  
 Phone: 1 303 440 8524, Fax: 1 303 440 032

**Course program\*:** [Corporate Finance 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.

<p><i>Day 1</i></p>	<p><b>Risk modeling basics and software</b></p> <p><b>Welcome and general introduction</b></p> <p><b>Introduction to risk analysis applications in corporate finance</b></p> <ul style="list-style-type: none"> <li>○ The use of qualitative and quantitative approaches</li> <li>○ Applications and real-file examples</li> </ul> <p><b>Why and how to do risk analysis</b></p> <ul style="list-style-type: none"> <li>○ Fundamentals of Monte Carlo simulation and probability theory</li> <li>○ Example/exercise: Evaluating the financial risks around a Phase II drug</li> </ul> <p><b>Getting started with @RISK/Crystal Ball/Monte Carlo software</b></p> <ul style="list-style-type: none"> <li>○ Monte Carlo simulation, Excel-add-ons (@Risk@ and Crystal Ball)</li> <li>○ Example/exercise</li> </ul> <p><b>Probability and distribution basics:</b></p> <ul style="list-style-type: none"> <li>○ Mean, mode, standard deviation, percentiles, etc.</li> <li>○ Calculation vs. Monte Carlo simulation</li> <li>○ eNPV, single-point estimates and stochastic NPV</li> <li>○ Relative vs. cumulative, discrete vs. continuous distribution</li> <li>○ Graphical representations of risk events</li> </ul> <p><b>Example/exercise: Quantifying the financial risks around a business development (BD) deal</b></p>
<p><i>Day 2</i></p>	<p><b>The use of expert opinion and historical data:</b></p> <ul style="list-style-type: none"> <li>○ Expert opinion distributions</li> <li>○ Expert opinion eliciting</li> <li>○ Best practices, types of biases, and how to prevent them</li> <li>○ The use of P10's and P90's</li> <li>○ The use of historical data in risk analysis</li> <li>○ Example/exercise: Sales forecast and budget forecasting moce3l</li> <li>○ Extra example/exercise: The value of information of a clinical trial</li> </ul> <p><b>Using Central Limit Theorem</b></p> <ul style="list-style-type: none"> <li>○ An insurance problem</li> </ul>



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	<p><b>Portfolio decision making:</b></p> <ul style="list-style-type: none"> <li>○ The use of stochastic optimization in decision making</li> <li>○ Example/exercise: Selecting an optional R&amp;D portfolio, given a finite budget and workforce</li> </ul> <p><b>Applications and case-studies: example models and exercises</b></p>
<p><i>Day 3</i></p>	<p><b>Modeling correlations and its importance</b>  <b>Good practices and the most common modeling errors</b>  <b>Time series modeling and forecasting</b>  <b>Interpreting and presenting results:</b></p> <ul style="list-style-type: none"> <li>○ Typical risk analysis results, their presentation and correct interpretation</li> <li>○ The use of NPV's and IRR's in stochastic modeling</li> <li>○ Good modeling practices and common mistakes</li> <li>○ Comparing options using risk analysis</li> <li>○ Critiquing a risk analysis</li> <li>○ Examples/exercise: Interpreting and presenting around a business development (BD) deal</li> </ul> <p><b>Discussion of participants' modeling problems</b></p>

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