

**TREASURY TECH:**
CASH FLOW ANALYTICS SERIES

Advanced Cash Flow Forecasting: Monte Carlo Techniques

**COURSE LENGTH**

Two 2-Hour Virtual Sessions or
One Half-Day In Person

DESCRIPTION

Monte Carlo methods are invaluable resources to evaluate a range of possible outcomes for those forecasting business activities. Through a variety of examples and demonstrations, this course helps attendees to apply Monte Carlo methods to cash flow forecasting problems, such as mixing forecasts, non-normal cash flow distributions and multi-period forecasting, and to execute Monte Carlo models as an Excel spreadsheet using a third-party plug-in. The benefits and challenges to this method of forecasting are addressed.

LEARNING OBJECTIVES

- Understand the use of Monte Carlo simulation, including random number generators, distribution fitting, drawing observations and interpretation of results
- Apply Monte Carlo methods to problems such as simulating cash flow statements, finding optimal order quantities, forecasting exchange rates, etc.
- Understand the pitfalls and limitations of Monte Carlo techniques

AGENDA

- Common probability distributions
 - Normal distribution
 - Log-normal distribution
 - Triangular distribution
 - Uniform (or rectangular) distribution
- Example 1: Forecasting international payments
 - Uncertainty
 - Examining historical foreign exchange rates
 - Sensitivity analysis
 - Monte Carlo simulation
- Example 2: Forecasting net cash flow
 - Sensitivity analysis
 - Scenario analysis
 - Uncertainty in the cash budget
 - Monte Carlo simulation
 - Creating a histogram
- Example 3: NPV of offering trade credit
 - Measuring value
 - Calculating operational cash flow (OCF)
 - Sensitivity analysis
 - Scenario analysis
 - Monte Carlo simulation
- Additional cases and practice sessions
 - Case 1: CF forecasting
 - Case 2: Capital budgeting (simulating NPVs and IRRs Case Study)