



Introduction & Advanced Crystal Ball software

2-Day Professional Development Workshop

[East Asia Training & Consultancy Pte Ltd](http://www.eastasiatc.com.sg) invites you to attend a two-day professional development workshop on “**Introduction & Advanced Crystal Ball software**”.

Course Programme I

This comprehensive 2-day workshop will cover everything about Crystal Ball software, with the Basic and Advanced Crystal Ball simulation materials plus high-level real options topics. Coverage includes the basics of Monte Carlo simulation, how to develop Crystal Ball models, how to gain insights from simulation results, and the best ways to present your findings to peers, management, or clients. There will be ample hands-on instruction and real-world case studies. Participants will be shown how to develop basic & advanced Crystal Ball models through the analytical tools of Crystal Ball Standard and Professional (Optimizer) Editions. Extend your understanding of Crystal Ball to include optimization, time-series forecasting, tornado analysis, scenario analysis, how to make optimal decisions using Crystal Ball and OptQuest, and the remainder covers time-series forecasting, model building techniques and the CB Tools.

Who should attend

The course is an excellent introductory and refresher course and a quick way to learn about the latest analytical tools and features in Crystal Ball software. Intermediate-level modelers with some Crystal Ball experience can also gain valuable insights and tips from our expert trainers. It is also suitable for those intermediate and advanced Crystal Ball users who want to expand their modeling tool set. By the conclusion of this course, you will have covered most, if not all, of the suite of tools in the Standard & Professional (Optimizer) Editions. We encourage attendees to bring along their own models to discuss with our expert trainers during breaks or after class.

The Benefits

This course will:

- Teach you the tools of Crystal Ball Standard and Professional (Optimizer) Editions
- Help you to make optimal decisions despite uncertain conditions
- Show you how to communicate the concept of risk to others
- Give you a better understanding of the benefits of spreadsheet risk analysis
- Extend your ability to build and analyze spreadsheet risk models
- Dramatically shorten the software learning curve
- Provide you with handy tips, shortcuts, and modeling techniques
- Allow you to meet and network with other professionals
- Help you bring the necessary risk and decision analysis techniques back to your organization

“Gain the skills necessary to make you a more confident, efficient, and professional decision-maker.”

Prerequisites & Fees

Attendees for this course must have:

1. An introductory understanding of Excel
2. Competence with Windows operating systems

The course fee includes lunch. You must pay the course fee prior to attending the course. This is a “hands-on” course. Participants are required to bring their own laptops.

Registration

Please email the official registration form to reserve your seats. Confirmation will only be made upon receipt of payment. Further instructions will be sent to confirmed participants. You may email us at crystalball@eastasiatc.com.sg

Agenda

Day One

Session 1: Morning (9:00 am to 10:00 am)

Introduction to Monte Carlo simulation

- What it is and how it works
- Steps in model development
- Current environment of spreadsheets
- Deterministic modeling vs. Stochastic modeling

Probability Distributions and Statistics

- Basic Distributions
- Basic Statistics

Break (10:00 am to 10:30am)

Session 2: Morning (10:30 am to 12:00 pm)

Getting Started with Crystal Ball

- Launching Crystal Ball
- Terminology
- Navigation

Setting up a Simulation Model

- Defining Assumptions
- Correlating Assumptions
- Defining Forecasts
- Editing Crystal Ball data
- Correlation analysis

Lunch (12:00 pm to 13:00 pm)

Session 3: Afternoon (13:00 pm to 15:00 pm)

Analysis and Presentation of Results

- Sensitivity Chart

- Overlay Chart
- Trend Chart
- Report Generation
- Saving Results

Simulation Control

- Trials
- Sampling
- Speed
- Options
- Statistics

Break (15:00 pm to 15:30 pm)

Session 4: Afternoon (15:30 pm to 17:00 pm)

Basic Crystal Ball Tools

- Tornado Charts
- Batch Fit
- Correlation Matrix

Class Exercises

Day Two

Session 1: Morning (9:00 am to 10:00 am)

Advanced Assumption Options

- Using alternate parameters
- Using a formula as a parameter
- Truncating assumption distributions
- Using a function as a distribution
- Customizing the distribution gallery
- Publishing and subscribing to distributions

Break (10:00 am to 10:30am)

Session 2: Morning (10:30 am to 12:00 pm)

Advanced Forecast Options

- Fit a distribution to a forecast
- Forecast filtering
- Auto extract forecast data
- Adding marker lines to forecast statistics

Advanced Simulation Control

- Precision control
- User defined macros
- 2D simulation
- Bootstrapping

Lunch (12:00 pm to 13:00 pm)

Session 3: Afternoon (13:00 pm to 15:00 pm)

OptQuest

- What is optimization?
- How OptQuest works
- Optimization applications
- Running OptQuest
- OptQuest results
- Efficient frontier

Break (15:00 pm to 15:30 pm)

Session 4: Afternoon (15:30 pm to 17:00 pm)

Predictor

- Time series forecasting
- Linear regression

Class Exercises