



Statistical Concepts for the Marketplace

"Trends", whether in weather, finance, or gambling, hinge on the concept of probability. The study of probability and statistics sends shivers of dread through most people, and often probability is thought of as only having practical applications in the gambling arena. In fact, probability and statistics have scores of applications throughout finance. The entire philosophy of technical analysis is predicated on forecasting future price trends, fundamental analysis believes that financial statements may be a window into a company's future health, and the pricing of options and derivative products all hinge on some notion of a future price. Arbitrage falls under two categories, statistical and deterministic both of which hinge on mathematical models involving statistics. In short, although one can effectively and profitably recognize patterns on a chart or plug values into proprietary pricing software in order to fully understand, appreciate, criticize, and improve such analysis, one must understand the foundation of how the models are created. In short, one must understand notions of probability and statistical modeling. This four-session class covers the essentials of statistical thought, including detailed examples drawn from the financial marketplace. The emphasis is on the practical and the applied, and not on the theory.

Available Session(s):

No sessions currently available. Email customerservice@nyif.com to get the next available date.

Targeted Audience

Traders, analysts, brokers, insurance and other finance professionals.

Special Offer

Clients who register for this course will receive a complimentary 6 month subscription to the Financial Times and FT.com. The Financial Times is the world's most respected financial newspaper providing a broad assessment on finance, business and the industrial sector. Subscriptions will start within 6-8 weeks of the application process, and are limited to one per client. For questions about your subscriptions call 800-628-8088 or email uscirculation@ft.com. US and Canada enrollees only.

Advance Preparation

No advance preparation required.

Level: Basic

CPE Credits: 10.0

Instructional Method: Group-Live

Detailed Outline

Day 1

Probability, Gambling, and Finance Practical Applications of Probability Theory in Finance

- Essential Descriptive Statistics
- Probability Models
- Conditional Probability
- Compound Events and Compound Probability
- Bayes Theorem - Let's make a Deal

Expected Value and Expected Return How do we devise criteria for making investment or other financial decisions? Do these criteria have any bearing on real life?

- Expected Value
 - Expected Return
 - Populations and Samples
 - Monte Carlo Estimation
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Day 2

Regression Analysis - so this is what they mean by modeling

- Univariate models
- Multivariate models
- Bond Pricing with models
- Using and interpreting technology / computer output

Day 3

More on Probability Technical Analysis and Conditional Probability

- Theoretical basis for all charting
 - Understanding charts: How much do they really tell us? What they fail to tell us.
 - Using conditional probability to read and interpret analyst reports.
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Day 4

Hypothesis testing and Statistical theory

- Testing brokerage claims
- Using the central limit theorem
- Applying formal statistical tools to applied Wall Street problems