Data Analysis for Internal Auditors

About This Course

Course Description
Executing a cost-effective and value-added audit requires an understanding of population analysis. Without this knowledge, you run the risk of spreading your resources and your sampling over low risk subsets of the population. This could result in crucial data not being collected.

In this course, you will learn when and how to use population analysis in the planning phase of the audit and how to identify subsets of the population that behave differently from a benchmark data set.

This course is appropriate for auditors, managers, and executives working in both the public and private sectors.

Course Objectives

• Summarize introductory terminology and methodology related to Data Analysis.
• Evaluate shapes of distribution relevant to their important characteristics.
• Determine which measure of central tendency and variation to use based on the frequency distribution.
• Evaluate the important differences between a set of data and a chosen benchmark standard using shape, central tendency, and variation.
• Determine when to use correlation and time series analysis.
Course Topics

Introduction to Data Analysis
- Defining Data Analysis
- Data Analysis and Audit Planning
- Population
- Random Sample
- Variables

Population Analysis: Shapes of Frequency Distributions
- Descriptive Statistics
- Graphical Presentation
  - Uniform Distribution
  - Skewed Distribution
  - Bimodal Distribution
  - Normal Distribution

Population Analysis: Measures of Central Tendency and Variation
- Measures of Central Tendency
  - Mode
  - Median
  - Mean
- Shape of Distribution and Central Tendency
- Measures of Variability
  - Range
  - Quartile Deviation
  - Standard Deviation

Population Analysis: Comparison to Benchmarks
- IPPF Standard 2320 – Practice Advisory 2320-1 Benchmarking
- Recalculations
- Non-Random Selection

Case Study Using Frequency Distributions

Population Analysis: Time Series and Correlational Analysis
- Time Series Analysis
- Case Study Using Time Series Analysis
- Correlational Analysis

Case Study Using Correlations
Course Information

Course Duration: 1 Day

CPE Hours Available: 8

Knowledge Level: Intermediate

Field of Study: Auditing

Prerequisites: Data Analysis Overview course, Data Sampling course, Defining Populations for Data Analytics course, or equivalent knowledge.

Advance Preparation: None

Delivery Format: eLearning (Group-Internet-Based); On-site Training (Group-Live); Seminar (Group-Live)