

INTRODUCTION TO DATA ANALYSIS

2 Days Classroom
2 Days Live Online

Individual: \$1295

Group: \$1195

GSA: \$1185

Credits: 14 PDUs, 14 CDUs

REGISTER HERE:
www.cprime.com/learning

COURSE OVERVIEW

Data Analysis is an ever-evolving discipline with lots of focus on new predictive modeling techniques coupled with rich analytical tools that keep increasing our capacity to handle big data. However, in order to chart a coherent path forward, it is necessary to understand where the discipline has come from since its inception.

COURSE OUTLINE

Part 1: Data and Information

1. Data in the Real World
2. Data vs. Information
3. The Many "Vs" of Data
4. Structured Data and Unstructured Data
5. Types of Data

Part 2: Data Analysis Defined

1. Why do we analyze data?
2. Data Analysis Mindset
3. Data Analysis Steps
4. Data Analysis Defined
5. Descriptive Statistics vs Inferential Statistics

Part 3: Types of Variables

1. Categorical vs Numerical
2. Nominal Variables
3. Ordinal Variables
4. Interval Variables
5. Ratio Variables

Part 4: Central Tendency of Data

1. (Arithmetic) Mean
2. Median
3. Mode

Part 5: Basic Probability

1. Probability Uses In Business
2. Ways We Can Calculate Probability
3. Probability Terms
4. Calculating Probability
5. Calculating Probability from a Contingency Table
6. Conditional Probability
7. Frequency Distribution

Part 6: Distributions, Variance, and Standard Deviation

1. Discrete Distributions
2. Continuous Distributions
3. Range
4. Quartiles
5. Variance
6. Standard Deviation

7. Population vs. Sample
8. Application of the Standard Deviation
 - Standard Deviation and the Normal Distribution
 - Sigma Values (Standard Deviations)
9. Bimodal distribution
10. Skew and Summary
11. Other Distributions
 - Poisson Distribution
 - Exponential Distribution
 - Pareto Distribution ("80/20")
 - Log Normal Distribution
12. Distributions in Excel

Part 7: Fitting Data

1. Bivariate Data (Two Variables)
2. Covariance and Correlation
3. Simple Linear Regression
4. Linear Regression
5. Fitting Functions
 - Linear Fit
 - Polynomial Fit
 - Power-Law Fit

Part 8: Predictive Analytics Overview

1. Monte Carlo Method

[See website for complete outline...](#)

© 2020 Cprime, Inc. All Rights Reserved.