Data Analysis and Modeling Techniques

Course Number: 4615
Length: 4 Days
Primary Delivery Method: Instructor-led live classroom
Alternative Delivery Methods: Instructor-led online (synchronous)

Course Description

Analyze data to help solve your organization's most complex challenges and requirements. Learn the core techniques used to analyze and model complex data into understandable information. Gather the skills to interpret data using Microsoft Excel with lessons enhanced with application-based demonstrations and exercises that will provide you with the skills needed to apply these concepts back on the job.

Intended Audience

This course is designed for professionals who need to interpret data to aid in organizational decision-making and problem-solving.

Client-Provided Facility Requirements

- 1 computer per student with Internet and Microsoft Office 2016 including Microsoft Excel with unrestricted rights to install the Analysis ToolPak or with Analysis ToolPak already installed on each computer
- Internet required for instructor computer
- Shared folders for students to share work products and access presentations/files from the instructor computer

Course Learning Objectives

- Describe data analysis, data modeling, and the analytics process model
- Review and modify data to prepare for data analysis
- Identify general statistical techniques for data analysis
- Determine how to summarize data to present information using descriptive statistics
- Use a correlation chart to determine the strength of a correlation
- Explain relationships in data and apply regression and other forecasting techniques to forecast probable events
- Demonstrate how to use simulation techniques to solve complex problems
- Identify how to track and control Processes with Statistical Process Control (SPC)
- Conduct a sensitivity analysis to solve complex problems
- Evaluate how well an analysis meets organizational goals

Course Additional Features

- Producer Support
- Technical Support Team
- Extended Learning Bursts

Data Analysis and Modeling Techniques

- Dedicated In-House Accessibility/Section 508 Compliance
- Student Resource Guides

All details about the Additional Features are available on this page. Click here to Explore

Course Schedule

DAY ONE	
MORNING	Lesson 1: Data Analysis, Data Modeling, and the Analytics Process Model
	Lesson 2: Preparing for Data Analysis
LUNCH	
AFTERNOON	Lesson 3: Selecting Analysis Techniques
	Lesson 4: Descriptive Statistics

DAY TWO	
MORNING	Lesson 5: Correlation Essentials
	Lesson 6: Forecasting Techniques
LUNCH	
AFTERNOON	Lesson 6: Forecasting Techniques, continued

DAY THREE	
MORNING	Lesson 7: Simulation
LUNCH	
AFTERNOON	Lesson 8: Statistical Process Control

DAY FOUR

Data Analysis and Modeling Techniques

MORNING	Lesson 9: Sensitivity Analysis
LUNCH	
AFTERNOON	Lesson 9: Sensitivity Analysis, continued
	Lesson 10: Evaluating Analysis Techniques

Learning Methods

Lecture; facilitator presentations; facilitated discussions; practical individual and large-group hands-on exercises; discussion; action planning.

Credits

National Association of State Boards of Accountancy (NASBA)

- Field of Study: Statistics
- Level: Advanced
- CPEs: 32

Professional Development Units (PDUs)

- Credits: 28

Continuous Learning Points (CLPs)

- Credits: 32

Management Concepts Certificate Program Relationship

This is a core course in the following program(s):

- Data Analytics Certificate Program

This is an elective course in the following program(s):

- Business Analysis and Requirements Management Master Track
- Enterprise Risk Management
- Internal Control
- Project Management Master Track
- Program Management Certificate Program

Data Analysis and Modeling Techniques

Prerequisites

Mandatory

- Participants should have a basic understanding of Excel

Suggested

- Introduction to Analytics
- Analytics Boot Camp
- Introduction to Statistics
- Data Collection Techniques

Prework

There is no prework required for this course.

Requirements for Successful Completion

Full (100%) attendance is expected and required. Successful completion of the course depends on full class attendance and active participation in individual and group exercises.

Follow-On Resources

- Data Storytelling for the Federal Government: Numbers to Narratives
- Introduction to Evidence-Based Hypothesis Building
- Leveraging Artificial Intelligence for Federal Decision-Making
- Federal Analytics Simulation: A Data Quest

Data Analysis and Modeling Techniques

Ready to Enroll?

See the most recent course information and scheduled classes at this link:
https://www.managementconcepts.com/course/id/4615