Introduction to Advanced Analytics

Duration
Fast-paced one day in-person training, online training options also available

Cost
$695 USD per attendee
If you have five (5) or more attendees that need training, group discounts available

Description
Quantifying business situations for forecasting and analytical modeling is an art and a science. This fast-paced course with hands-on participation is vendor neutral. It introduces and walks through a collection of descriptive, diagnostic, predictive and prescriptive techniques across the entire advanced analytics life-cycle.

Participants will gain an understanding of when to choose specific analytic techniques, algorithms and tools to solve common business problems. We will also dive into the critical importance of data preparation and sampling. After learning how to effectively develop models, we will cover evaluating models and embedding intelligent analytics into smart reports, dashboards and applications to deliver actionable insight.

Who Should Attend
This course is designed for data analysts, advanced Excel users and business intelligence developers that want to learn advanced analytics.

Learning Objectives
- Advanced Analytics Techniques and Tools
- Descriptive and Diagnostic Analytics Fundamentals
- Predictive Analytics and Data Mining
- Business Modeling for Prescriptive Analytics
- Embedding Analytics into the Business
Topics

1. **Introduction to Advanced Analytics**
   a. Areas of Advanced Analytics
   b. Current Industry Trends
   c. Types of Analytics Models
   d. Solving Common Problems
   e. CRISP-DM Life-cycle
   f. Framing Questions and Problems

2. **Descriptive and Diagnostic Analytics**
   a. Basic Statistics
   b. Analysis Toolpak
   c. Introduction to R

3. **Data Collection and Preparation**
   a. Common Tools and Techniques
   b. Cleansing and Shaping with Excel
   c. Analytical Data Transformation
   d. Sampling Methods

4. **Predictive Analytics Development**
   a. Overview of Data Mining and Machine Learning
   b. Building and Evaluating Predictive Models
   c. Introduction to Weka

5. **Prescriptive Analytics**
   a. What-If, Scenarios and Solver
   b. Forecasting and Regression
   c. Optimization and Simulation
Jen Underwood
Jen Underwood, founder of Impact Analytix, LLC, has 20 years of experience in “hands-on” development of data warehouses, reporting, dashboards, and predictive analytics. In addition to keeping a constant pulse on the industry, she has held product management and marketing roles on the Microsoft Business Intelligence teams. Jen also was honored to be a former Tableau Zen Master.

Throughout her career, she has helped customers select and succeed in adopting new technologies. She has launched new analytics products and turned around failed projects for organizations, systems integration firms and industry vendors. Today she provides advisory, thought leadership, strategy, technical product marketing services, market intelligence, technical writing, training, and event presentations for investment groups, industry publications, media, research firms and technology companies.

Jen holds a Bachelor of Business Administration degree from the University of Wisconsin, Milwaukee and a post graduate certificate in Computer Science - Data Mining from University of California, San Diego.