



# Predictive Analytics (Advanced)

**Quick View**

**Program Objectives**

- Impart an understanding of Predictive analytics approach and advanced techniques
- Equip with skills to analyze and interpret data, derive insights, build models and make recommendations

**Duration:** 3 Days

**Batch Size:** 10 - 25 persons

**Participant Profile**

- Candidates desirous of acquiring advanced Predictive analytics competencies
- Professionals with 3+ years work experience in industry
- Graduate level qualified (UG/PG)

**Assessment**

- Electronic / Online Assessment (Multiple Choice Objective type)

**Certification**

- Certified Predictive Analytics Professional (Basic) (Participation and Course Completion) Certificate)

**Computing Facilities**

- Laptop with Microsoft Excel (Ver-2003) running on Windows XP

**Course Outline**

**Introduction**

- Predictive Analytics (PA) Overview
- Business Value of Analytics
- Analytics - Application areas

**Measurement and Data**

- Project Objectives
- Data - Scale and Types
- Sampling methods
- Descriptive Statistics
- Data Visualization and Distribution

**Statistical Inference**

- Point and Interval Estimation
- Sample Size Calculation
- Hypothesis Formulation
- Testing Hypothesis (Means - One, Two and Multiple Samples)
- Testing Hypothesis (Variance - One, Two and Multiple Samples)
- Non-Parametric Hypothesis Testing (One, Two and Multiple Samples)
- Testing Hypothesis (Mean and Variance - Multiple samples)
- Testing Hypothesis (Proportion and Median - Multiple Samples)

**Statistical Modeling**

- Classification - Decision Trees, Naïve Bayes, k-NN and Neural Networks
- Time Series Forecasting (Moving Average, Exponential Smoothing, ARIMA, Seasonality and Box-Jenkins Models)
- Regression (Linear, Polynomial, Logarithmic, Exponential, Power and Logit models)
- Regression Hypothesis Testing
- Model Identification, Estimation and Assessment

**Assessment and Feedback**

