Statistics Essentials for Analytics training provides complete knowledge to delegates about the Statistical Techniques. The delegates will learn how every technique is employed on a real-world data set to analyse and conclude insights. The delegates will get familiar with the implementation of the various statistical technique. These techniques are explained using dedicated illustrations. The delegates will learn about the various data types and variables types. With the help of the training, the delegates will able to understand Skewness, Modality, Measures of Center and Measures of Spread. Throughout the training, the delegates will understand the various statistical techniques from the basics.

The delegates will also understand the relationship between these terminologies. With the help of the Statistics Essentials for Analytics training, the delegates will able to analyse airlines data set to gather insights. The delegates will get an opportunity to understand the rules of probability and also learn about the Disjoint and Independent events. The delegates will also understand the concept of probability, implement these concepts on a case-study. The training provides a complete knowledge to the delegates about the Normal distribution, interpreting z-scores and calculating percentiles, Mean, Binomial Distribution and Standard deviation.

## **Prerequisites**

There are no prerequisites for attending Statistics Essentials for Analytics Training.

# **Course Objectives**

After the completion of Statistics Essentials for Analytics Training at Silicon Beach Training, the delegates will be able:

- To analyse different types of data
- Understand Regression modelling
- · Understand Clustering techniques
- To apply the probabilistic approach to solve the real-life complex problems
- Understand how to explain and derive the Bayesian inference
- Implement Milgram's Experiment
- Understand Master different sampling techniques
- Understand how and where to apply which statistical technique
- Learn several statistics techniques such as Bayesian Theorem, Sampling Methods, Conditional Probability and many more

### **Understanding the Data**

- Introduction to Data Types
- · Numerical parameters to represent data
- Mean
- Mode
- Information Gain



- Entropy
- Median
- Sensitivity
- · Statistical parameters to represent data

## Probability and its uses

- Uses of probability
- · Need of probability
- Bayesian Inference
- Density Concepts
- Normal Distribution Curve

#### **Statistical Inference**

- Point Estimation
- Hypothesis Testing
- Confidence Margin
- · Levels of Hypothesis Testing

## Data Clustering

- · Association and Dependence
- Simpson's Paradox
- Clustering Technique
- Covariance
- · Causation and Correlation

# **Testing the Data**

- Parametric Test
- Parametric Test Types
- Non- Parametric Test
- · Experimental Designing
- A/B testing

## **Regression Modelling**



- Logistic and Regression Techniques
- Problem of Collinearity
- WOE and IV
- Residual Analysis
- · Heteroscedasticity
- Homoscedasticity

Statistics Essentials for Analytics training provides complete knowledge to delegates about the Statistical Techniques. The delegates will learn how every technique is employed on a real-world data set to analyse and conclude insights.