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| <b>Course Name</b>      | <b>Fundamental Course in Predictive Analytics</b>  |
| <b>Course Duration</b>  | 50 Hours   |
| <b>About Technology</b> | <p>IBM® SPSS® Statistics is statistical analysis software that delivers the core capabilities one needs to take the analytical process from start to finish. It is easy to use and includes a broad range of procedures and techniques to help you increase revenue, outperform competitors, conduct research and make better decisions.</p> <p>SPSS Statistics provides essential statistical analysis tools for every step of the analytical process.</p> <ul style="list-style-type: none"><li>• <b>A comprehensive range of statistical procedures</b> for conducting accurate analysis.</li><li>• <b>Built-in techniques</b> to prepare data for analysis quickly and easily.</li><li>• <b>Sophisticated reporting functionality</b> for highly effective chart creation.</li><li>• <b>Powerful visualization capabilities</b> that clearly show the significance of your findings.</li></ul> |
| <b>About Course</b>     | A course on Predictive Analytics using IBM SPSS Statistics will help the students to understand the basic concepts of Statistical Methods .This course will help to focus on Business Prediction in the era of high performance and low tolerance business environment.  |
| <b>Target Audience</b>  | <p>The course enables students in early stages of undergraduate studies with an understanding of how to use the predictive analytics and its application.</p> <p>Students of:</p> <ul style="list-style-type: none"><li>– MBA / BBA Students</li></ul>   |
| <b>Pre-requisites</b>   | No previous Software knowledge, other than basic computer/Windows usage required. Understanding of Statistical Computation & Concepts ( Sampling , Probability , Testing , Hypothesis etc)   |
| <b>Contents</b>         | <b>Introducing IBM SPSS Statistics</b><br>Reading Data<br>Variable Properties<br>Working with the Data editor<br>Summarizing Individual Variables<br>Modifying Data Values: Recode<br>Modifying Data Values: Compute<br>Describing Relationship Between Variables<br>Selecting Cases<br>Creating and Editing Charts<br>Output in the Viewer<br>Syntax Basics<br>Course Summary<br>Menus and the Help System  |



- Helpful Data Management Features
- Transformations: Computing with Numeric Data
- Transformations: Computing with Date and Time Variables
- Transformations: Computing with Alphanumeric Data
- Additional Data Transformations
- Identifying Duplicates and Restructuring Data
- Aggregating Data
- Merging Files – Adding Cases Adding Variables
- Analyzing Multiple Response Questions
- Working with Pivot Tables
- Working with Charts
- Exporting Tables and Charts
- An Introduction to Output Management System
- Automating IBM SPSS Statistics
- Controlling the IBM SPSS Statistics Environment

### **Introduction to Statistical Analysis**

- Understanding Data Distribution Theory
- Data Distribution for Categorical Variables
- Data Distribution for Scale Variables
- Making Inference about population from sample
- Relationship between Categorical variables
- The Independent Sample T test
- The Paired Sample T Test
- One Way ANNOVA
- Decision Tree Introduction and Procedure
- CHAID analysis
- Bivariate Plots and Correlation for Scale Variables
- Regression Analysis
- Concepts of Logistic Regression