



Professional School

An ISO 9001 : 2000 Organisation

DATA VISUALIZATION CERTIFICATION COURSE

- **Advanced Excel**
 - Introduction to MS Excel, Cell Ref, Basic Functions and Usage
 - Sorting, Filtering, Advance Filtering, Subtotal
 - Pivot Tables and Slicers
 - Goal Seek and Solver
 - Different Charts Graphs – Which one to use and when
 - Vlookup, Hlookup, Match, Index
 - Conditional Formatting
 - Worksheet & Workbook Reference, Error Handling
 - Logical Operators & Functions – IF and Nested IF
 - Data Validation
 - Text Functions
 - Form Controls
 - Dashboard
 - 6 Case Studies from App Cab Aggregators, Insurance, Sports, Sales, Marketing, Web Analytics Industry

- **SQL Queries & Relational Database Management**
 - Relational Database Fundamentals
 - Steps to Design Efficient Relational Database Models
 - Case Studies on Designing Database Models
 - Case Study Implementation on Handling Data
 - Importing / Exporting Large Amount of Data into a database
 - SQL Statements - DDL, DML, DCL, DQL
 - Writing Transactional SQL Queries, Merging, joining, sorting, indexing, co-related queries, etc.
 - Hands-on Exercises on Manipulating Data Using SQL Queries
 - Creating Database Models Using SQL Statements
 - Individual Projects on Handling SQL Statements
 - 6 Case Studies from App Cab Aggregators, Ecommerce, Sports Industry

- **Data Visualization using Tableau**
 - Introduction to Data Visualization
 - What is Dashboard
 - Why do we need Dashboard
 - Introduction of Data Visualization using Tableau
 - Use of Tableau
 - Navigation in Tableau
 - Exporting Data
 - Connecting Sheets
 - Tableau Basics
 - Working with Dimension and Measures
 - Making Basic Charts like Line, Bar etc.
 - Adding Colours
 - Working in marks card
 - Working with Sorting and Filters
 - Creating Dual Axis and Combo Charts
 - Working with Tables
 - Creating Data Tables
 - Table Calculations
 - Calculated Field
 - Logical Calculations
 - If/Then
 - IIF
 - Case/When
 - Date Calculations
 - Date
 - DateAdd
 - DateDiff
 - DateParse

- Today()
 - Now()
 - Parameters
 - Pre-defined Lists for Faster Filtering
 - Top N Filter
 - Reference Line Parameter
 - Swapping Dimensions or Measures in a View
 - Using Actions to Create Interactive Dashboards
 - Filter Actions
 - Highlight Actions
 - Advanced Charts
 - Heat maps, Tree Maps, Waterfall Charts etc.
 - Working with latitude and Longitude
 - Symbol and filled maps
 - Working with data
 - Joining multiple tables
 - Blending of Data
 - Sets
 - In/Out Sets
 - Combines Sets
 - Drilling Up/Down using Hierarchies
 - Grouping
 - Bins/Histograms
 - Analytics
 - Referencing lines
 - Clustering
 - Trend Line
 - Building dashboards
 - Layout and Formatting
 - Interactivity with Actions
 - Best Practices
 - Story Telling with Data
 - Working with story
 - Highlighting important insights
 - Data Interpreter
 - Data Preparation
 - Data Cleaning
 - Pivoting
 - 4 Case Studies on Retail, Airline, Bank datasets
- **VBA (Recorded)**
 - **Concept of Object**
 - Object as an element in programming
 - Examples of objects
 - Collection of objects
 - Object properties
 - Methods related to objects
 - **Introduction to Excel Visual Basic Editor**
 - Excel VBA programming environment
 - Project window and code window
 - **Programming Basics**
 - Concept of Sub Routines
 - Types of Errors
 - Excel Macro Recording facility
 - Modifying the existing Macro in VB editor window
 - Adding new module, removing module, Importing and Exporting objects
 - **Commonly used objects**
 - Workbooks Object
 - Worksheets Object
 - Range Object

- Cell Object
- **Some Range Properties**
 - Address property
 - The Font property
 - Formula property
- **Some Useful range methods**
 - The Select method
 - Copy and Paste method
 - Clear method
 - Delete method
 - Paste Special
- **Dynamic Selection**
 - Dynamic Row/Column selection
 - Dynamic Table selection
- **Multiple tasks on same object**
 - Use of 'With ... End With Structure'
- **Concept of Variables**
 - Variable Naming Conventions
 - Numeric and Non-numeric variables
 - Object Stored as variable
- **Decision Statements**
 - 'If ... then' structure
 - 'Select ... Case' structure
- **Loops**
 - 'For ... Next' structure
 - Nested for loop
 - For Each Loop
 - Do until Loop
 - Do While Loop
 - GoTo
- **Programming Basics**
 - Calling a macro
 - Practice of good programming
 - Concept of Functions
 - Structure of a function
 - Uses of writing a function
 - Difference between a macro and a function
 - Some Examples
- **Dashboards on Excel**
 - Form Control
 - What is Dashboard?
 - Creating Dynamic dashboards