

COURSE CONTENT:**DATA ANALYTICS USING POWER-BI, TABLEAU & ADVANCE EXCEL IN GOVERNMENT SECTOR**

(29th March to 09th April 2027)

1. Introduction to Data Analytics and Decision Making**2. Describing Data Graphs and Tables using Excel Add-Ins**

- Frequency Tables and Histograms
- Analyzing Relationship with Scatter plots
- Time Value of Money (Case study)
- Exploring Data with Pivot Tables

3. Describing Data Summary Measures

- Measures of Central Location
- Minimum, Maximum and Range
- Measures of Variability, Variance and Standard Deviation
- Obtaining Summary Measures with Add-Ins
- Sensitivity Analysis w.r.t. Capital Budgeting
- Monte Carlo Simulation
- Modelling with Excel

4. Overview of Tableau Desktop

- The Start Page and Data Connection Page
- Leveraging Toolbar Icons, Data Window, Data Types, and Aggregation

4.1 Creating Visual Analytics with Tableau Desktop

- Building Visualizations with the row and Column Shelves (Case-study)

4.2 Tableau Line Charts for Time Series Analysis (Case Study)

- Trend Lines and Reference Lines
- Enhancing Views with Filters, Sets, Groups, and Hierarchies

4.3 Maps in Tableau to Improve Insight**5. Overview of Power BI**

- Big Data & AI
- AI in Data Analytics
- Data Modeling & Visualization
- Creating visualizations (charts, tables, maps)
- Hands-on exercise: designing interactive dashboards