

## Mastering Tableau

**Tableau** is a powerful data visualization tool used for exploring and analyzing data to uncover insights and make data-driven decisions.

This course covers the key concepts and techniques for mastering Tableau, from data preparation and visualization to advanced analytics and collaboration. Depending on the audience's background and goals, you can adjust the depth and complexity of each topic and incorporate hands-on exercises and projects to reinforce learning.

## Tech Stack To Be Covered



## Mastering Tableau

### Module 1: Introduction to Tableau

- Understanding the role of data visualization in decision-making
- Overview of Tableau and its capabilities
- Tableau product offerings: Tableau Desktop, Tableau Server, Tableau Online

### Module 2: Getting Started with Tableau Desktop

- Installing Tableau Desktop
- Connecting to data sources (Excel, CSV, databases)
- Introduction to Tableau interface: worksheets, dashboards, and stories

### **Module 3: Data Preparation in Tableau**

- Understanding Tableau data types and roles
- Data cleansing and transformation techniques in Tableau
- Joining and blending data from multiple sources

### **Module 4: Building Basic Visualizations**

- Creating bar charts, line charts, and scatter plots
- Customizing visualizations with colors, shapes, and sizes
- Using filters and parameters to interact with data

### **Module 5: Advanced Visualization Techniques**

- Creating advanced charts: heatmaps, treemaps, histograms
- Implementing reference lines, bands, and distributions
- Building interactive dashboards with actions and filters

### **Module 6: Geographic Mapping in Tableau**

- Plotting geographic data on maps
- Customizing map layers and styles
- Analyzing spatial patterns and trends

### **Module 7: Calculations and Expressions**

- Introduction to Tableau calculations: calculated fields and table calculations
- Using functions and operators in Tableau calculations
- Implementing conditional logic and aggregation functions

## **Module 8: Advanced Analytics in Tableau**

- Implementing trend lines, forecasting, and clustering
- Calculating moving averages and cumulative totals
- Performing statistical analysis with Tableau

## **Module 9: Sharing and Collaborating with Tableau**

- Publishing workbooks to Tableau Server or Tableau Online
- Creating and managing user permissions and access
- Embedding Tableau visualizations in web pages and applications

## **Module 10: Tableau Best Practices**

- Design principles for effective data visualization
- Performance optimization techniques in Tableau
- Documenting and sharing best practices within the organization

## **Module 11: Tableau Integration and Extensibility**

- Integrating Tableau with other tools and platforms (R, Python, Salesforce)
- Extending Tableau functionality with custom extensions and APIs
- Leveraging Tableau Prep for data preparation and cleaning

## **Module 12: Advanced Topics and Case Studies**

- Advanced Tableau features: set actions, parameter actions, LOD calculations
- Case studies and real-world examples of Tableau implementations
- Tips and tricks for becoming a Tableau power user

## **Module 13: Tableau Certification and Career Path**

- Overview of Tableau certification exams and preparation resources

- Career opportunities for Tableau professionals
- Building a portfolio of Tableau projects and showcasing skills