Tableau Desktop Certified Associate

Duration – 5 days

Course Overview

This training provides a comprehensive introduction to Tableau Desktop and Tableau Prep Builder, covering data connection, preparation, analysis, visualization, and publishing. The course is designed to align with the Tableau Desktop Certified Associate exam objectives and focuses on hands-on learning to help participants build interactive dashboards and perform effective data analysis using Tableau.

Target Audience

This course is intended for:

- Aspiring and current **Data Analysts**
- **Business Intelligence (BI) professionals**
- **Data professionals** working with reports and dashboards
- Individuals preparing for the **Tableau Desktop Certified Associate certification**

Prerequisites

- Basic computer skills
- Familiarity with spreadsheets and tabular data (e.g., Excel)
- Basic understanding of data concepts such as rows, columns, and measures
- No prior Tableau experience is required for foundational modules

1. Connect to and Transform Data (24%)

1.1 Connect to Data Sources

1.1.1 Identify data sources
1.1.2 Determine live connections vs. extracts
1.1.3 Connect to extracts
1.1.4 Connect to files
1.1.5 Connect to relational databases
1.1.6 Connect to published data sources (Tableau Server / Tableau Cloud)
1.1.7 Replace data sources in existing worksheets

Covered in:

- Tableau Desktop I: Fundamentals
- Tableau Desktop II: Intermediate

2. Prepare Data for Analysis

1.2.1 Assess data quality (completeness, consistency, accuracy)
1.2.2 Perform data cleaning operations

1.2.3 Organize data fields into folders

1.2.4 Use multiple data sources (relationships, joins, unions)

1.2.5 Use Data Interpreter, pivot, and split

1.2.6 Create extracts and data source filters

Covered in:

- Tableau Desktop I: Fundamentals
- Tableau Desktop II: Intermediate

1.3 Perform Data Transformation in Tableau Prep

1.3.1 Choose transformations based on business scenarios

1.3.2 Combine data using unions

1.3.3 Combine data using joins

1.3.4 Shape data using aggregations

1.3.5 Perform filtering

1.3.6 Shape data using pivots

1.3.7 Determine appropriate output types

Covered in:

- Tableau Prep Builder

1.4 Customize Fields

1.4.1 Change default field properties (data types, sorting)

1.4.2 Rename columns

1.4.3 Convert between discrete and continuous fields

1.4.4 Convert between dimensions and measures

1.4.5 Create aliases

Covered in:

- Tableau Desktop I: Fundamentals

2. Explore and Analyze Data (41%)

2.1 Create Calculated Fields

2.1.1 Date calculations

2.1.2 String functions

2.1.3 Logical and Boolean expressions

2.1.4 Number functions

2.1.5 Type conversion functions

2.1.6 Aggregate functions

2.1.7 Basic spatial calculations

Covered in:

- Tableau Desktop I: Fundamentals
- Tableau Desktop II: Intermediate

2.2 Create Table Calculations

2.2.1 Moving and window averages

2.2.2 Percent of total

2.2.3 Running totals

2.2.4 Difference and percent difference

2.2.5 Percentile

2.2.6 Index

2.2.7 Ranking

2.2.8 Apply quick table calculations

2.2.9 Customize table calculations

Covered in:

- Tableau Desktop I: Fundamentals
- Tableau Desktop II: Intermediate

2.3 Create and Use Filters

2.3.1 Filter dimensions and measures

2.3.2 Top N, Bottom N, wildcard, conditional filters

2.3.3 Context filters

2.3.4 Apply filters across sheets and data sources

Covered in:

- Tableau Desktop I: Fundamentals

2.4 Create Parameters for Interactivity

2.4.1 Parameters in calculations

2.4.2 Parameters with filters

2.4.3 Parameters with reference lines

2.4.4 Dynamic parameter refresh

Covered in:

- Tableau Desktop II: Intermediate

2.5 Structure the Data

2.5.1 Sets

2.5.2 Bins

2.5.3 Hierarchies

2.5.4 Groups

Covered in:

- Tableau Desktop I & II

2.6 Map Data Geographically

2.6.1 Symbol maps

2.6.2 Density maps

2.6.3 Choropleth (filled) maps

2.6.4 Mark layers

Covered in:

- Tableau Desktop I: Fundamentals

2.7 Analytics Pane

2.7.1 Totals and subtotals
2.7.2 Reference lines
2.7.3 Reference bands
2.7.4 Average lines
2.7.5 Trend lines
2.7.6 Distribution bands
2.7.7 Forecasting (default)
2.7.8 Customize forecasting models

Covered in:

- Tableau Desktop I & II

2.8 Level of Detail (LOD) Calculations

2.8.1 FIXED LOD expressions
2.8.2 INCLUDE LOD expressions
2.8.3 EXCLUDE LOD expressions
2.8.4 Nested LOD expressions

Covered in:

- Tableau Desktop II: Intermediate

3. Create Content (26%)

3.1 Create Charts

3.1.1 Bar, line, pie, scatter, histogram, treemap, dual-axis, Gantt, box plots, area charts
3.1.2 Sort data (including custom sorting)

Covered in:

- Tableau Desktop I & II

3.2 Create Dashboards and Stories

3.2.1 Dashboards with containers and layouts
3.2.2 Add images, text, and objects
3.2.3 Create stories using story points

Covered in:

- Tableau Desktop I & II

3.3 Add Dashboard Interactivity

3.3.1 Dashboard filters
3.3.2 Filter, URL, and highlight actions
3.3.3 Dynamic zone visibility
3.3.4 Navigation buttons
3.3.5 Set and parameter actions
3.3.6 Show/hide dashboard objects

Covered in:

- Tableau Desktop II: Intermediate

3.4 Formatting and Design

3.4.1 Colors, fonts, and styling
3.4.2 Custom shapes and palettes
3.4.3 Annotations
3.4.4 Tooltips
3.4.5 Padding
3.4.6 Gridlines, banding, shading
3.4.7 Device-specific layouts

Covered in:

- Tableau Desktop I & II

4. Publish and Manage Content (9%)

4.1 Publish Content

4.1.1 Publish workbooks
4.1.2 Publish data sources
4.1.3 Export content
4.1.4 Publish flows

Covered in:

- Tableau Desktop I
- Tableau Prep Builder

4.2 Schedule Data Updates

4.2.1 Schedule extract refreshes

Covered in:

- Tableau Desktop II

4.3 Manage Published Content

4.3.1 Create alerts
4.3.2 Subscriptions
4.3.3 Custom views
4.3.4 User roles and permissions
4.3.5 Distribute published workbooks

Covered in:

- Tableau Desktop I & II