



**Course Name:** Tableau Developer Professional Certification Program

**Course Overview:**

This extensive Tableau training program, spread across 24 modules, begins with foundational knowledge in Tableau Prep and progresses through advanced data preparation, visualization, and analysis techniques. Participants will delve into Tableau Desktop functionalities, master data connectivity, chart creation, dashboard design, and SQL database management. The curriculum includes practical real-world projects, performance optimization, data warehousing concepts, and ends with a professional internship, preparing students for both job and freelance opportunities in data analytics and visualization.

**What You'll Learn?**

In this Tableau program, you'll learn to navigate and utilize Tableau Prep for data preparation, create sophisticated visualizations with Tableau Desktop, and manage databases using SQL. You'll master dashboard design, data warehousing, and performance optimization, and gain practical experience through real-world projects and a professional internship, preparing you for a career in data analytics.

**Internship Program:**

In addition to the program, you will participate in a 3-month internship involving six live projects. Upon successful completion, you will receive an Internship Certificate.

**Letter of Recommendation:**

Upon successfully completing the program and internship, you will also receive a Letter of Recommendation (LOR).

**Duration:**

54 Hours (9 Weeks) + 3 Months (Internship Program)

**Requirements:**

Tableau Desktop, Tableau Prep, Tableau Online, Microsoft SQL Management Studio

**Pre-requisite:**

Basic Excel Knowledge

## Curriculum

### Module 1. Data Preparation using Tableau Prep

1. What is Tableau?
2. Why Tableau?
3. Tableau Products
4. Data Visualization
5. Business Intelligence tools
6. Tableau Architecture
7. Tableau Server Architecture
8. VizQL
9. Introduction to Tableau Prep
10. Tableau Prep Builder User Interface
11. Data Preparation techniques using Tableau Prep Builder tool

### Module 2. Introduction to Tableau Desktop

1. Introduction to Tableau Desktop
2. Start Page
3. Connections and Sheets

### Module 3. Connecting to a Dataset

1. Connect to an Excel Data set
2. Preliminary data checks
3. Manage Data Properties
4. Rename a data field
5. Assign an alias to a data value
6. Assign a geographic role to a data field
7. Change data type for a data field (number, date, string, Boolean, etc.)
8. Change default properties for a data field (number format, aggregation, Color, date format, etc.)
9. Explain difference between Live vs Extract
10. Tableau File types

### Module 4. Tableau Desktop Walk thru

1. Explain role of Worksheet, Dashboard, Story
2. Dimension and Measures Pane
3. Column and Row Shelves

4. Auto Generated Fields in Tableau
5. Discrete vs Continuous Fields
6. Show Me Feature

#### **Module 5. Understanding Tableau Charts**

1. Text Table
2. Highlighter Table
3. Bar chart
4. Line chart
5. Bubble Chart
6. Stacked Chart
7. Side by Side Chart
8. Filled Maps
9. Symbol Maps
10. Bullet chart
11. Tree Map
12. Heat Map
13. Mark Cards
14. Histogram
15. Butterfly Chart
16. Waterfall Chart
17. 10 Advanced Charts

#### **Module 6. Learn About Filters**

1. Data source Filters
2. Extract Filters
3. Dimension Filters
4. Measure Filters
5. Context Filters
6. Order of operations
7. Add Date filter to view
8. Customizing Show filters

#### **Module 7. Groups, Sets and Parameters**

1. Groups
2. Sets
3. Combined Sets
4. Parameters



### **Module 8. Sorting and Formatting**

1. Sorting
2. Headers
3. Palettes
4. Font and Alignment
5. Marks cards
6. Add Totals, Sub Totals and Grand Totals to Report

### **Module 9. Advanced Features**

1. Reference line
2. Reference Band
3. Reference Distribution
4. Trend Line
5. Forecasting
6. Table Calculations

### **Module 10. Calculated fields**

1. Date Expressions
2. String Expressions
3. Numeric Expressions
4. Logical Expressions

### **Module 11. Level of Details**

1. FIXED
2. EXCLUDE
3. INCLUDE

### **Module 12. Combining Data**

1. Joining multiple tables
2. Union Data
3. Blend
4. Relationship

### **Module 13. Dashboards**

1. Understanding Dashboard Layout
2. Blank Container
3. Add Headers and Borders
4. Horizontal and Vertical Containers



5. Text
6. Image
7. Web Page
8. Navigation
9. Download

#### **Module 14. Advanced Formatting & Story**

1. Dashboards for Phone, Tablet
2. Dashboard Actions
3. Filters
4. Story

#### **Module 15. Tableau Online**

1. Publishing Workbooks to Tableau Online
2. Interacting with Content on Tableau Online
3. Data Management through Tableau Catalog
4. AI-Powered features in Tableau Online (Ask Data and Explain Data)
5. Understand Scheduling
6. Managing Permissions on Tableau Online
7. Data Security with Filters in Tableau Online

#### **Module 16. Real Time Projects**

1. Real time Projects
2. How to analyze the data and get insight from it?
3. How to approach any business scenario/problem?
4. How to solve any business scenario/problem?
5. How to create a story on any business scenario/problem?

#### **Module 17. Performance Monitoring and Improvement**

1. How to track performance of a dashboard?
2. How to understand the output of performance tracker?
3. Best practices to improve dashboard performance
4. Other tips related to performance monitoring and improvement

#### **Module 18: Introduction to Databases and SQL**

1. Introduction to Databases
2. Understanding SQL and Its Importance
3. Basic SQL Syntax

4. SELECT Statement: Retrieving Data
5. WHERE Clause: Filtering Data

#### **Module 19. Advanced SQL Queries**

1. Sorting Data: ORDER BY Clause
2. Filtering Data: WHERE Clause (continued)
3. Aggregating Data: GROUP BY Clause
4. Joining Tables: INNER JOIN, LEFT JOIN, RIGHT JOIN
5. Subqueries and Derived Tables

#### **Module 20. SQL Functions and Data Manipulation**

1. SQL Functions: COUNT, SUM, AVG, MAX, MIN
2. Modifying Data: INSERT, UPDATE, DELETE
3. Data Integrity: Constraints
4. Windows functions (rank, dense rank, etc.)

#### **Module 21. Introduction to Data Warehousing**

1. What is Data Warehousing?
2. Data Warehousing Architecture
3. Star Schema and Snowflake Schema
4. ETL (Extract, Transform, Load) Process
5. OLTP vs OLAP

#### **Module 22. Designing a Data Warehouse**

1. Identifying Data Sources
2. Data Modeling: Fact Tables and Dimension Tables
3. Design Best Practices
4. Data Warehouse Tools and Platforms
5. Performance Tuning and Optimization
6. Reporting and Dashboards

#### **Module 23. Interview Preparation Jobs & Freelance work in Tableau**

1. How to create Tableau Public profile and its importance?
2. Mock-up
3. Tips and tricks in Tableau
4. Interview questions
5. Mock interviews
6. Interview tips



7. How to crack job interview
8. How to register for freelancing work
9. How to get freelance work

#### **Module 24. Tableau Professional Internship Program**

6 Live Professional Projects