

Tableau for Data Visualization

Duration: 3 Months (Mon–Fri, ~120 Hours)

Mode: Live Online / Classroom

Tools & Technologies: Tableau Desktop, Tableau Server, SQL

Syllabus

Week 1

- Introduction to Data Visualization & Tableau
- SQL Basics: DDL, DML, SELECT, WHERE
- Connecting Tableau to SQL databases
- Assignment at end of week

Week 2

- SQL Aggregations: GROUP BY, HAVING
- Tableau basics: dimensions, measures, filters
- Hands-on: Load dataset into Tableau
- Assignment at end of week

Week 3

- SQL Joins: INNER, LEFT, RIGHT, FULL
- Combining multiple tables in Tableau
- Hands-on: Join tables in SQL, visualize in Tableau
- Assignment at end of week

Week 4

- Sorting, grouping, calculated fields
- String & number functions
- Assignment at end of week

Week 5

- Visualizations: bar, line, scatter, heatmap, maps
- Formatting, legends, annotations
- Assignment at end of week

Week 6

- LOD Expressions (FIXED, INCLUDE, EXCLUDE)
- Advanced aggregations
- Mock Interview 1: SQL + Tableau basics

Week 7

- Parameters & sets
- Dynamic dashboards
- Assignment at end of week

Week 8

- Dashboard layout & interactivity
- Adding actions (filter, highlight, URL)
- Assignment at end of week

Week 9

- Storyboards & visual storytelling
- Best practices for design
- Assignment at end of week

Week 10

- Tableau Server – publishing, permissions, scheduling
- Assignment at end of week

Week 11

- Project Development – SQL + Tableau
- Assignment at end of week

Week 12

- Capstone Project
- Mock Interview 2: SQL + Tableau end-to-end
- Final project presentation

Learning Outcomes

- Understand SQL queries till joins for analytics
- Connect Tableau to SQL databases
- Create visualizations with dimensions & measures

- Use LOD expressions, parameters, and sets
- Build dashboards and storyboards
- Publish reports to Tableau Server
- Deliver end-to-end BI projects using SQL + Tableau