**Module 1: Introduction to Tableau**

1. **Overview of Tableau:**
   * What is Tableau?
   * Tableau Desktop vs Tableau Public vs Tableau Server
   * Tableau Products Ecosystem
2. **Installing and Setting up Tableau:**
   * Tableau Desktop Installation
   * Tableau Public Account Setup
3. **Navigating the Tableau Interface:**
   * Worksheets, Dashboards, and Stories
   * Tableau Menus and Toolbars
   * Understanding Shelves and Cards (Rows, Columns, Marks, Filters, Pages)
   * Connecting to Data (Excel, CSV, SQL, and other sources)
4. **Basic Data Operations:**
   * Understanding Dimensions vs. Measures
   * Exploring Data Types and Roles
   * Sorting and Filtering Data
   * Aggregation and Granularity

**Module 2: Basic Data Visualization**

1. **Introduction to Visual Analytics:**
   * What is Data Visualization?
   * The Importance of Data Storytelling
2. **Creating Simple Charts:**
   * Bar Charts
   * Line Charts
   * Pie Charts
   * Heat Maps
   * Highlight Tables
3. **Interactivity in Visualizations:**
   * Filters and Quick Filters
   * Parameters and their usage
   * Tooltips and Annotations
4. **Working with Time Series Data:**
   * Creating Trend Lines
   * Date Hierarchies and Continuous vs. Discrete Dates

**Module 3: Intermediate Data Visualization**

1. **Advanced Chart Types:**
   * Dual-axis and Combined Charts
   * Scatter Plots
   * Bullet Graphs
   * Gantt Charts
   * Waterfall Charts
2. **Maps and Geographic Visualizations:**
   * Creating Basic Maps in Tableau
   * Working with Geo Data (Latitude & Longitude)
   * Using Map Layers and Custom Background Images
3. **Table Calculations:**
   * Introduction to Table Calculations
   * Common Calculations (Running Total, Percent of Total, Moving Average)
   * Writing Custom Table Calculations
4. **Groups, Sets, and Hierarchies:**
   * Creating and Managing Groups
   * Using Sets for Advanced Filtering
   * Creating and Navigating Hierarchies

**Module 4: Data Preparation & Transformation**

1. **Data Blending vs. Joins:**
   * Performing Joins in Tableau (Inner, Outer, Left, Right)
   * Using Data Blending across Different Data Sources
2. **Union and Pivot:**
   * Merging Data with Union
   * Pivoting Data for Better Visual Analysis
3. **Data Cleaning with Tableau Prep:**
   * Introduction to Tableau Prep Builder
   * Cleaning and Structuring Data in Tableau Prep
   * Creating Data Flows and Automating Data Refresh
4. **Creating Calculated Fields:**
   * Basic Calculations (String, Date, Number Functions)
   * Logical Calculations (IF, CASE, IIF)
   * Aggregate Calculations (SUM, AVG, COUNT)
   * Nested Calculations

**Module 5: Advanced Visualization Techniques**

1. **Advanced Chart Types:**
   * Box Plots
   * Histogram and Bins
   * Tree Maps
   * Funnel Charts
   * Pareto Charts
2. **Dashboards and Stories:**
   * Building Interactive Dashboards
   * Adding Actions (Filter, Highlight, URL)
   * Creating Dashboard Layouts (Tiled vs. Floating)
   * Using Device Layouts for Mobile Compatibility
3. **Designing for User Experience (UX):**
   * Principles of Data Visualization Design
   * Color Theory and Design Best Practices
   * Improving Dashboard Performance and Loading Times
4. **Data Storytelling with Tableau Stories:**
   * Creating and Linking Stories
   * Using Captions, Annotations, and Narratives
   * Presenting Data Stories to Stakeholders

**Module 6: Tableau Server and Online**

1. **Publishing and Sharing Dashboards:**
   * Publishing Dashboards to Tableau Server and Tableau Public
   * Managing Access and Permissions
   * Embedding Tableau Dashboards in Websites
2. **Collaborating on Tableau Online:**
   * Using Tableau Online for Team Collaboration
   * Scheduling Data Extract Refreshes
   * Creating Tableau Subscriptions and Alerts
3. **Performance Optimization:**
   * Using Data Extracts for Performance
   * Reducing Data Source Size
   * Tableau Performance Recording and Optimization Techniques

**Module 7: Advanced Analytics in Tableau**

1. **Using Level of Detail (LOD) Expressions:**
   * Fixed, Include, and Exclude LOD Calculations
   * Practical Use Cases of LOD
2. **Statistical Analysis:**
   * Reference Lines, Bands, and Distributions
   * Trend Lines, Forecasting, and Clustering
   * Understanding Statistical Models in Tableau
3. **Integrating Tableau with R and Python:**
   * Introduction to R Integration with Tableau
   * Python Integration with Tableau via TabPy
   * Performing Predictive Analytics and Advanced Statistical Modelling

**Module 8: Tableau and Business Intelligence (BI) Applications**

1. **Connecting to External BI Tools:**
   * Connecting Tableau to SQL, BigQuery, Snowflake, and other BI tools
   * Tableau Data Extract API
2. **Tableau and Power BI:**
   * Comparing Tableau and Power BI for Data Analysis
   * Integrating Tableau with Power BI in Business Use Cases
3. **Case Studies and Industry Use Cases:**
   * Using Tableau in Finance, Retail, Healthcare, and Manufacturing
   * Data Storytelling and Presentation Techniques for Executives

**Module 9: Capstone Project**

1. **Real-World Business Problem:**
   * Choose a business case (e.g., sales analysis, marketing performance, financial forecasting)
   * Apply Tableau skills to solve the problem
2. **Project Presentation:**
   * Create an end-to-end Dashboard
   * Present findings and insights with visualizations and storytelling techniques
   * Peer Review and Feedback

**Module 10: Certification Preparation (Optional)**

1. **Tableau Certification Overview:**
   * Tableau Desktop Specialist Exam Preparation
   * Tableau Desktop Certified Associate Exam Preparation
2. **Exam Practice:**
   * Mock Tests and Exam Tips
   * Review of Certification Study Guides