

# uCertify

## Course Outline

### Mastering Data Visualization with Tableau



04 Aug 2025

## 1. Exercises, Quizzes, Flashcards & Glossary

Number of Questions

## 2. Expert Instructor-Led Training

### 3. ADA Compliant & JAWS Compatible Platform

### 4. State of the Art Educator Tools

### 5. Award Winning Learning Platform (LMS)

## 6. Chapter & Lessons

Syllabus

Chapter 1: Preface

Chapter 2: Introduction to Data Visualization and Visual Analytics

Chapter 3: Getting Started with Tableau Desktop

Chapter 4: Connecting to Data Sources and Data Interpretation

Chapter 5: Basic Data Visualization and Graphs in Tableau

Chapter 6: Dynamic Interaction: Parameters, Set, Hierarchies, and Sorting

Chapter 7: Dynamic Interaction Using Filter and Action on Worksheet

Chapter 8: Advanced Data Visualization and Graphs in Tableau

Chapter 9: Calculations in Tableau

Chapter 10: Dashboard Design and Story Creation

Chapter 11: Enhancing Dashboards: Sharing and Collaboration

Chapter 12: Integrating AI in Tableau: An Overview

Chapter 13: Data Cleaning and Preparation Using Tableau Prep Builder

Videos and How To

## 1. Expert Instructor-Led Training

uCertify uses the content from the finest publishers and only the IT industry's finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule 24/7.

## 2. ADA Compliant & JAWS Compatible Platform

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

## 3. State of the Art Educator Tools

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assessments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

## 4. Award Winning Learning Platform (LMS)

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology's finest products and services. Since 1986, thousands of products, services and solutions have been recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 7 years:

- 2014
  1. Best Postsecondary Learning Solution

- **2015**

1. Best Education Solution
2. Best Virtual Learning Solution
3. Best Student Assessment Solution
4. Best Postsecondary Learning Solution
5. Best Career and Workforce Readiness Solution
6. Best Instructional Solution in Other Curriculum Areas
7. Best Corporate Learning/Workforce Development Solution

- **2016**

1. Best Virtual Learning Solution
2. Best Education Cloud-based Solution
3. Best College and Career Readiness Solution
4. Best Corporate / Workforce Learning Solution
5. Best Postsecondary Learning Content Solution
6. Best Postsecondary LMS or Learning Platform
7. Best Learning Relationship Management Solution

- **2017**

1. Best Overall Education Solution
2. Best Student Assessment Solution
3. Best Corporate/Workforce Learning Solution
4. Best Higher Education LMS or Learning Platform

- **2018**

1. Best Higher Education LMS or Learning Platform
2. Best Instructional Solution in Other Curriculum Areas
3. Best Learning Relationship Management Solution

- **2019**

1. Best Virtual Learning Solution
2. Best Content Authoring Development or Curation Solution
3. Best Higher Education Learning Management Solution (LMS)

- **2020**

1. Best College and Career Readiness Solution
2. Best Cross-Curricular Solution
3. Best Virtual Learning Solution

## 5. Chapter & Lessons

uCertify brings these textbooks to life. It is full of interactive activities that keeps the learner engaged. uCertify brings all available learning resources for a topic in one place so that the learner can efficiently learn without going to multiple places. Challenge questions are also embedded in the chapters so learners can attempt those while they are learning about that particular topic. This helps them grasp the concepts better because they can go over it again right away which improves learning.

Learners can do Flashcards, Exercises, Quizzes and Labs related to each chapter. At the end of every lesson, uCertify courses guide the learners on the path they should follow.

### Syllabus

Chapter 1: Preface

Chapter 2: Introduction to Data Visualization and Visual Analytics

- Importance of data visualization in decision-making
- Timeline of data visualization
- Popular data visualization tools
- Overview of Tableau in data visualization
- Overview of Power BI in data visualization
- Key differences between Power BI and Tableau

- Usage of Power BI and Tableau
- Choosing the best Business Intelligence tool
- Merits of Power BI and Tableau
- Conclusion
- Key facts
- Practical exercises

## Chapter 3: Getting Started with Tableau Desktop

- Introduction to Tableau Desktop
- Installation and Interface of Tableau Desktop
- Navigating Tableau Desktop Interface
- Working with Workbook Data and Worksheets
- Creating basic data visualizations using the “Show Me” feature
- Understanding Dimensions and Measures in Tableau
- Conclusion
- Practice exercises

## Chapter 4: Connecting to Data Sources and Data Interpretation

- Introduction

- Overview of Tableau Desktop and Data Integration
- Evolution of Tableau's data management features
- Navigating Data connection options in Tableau
- Introduction to Data sources in Tableau
- Components of the Start Page for Data Connections
- Launching Tableau Desktop
- Connecting to Excel Data Sources in Tableau
- Key components of the Data Source page
- Tableau Data types
- Editing Data Sources in Tableau
- Navigating the Data Grid in Tableau
- Resetting Field names
- Combining Data in Tableau: Relationships and Joins
- Visualization in Tableau
- Tableau Design Flow
- Tableau File types
- Tableau Desktop Navigation: Introduction to Tableau Interface
- Exploring Tableau Workbook Navigation

- Navigating Worksheets in Tableau Desktop
- Dimensions and Measures
- Conclusion
- Practical exercise

## Chapter 5: Basic Data Visualization and Graphs in Tableau

- Importance of Data visualization and graphs
- Basic chart types in Tableau Desktop
- Selecting the ideal chart type in Tableau
- Other basic charts in Tableau
- Understanding the usage of different charts
- Conclusion
- Practical exercises

## Chapter 6: Dynamic Interaction: Parameters, Set, Hierarchies, and Sorting

- Hierarchies in Tableau
- Grouping data in Tableau
- Utilizing parameter
- Utilizing sets

- Sorting data in Tableau

## Chapter 7: Dynamic Interaction Using Filter and Action on Worksheet

- Filters in Tableau
- Types of filters in Tableau
- Extract filters
- Filter conditions in Tableau
- Data source filters in Tableau
- Context filters in Tableau
- Dimension filters in Tableau
- Measure filters in Tableau
- Table calculation filters in Tableau
- Quick filter
- User filter
- Filter Order of Operations in Tableau
- Understanding actions in Tableau
- Navigational actions in Tableau
- Functional actions in Tableau
- Dimension filters in Tableau

- Conclusion
- Practice questions

## Chapter 8: Advanced Data Visualization and Graphs in Tableau

- Bar-in-bar chart
- Dual axis charts
- Combo bar chart
- Diverging bar chart
- Lollipop chart
- Animated graph or motion chart
- Racing bar chart
- Sparklines in Tableau
- Word clouds in Tableau
- Calendar chart
- Donut chart
- Conclusion
- Practical exercises

## Chapter 9: Calculations in Tableau

- Calculated fields in Tableau
- Level of detail expressions in Tableau
- Creating a Quick Fixed LOD expression

## Chapter 10: Dashboard Design and Story Creation

- Introduction
- Dashboards in Tableau
- Creating effective dashboards in Tableau
- Tableau dashboard objects
- Format filters and set controls
- Dashboard presentation and sharing in Tableau
- Introduction to Tableau stories
- Conclusion
- Practical exercises 1

## Chapter 11: Enhancing Dashboards: Sharing and Collaboration

- Dashboard in Tableau
- Dynamic titles in Dashboard
- Filter actions in Tableau dashboards

- Publishing dashboards to PDF in Tableau
- Exporting packaged workbooks for sharing
- Publishing on Tableau Public
- Conclusion
- Practice exercises

## Chapter 12: Integrating AI in Tableau: An Overview

- Introduction to AI in data visualization with Tableau
- Visually driven AI and ML in Tableau
- AI and ML throughout the analytics flow in Tableau
- Tableau extensions: Enhancing visualization with AI and ML capabilities
- Tableau's AI features
- Integrating Python, R, and Matlab with Tableau for advanced analytics
- Tableau Business Science
- Tableau GPT
- Tableau Pulse
- Use cases and applications of AI features in Tableau
- Conclusion

## Chapter 13: Data Cleaning and Preparation Using Tableau Prep Builder

- Introducing Tableau Prep
- Conclusion
- Multiple choice questions

You can't stay away! Get [Tableau Prep Builder](#)



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