



# VISUAL ANALYTICS WITH TABLEAU CERTIFICATION

## CURRICULUM

### MODULE 1: FUNDAMENTALS OF DATA VISUALIZATION WITH TABLEAU

This is the introductory module to data visualization where you learn about what it is and how it is used to understand and evaluate data. We will cover the fundamental concepts and learn the Tableau interface and the various tools it has to offer. No previous experience with visualization or Tableau is expected. You will be able to create basic visualizations from scratch which would be the foundation skill for the rest of the specialization.

- Tableau installation and visualization creation
- Connecting to data sources
- Examine and navigate Tableau Public workspace
- Defining your project

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### MODULE 2: TABLEAU DESIGN PRINCIPLES AND HUMAN COMPUTER INTERACTION

In this module, you'll be introduced to Human Computer Interfaces, which is a multidisciplinary field focusing on design principles and the interactions of users with computer interfaces. You will be able to analyse and apply these design principles using Tableau. You will learn about exploratory data analysis and how it relates to the entire analytics lifecycle. You will learn about colours, contrast, layouts, and apply the design principle to create effective data visualizations.

- Principles of HCI and visual design
- Examine and improve visualization
- Apply visual design best practices
- Design visualizations for a target audience

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### MODULE 3: TABLEAU VISUAL ANALYTICS

This module is a deeper dive into the advanced tools of Tableau. You'll understand how to pick the best plotting device and types of charts for different data. You'll learn about histograms, scatter plots, bar plots, box plots, and others. You'll also learn about the mapping features of Tableau and how to use geographical features to create custom maps with Tableau.

- Creating charts with Tableau
- Tableau dates using calculated fields
- Customize table calculations
- Customize dual layer maps

## **MODULE 4: STORYTELLING USING DASHBOARDS WITH TABLEAU**

In this module, you will begin to assimilate and combine skills learned in previous modules. This is the beginning to be able to tell a good story with the data you have. You will learn how to use Story points to have a deep impact on your audience and business stakeholders. You'll be exposed to even more advanced features of Tableau including hierarchies, actions and parameters to guide user interactions. You will be able to create an effective interactive display online by the end of this module.

- Dashboard Design and Assembly
  - Create calculated fields for KPIs and progress measurements
  - Analyse storytelling concepts and techniques
  - Follow best practices for storytelling with data
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## **MODULE 5: DATA VISUALIZATION PROJECT WITH TABLEAU**

This is a hands-on project-based module where you will work on specific use-cases and create a portfolio-worthy data story that you can share with the world. You will do this step-by-step with guidance from faculty. You will create a project proposal, identify the goals and the questions pertaining to the data. You will then prepare the data for analysis and create a dashboard that points to meaningful insights. You will learn to write a story-arc in a narrative form. You will be an effective data analyst by the end of this module.

- Create a project proposal for a use-case
  - Define the KPIs and dashboards
  - Assess and perform exploratory analysis on data
  - Create your data story and write a narrative to business stakeholders
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## **MODULE 6: CERTIFICATION ON TABLEAU**

Students can seek to get certified after 3 months from the end of the course. The relevant exam will have to be written to obtain the industry certification.