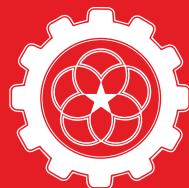


Data Science With Tableau



BLOSSOM
ACADEMY



Overview

How can data visualizations be standardized and pipelined for viewing by key decision makers & analysts across an organization? Made to be compelling, informative, and appealing to the eye? Draw upon data sources as various as relational database servers (e.g. SQL), spreadsheets (e.g. Google Sheets), Salesforce, or web-based data? Process ‘big data’ in a live manner for the most up-to-date output? Through our accelerated introduction, students will become fluid in using Tableau’s features to achieve all of these objectives.

This course offers an accelerated intensive learning experience with Tableau – the growing standard in business intelligence for data visualization and dashboard creation. Without prior experience, students will learn to work with multiple data sources, create compelling visualizations, and roll out their data science products for continuous, scalable outputs to key stakeholders. By building insight and weaving narrative, students will be empowered to harness data in a striking way that provides value to organizations large and small.

By the end of the course, you will be able to:

- Understand which visualizations best express a particular insight.
- Construct advanced visualizations such as tree maps, sunburst diagrams, and geo-mapped data.
- Wisely offer insight through visual dashboards constructed using principles such as the golden ratio.
- Pipeline visualizations that model large-scale data in a continuous fashion.



What To Expect

Without prior experience in data visualization or science, students can become fluid in this robust tool for business analysis & intelligence at any organization (from data-driven startup to multinationals).

Students will learn first principles of visualization & dashboard creation, leverage Tableau's features for combining and manipulating large & various sources of data, gain a deeper sense of comfort & practice by 'learning through doing' in frequent visualization labs, and complete a capstone visualization project that sparks their imagination.

As a student, you'll:

- Explore new concepts and tools through expert-led lectures and discussions.
- Complete hands-on exercises with real-world data sets to reinforce newly learned skills.
- Receive individualized feedback and support from your instructional team.
- Apply what you've learned to create a portfolio project: a presentation detailing your approach to and findings from solving a real-world data problem.





Prerequisites

This is a beginner-friendly program with no prerequisites, although some students may have coded previously. First-time programmers will have access to pre-course preparatory lessons and additional resources to boost their confidence with key concepts and set up their development environments.

The Final Project

In this project-based course, you will follow your own interests to create a portfolio worthy single-frame visualization or multi-frame data story that will be shared on Tableau Public. You will use all the skills taught in this class to complete this project step-by-step, with guidance from your instructors along the way.

Students share their results and each create a presentation that includes:

- A dashboard that will allow you to explore the data in depth and identify meaningful insights.
- A structure to your data story by writing the story arc in narrative form.
- A design checklist to craft the final visualization of data story in Tableau.



What You'll Learn

Pre-Work

- Download Tableau with <https://public.tableau.com/en-us/s/download>.
- Get acquainted with the Tableau interface and file types that can connect to Tableau

Unit 1

Tableau Fundamentals and Its Importance

- Importance of Tableau and How It Fits With Computing, Learning, & Analysis Today
- Connecting with Data & Using Multiple Sources (Relational Logic, Joining, Blending)
- Organizing your Data (Sorting, Filtering, Hierarchies, Groups, Subsets, Labeling, Aggregation)
- Measures in View (Individual/Blended/Dual Axes, Cross-tabs, Highlight Tables, Reference Lines)

Lab: Apply what you have learnt to organize given data (sorting, grouping, creating hierarchies)

Unit 2

Calculations and Visualizations in Tableau

- Calculations in Tableau (Calculation Syntax & Functions, Level of Detail)
- Creating and Using Parameters To Power Interactive Visualizations
- Visualizing Relationships Between Numerical Values (Scatter Plots, Heat Maps)
- Visualizing Breakdowns of the Whole (Box Plots, Tree Maps, Donut Chart, Sunburst Diagrams)

Lab: Create parameters to power interactivity on a view. (Data set will be provided). Use LOD expressions to bring out insights and use these insights in a customized tooltip

Unit 3

Applying Machine Learning to Tableau

- Visualizing Structure, Relationships, & Trends through Machine Learning (Clustering, Regression, Forecasting, Integrating R Libraries)
- Mapping Data Geographically
- Bringing Together Visualization To Offer Insight & Narrative (Dashboards, Stories)

Lab: Create a dashboard which features chats with clusters, filters, viz in tooltips



Frequently Asked Questions

Why are Data Science with Tableau skills relevant today?

Data visualization skills are tremendously important in today's data driven economy. Collecting and analysing data is just one step; to communicate your results to clients or your managers, you need to present the data in a coherent and intuitive way. Charts or graphs allow the human brain to visualize and understand large amounts of complex data.

This course will teach you to use data visualization to explore and understand data, and then communicate insights in a powerful and meaningful way. This course uses Tableau to create data visualizations.

What are the professional backgrounds of Data Science with Tableau students?

Data Science with Tableau is our best entry-level data course for professionals looking to learn the most utilized visualization tool in data science. You'll find a diverse range of students in the classroom including:

- Analysts/managers who frequently review data & share findings within an organization
- Consultants & external advisors who frame performance indicators & metrics for key decision makers
- Entrepreneurs growing companies where data is a central asset or offering
- Data scientists interested in utilizing Tableau's platform & R integration to pipeline compelling visualizations that harness advanced statistical learning algorithms

Regardless of their backgrounds, this program attracts a community of eager learners who want to know how to learn how to generate effective reports and create intuitive dashboards with high flexibility.

What does my tuition cover?

Here are just some of the things you can expect as a BA student:

- 20 hours* of expert instruction in creating compelling visualizations, plus many more spent tackling homework, honing projects, and getting technical support during our in-person sessions.
- Robust coursework, including expert-vetted lesson decks, lab materials, and more. Refresh and refine your knowledge throughout your professional journey as needed.
- A portfolio-ready capstone project built with support from your instructor.
- Exclusive access to alumni discounts, networking events, and career workshops.
- A certificate of completion to showcase your new skill set on LinkedIn.
- Connections with a professional network of instructors and peers that lasts well beyond the course. The global BA community can help you navigate and succeed in the analytics field.



Will I earn a certificate?

Yes! Upon passing this course, you will receive a Data Science With Tableau Certificate. Thousands of BA alumni use their course certificate to demonstrate skills to employers and their LinkedIn network. BA'S Data Science With Tableau course is well-regarded by many top employers, who contribute to our curriculum and use our data courses to train their own teams.

Who teaches this course?

Our instructors represent the best and brightest senior analysts from top companies like Fidelity Bank, Microsoft, and Google. They combine in-depth experience as practitioners with a passion for nurturing the next generation of talent.



What projects will I work on during the course?

You will develop a capstone project using your own data and have your own goal, in addition to submitting a Project Deliverable Sheet. We encourage you to tackle a problem that's related to your work or a passion project you've been meaning to carve out time for.

Throughout the course, you'll also complete a number of smaller visualization projects designed to reinforce what you've learned in each unit.

Take The Next Step

Have questions about our Data Science with Tableau course? Our Admissions team is here to help you determine if this program is right for you and your goals. To contact a representative on our team, email info@blossomacademy.co