

Data Analytics

4 months

Online

Part-time

Table of contents

What is Data Analytics?	2
Program Structure	3
Sprint 1. Analyze Data with Spreadsheets	4
Sprint 2. Analyze Data with Structured Query Language (SQL)	5
Sprint 3. Python for Data Analysis	6
Sprint 4. Exploratory Data Analysis with Python and SQL	7
Sprint 5. Visualize data with Power BI	8
Sprint 6. Introduction to Machine Learning using Python	9
Sprint 7. Advanced Business Analytics	10
Sprint 8. Capstone Project	11
Career Preparation	12
Active Job Search	13

What is Data Analytics?

Data Analytics by TripleTen is a 4-month, hands-on program designed for people from diverse backgrounds. No prior tech experience is required—just the ambition to build a career in data analytics.

You'll work with real business data and learn how to turn it into insights that support decision-making. The program covers core data analytics essentials, including SQL, Python, Power BI, and Tableau. You'll also be introduced to predictive analytics and machine learning concepts, and use AI-powered tools to support analysis and communication.

By the end of the program, you'll complete multiple hands-on projects, including a comprehensive capstone that demonstrates your ability to work across the full data analytics workflow.

Program Structure

Your journey will be structured as a series of eight two-week sprints. Each sprint focuses on a specific set of analytical and technical skills, reinforced through hands-on tasks and project work.

We provide rough time estimates, but recommend spending around 20 hours per week studying. However, we understand that everyone has different commitments and people learn at different speeds—so, we provide you with the possibility to extend your deadlines by 8 weeks in total. The final sprint is dedicated to a capstone project, where you'll apply everything you've learned to solve an end-to-end business analytics problem.

After successfully completing all required projects, you'll receive a program completion certificate.

Sprint 1. Analyze Data with Spreadsheets

You'll learn how to explore, clean, and analyze data using spreadsheets, starting with how to spot data quality issues and document the fixes you make.

You'll apply aggregations through pivot tables, define and calculate key performance indicators, and use charts and other visual elements to communicate patterns and trends. The sprint also introduces AI literacy, so you can use AI tools thoughtfully and critically as part of your analytical workflow. Together, these skills build the analytical foundation that will later transfer to SQL and other analytics tools.

Project: Analyze a real-world dataset of NYC Parks inspections. You'll assess and clean the data, define the metrics that matter for park conditions, calculate them with pivot tables, and present your findings in a clear, visual KPI report that evaluates performance across locations and over time.

Sprint 2. Analyze Data with Structured Query Language (SQL)

You'll learn how to work with data stored in relational databases and use SQL to retrieve exactly the information you need.

The sprint introduces how tables are structured and connected, and how to write queries to filter, aggregate, and combine data. You'll focus on using SQL to answer business questions efficiently, rather than working with entire datasets.

Project: Analyze a real-world database using SQL to compare company outcomes. You'll write queries to summarize results and present your findings using simple visualizations.

Sprint 3. Python for Data Analysis

You'll learn how to use Python to automate data cleaning and analysis tasks that are difficult or time-consuming in spreadsheets.

The sprint introduces Python as part of a modern analytics workflow, including working with structured datasets, connecting to databases, and performing exploratory data analysis to uncover patterns and trends.

Project: Analyze an e-commerce dataset using Python. You'll clean and prepare the data, explore key patterns, and answer business questions using exploratory analysis and basic visualizations.

Sprint 4. Exploratory Data Analysis with Python and SQL

You'll learn how to carry out a full exploratory data analysis in Python, using pandas to load, reshape, and inspect datasets. You'll build a repeatable data cleaning pipeline, describe distributions and relationships with descriptive statistics, and create visualizations that reveal outliers, patterns, and trends.

You'll also combine and summarize data across sources, then bring Python and SQL together in a cloud notebook environment. The sprint consolidates your spreadsheet, SQL, and statistical skills into a single programmatic workflow.

Project: Investigate customer behavior in an e-commerce dataset using Python and SQL in Google Colab. You'll query and load the data, clean and prepare it for analysis, profile it with descriptive statistics and visualizations, and summarize what your exploration reveals about how customers engage with the business.

Sprint 5. Visualize data with Power BI

You'll learn how to build interactive dashboards designed for business stakeholders.

The sprint focuses on connecting and modeling data for reporting, creating meaningful metrics, and designing dashboards that support exploration and decision-making in enterprise environments.

Project: Build an interactive Power BI report to analyze the Shopify app ecosystem. You'll model the data, create key metrics, and design dashboard pages that highlight patterns and factors related to app performance.

Sprint 6. Introduction to Machine Learning using Python

You'll learn how analysis becomes prediction, starting with the core concepts that distinguish machine learning from the descriptive work you've done so far.

You'll build predictive models in Python, then validate them to understand how well they generalize to data they haven't seen and interpret their results to explain which factors drive a prediction.

The sprint focuses on developing sound judgment about model quality and limitations, so you can tell the difference between a model that performs well and one that merely appears to.

Project: Build a model that predicts which customers are likely to leave a bank. You'll prepare the data, train and compare predictive models, evaluate their performance with appropriate validation techniques, and interpret the results to identify the factors most associated with churn.

Sprint 7. Advanced Business Analytics

You'll learn how to move from reporting on what happened to informing what happens next, using Power BI to answer the questions leadership actually asks.

You'll measure retention and build cohort analyses that show how customer value develops over time, apply forecasting and scenario analysis to model plausible futures and test assumptions, and construct financial and executive-level analytics that connect operational metrics to business outcomes.

The sprint focuses on the analytical framing and communication skills senior stakeholders expect, bringing together everything you've built into work that supports strategic decisions.

Project: Produce a strategic executive business review in Power BI. You'll analyze retention and cohort behavior, forecast performance under different scenarios, build out the financial view of the business, and deliver a cohesive executive dashboard and narrative that a leadership team could act on.

Sprint 8. Capstone Project

You'll work independently on a comprehensive analytics project that brings together everything you've learned throughout the program.

The capstone focuses on owning the full analytics workflow, from defining a business problem and working with multiple data sources to building analysis, models, and stakeholder-ready dashboards.

Project: Design and complete an end-to-end data analytics project in a domain of your choice. You'll collect data from multiple sources, build an analytical pipeline, create an interactive dashboard, and document your work in a complete project repository.

Career Preparation

During the program

Stay connected to your career goals while focusing on technical learning.

Career-focused lessons throughout the program

Job market insights and career awareness

Professional and soft skills development

Career Sprint

Spend 6 weeks preparing for your job search after graduation.

Build your resume, LinkedIn profile, and job search strategy

Join live group sessions and AMA sessions with career coaches and industry experts

Get started with our AI-powered job search platform for interview practice, career resources, and application management

Active Job Search

Throughout your job search period (up to 10 months), you'll receive ongoing guidance from the Career Team, strengthen your professional network, and have opportunities to keep building your portfolio.

Get guidance from your assigned career coach

Use our AI-powered job search platform to manage applications, networking, and interviews

Attend live career workshops and other learning opportunities

Access TripleTen's job board with roles from our employer network

Get opportunities to work on projects with partner employers

Receive unlimited AI-powered HR and technical interview practice

Practice live mock interviews with your coach when you land an interview

Learn the job by doing the job

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