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Data Analytics Program

Syllabus

Online | Part-Time | 7 months

Job-Ready Skills | 12 projects | Career Coaching

No Tech Background needed | 20 hours per week

Contents

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What is Data Analysis

7 months

The Data Analytics Program by TripleTen is a 7-month course designed for people with little to no programming knowledge. You can come from any possible background and join our course to re-skill and become a high-paid professional.

The aim is to equip you with all the skills needed to land a job in the tech industry.

You will learn everything from exploring data with Python and Pandas to data visualization, using advanced tools like Plotly and Tableau. By the end of the program, you will have up to 12 projects in your portfolio to show future employers the exceptional specialist you have become.

And while getting to grips with a collection of professional tools and technical skills, you will train those soft skills required for success. You'll learn time management, goal setting, teamwork, and much more. You'll also learn the best practices used in the tech industry—such as cohort analysis and metrics for sales funnels—skills you'll need to ace interviews in your quest for a job.

Skillset you'll get:

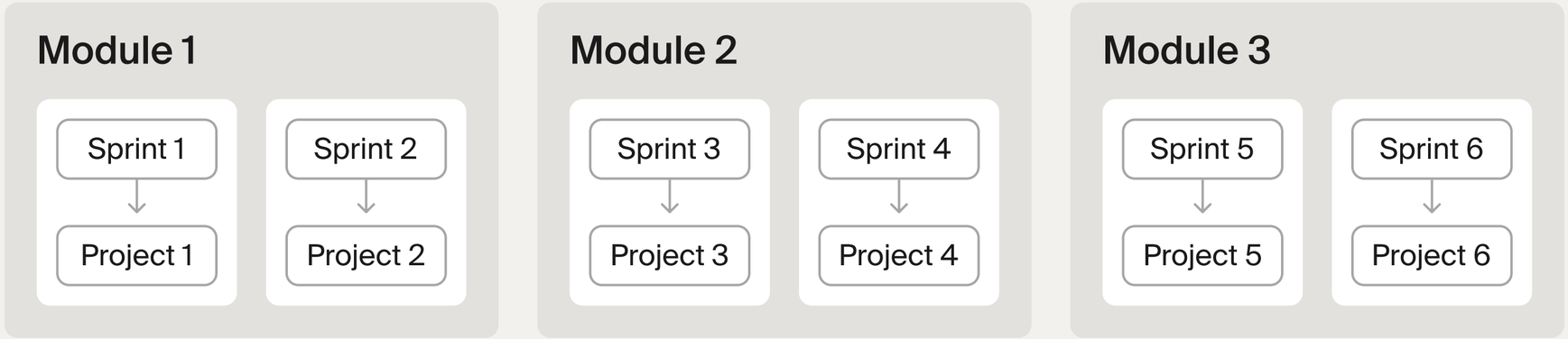
Python Jupyter Notebook SQL
PostgreSQL Tableau A/B tests
VSCode Pandas Dash Visualization

Course Structure

Your journey will be divided into sprints, two-to-three week long work intensive periods grouped into thematic modules. Each sprint will have a particular learning objective, reinforced through quizzes and tasks. Most tech companies work in this format, so you will come prepared. At the end of the sprint, you will take the skills you've learned and combine them with your existing skills to work on a project that will be assessed by industry experts.

We provide some rough time estimates to help you plan and manage your schedule, and we recommend spending around 20 hours per week studying. However, we understand that everyone has different commitments and people learn at different speeds. We also understand you may need a break at times, so we have some suggested breaks scheduled in too.

- Each sprint lasts 2-3 weeks
- One-week break recommended after each module



Module 1: Fundamentals of Business Analytics

5 weeks

Building an impactful analysis starts with understanding how to use SQL Databases to access and filter data. This module will explore industry best practices for choosing and calculating the right metrics and how to efficiently execute an analysis using spreadsheets.

Sprint 1: Advanced Spreadsheets

Learning outcomes

- Data Cleaning
- PivotTables
- Spreadsheet Best Practices
- Graphs and Charts
- Project

2 weeks | 40 hours

Sprint 2: SQL Databases

Learning outcomes

- What is SQL?
- Query Fundamentals
- Relationships Between Tables
- Functions
- Advanced Queries
- Creating Tables, Views and Temp Tables
- Project

3 weeks | 60 hours

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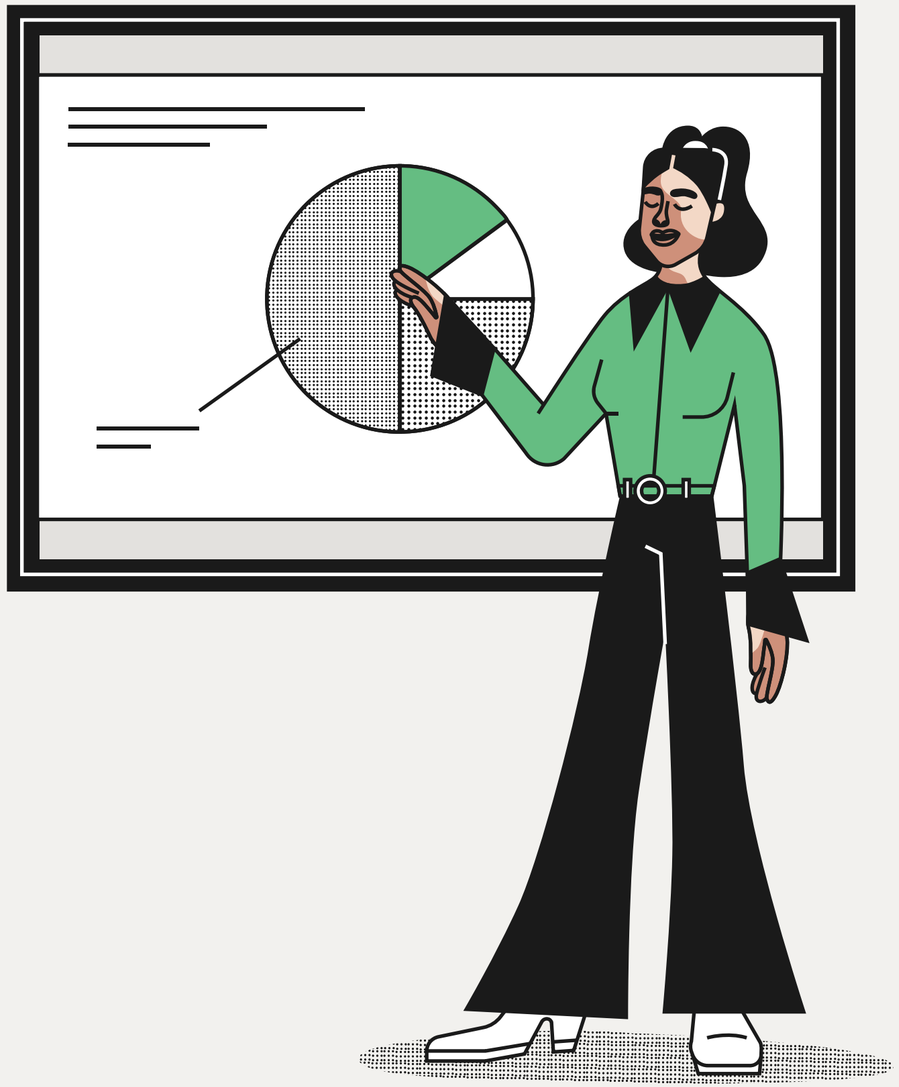
Module 2: Data Visualization and Storytelling

4 weeks

An analysis is only effective when you can clearly communicate it to your stakeholders. This module will focus both on how to build interactive data visualizations in Tableau and the best practices in developing persuasive stories for your presentations.



Sprint 3: Data Visualization with Tableau

Learning outcomes

- Fundamentals of Tableau
- Interface
- Building Charts
- Making Interactive Charts
- Project

2 weeks | 40 hours

Sprint 4: Storytelling with Data

Learning outcomes

- Introduction
- Building Your Story
- Choosing the Right Visualizations
- Dashboards in Tableau
- Tableau Stories
- Presentation Best Practices
- Project

2 weeks | 40 hours

Module 3: Python Fundamentals

4 weeks

Data analysis continues to become more sophisticated and some of the most advanced and powerful techniques utilize the Python programming language. This module is focused on building a solid foundation in Python and important software development tools used with Python.

Sprint 5: Python Fundamentals

Learning outcomes

- Introduction
- Variables, Printing, DataTypes, and Arithmetic Operations
- Strings
- Lists
- Dictionaries
- Conditional Statements
- Loops
- Functions
- Pandas Library
- Intro to Data Preprocessing and Exploratory Analysis
- Project

2 weeks | 40 hours

Sprint 6: Software Development Tools

Learning outcomes

- Setting Up Your Personal Dev Environment
- Intro to Command Line
- Version Control with Git and Git Hub
- Virtual Environments
- Documentation
- Project

2 weeks | 40 hours

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Module 4: Data Analysis with Python

6 weeks

Learn to use powerful Python libraries for data analysis like Pandas for cleaning data and Matplotlib for visualizing data. Apply python to execute A/B tests and build dashboards for reporting.

Sprint 7: Exploring and Cleaning Data with Pandas

Learning outcomes

- Intro to Data Frames and Series
- Importing and Exporting Data
- Exploratory Data Analysis
- Cleaning Data
- Project

2 weeks | 40 hours

Sprint 8: Data Visualization with Python

Learning outcomes

- Why use Python for Data Visualization?
- Building Charts with Matplotlib and Seaborn
- Building Dashboards with Plotly
- Project

2 weeks | 40 hours

Sprint 9: Business Analytics

Learning outcomes

- Introduction to Business Analytics
- Metrics and Funnels
- Cohort Analysis
- Unit Economics
- User Metrics
- SoftSkills
- Project

2 weeks | 40 hours

Module 5: Intro to Data Science

4 weeks

Learn how to apply Machine Learning (ML) algorithms to building predictive models. Using the scikit-learn Python library, you'll learn how to train a ML model, measure it's performance and implement the algorithm.

Sprint 10: A/B Testing

Learning outcomes

- Course Introduction
- The Basics of Testing Hypotheses in Business
- Choosing an Experimental Method
- Prioritizing Hypotheses
- Preparing for an A/B Test
- Analyzing the Results of A/B Test
- Project

2 weeks | 40 hours

Sprint 11: Intro to Machine Learning

Learning outcomes

- What is Machine Learning?
- Intro to Classification Algorithms
- Model Evaluation with Crossvalidation
- Intro to Regression Algorithms
- Model implementation
- Project

2 weeks | 40 hours

Module 6: Applying Analytics for the Final Project

2 weeks

After building a comprehensive set of skills in you data analytics toolkit, it's time to combine different techniques together to accomplish larger projects. This module will focus on choosing the right combination of tools to accomplish a job. The final step in this course is a Final Project where students can demonstrate their mastery of data analytics.

Final Project

- Review of the Full Analytics Toolkit
- Comparing Tools and Choosing the Right Technique for the Job

Employment Preparation

At TripleTen, we know that learning the technical skills you need for a job is only one piece of the employment puzzle. That's why we offer a range of courses to help you land your dream job.

10-15 hours in total, after Sprint 7

Career Prep Course

Dedicated course on the platform.

This is a course devoted to preparing for life after TripleTen. During this course, you'll learn how to create a resume, a LinkedIn profile, and a GitHub account, along with improving networking and interview skills. This course is self-paced and includes homework tasks.

We'll also perform a review of your career resources.

- Compile a ready-to-use resume
- Produce a production-ready portfolio
- Launch your LinkedIn profile

After graduation. Typically 3-4 months

Career Accelerator

This part starts after graduation and offers ongoing individual and group career coaching sessions with our team, and industry professionals, and access to our supportive alumni community. You will also prepare HR and technical mock interviews with our career coach. This part takes 4 weeks of webinars, 2 weeks of 1on1 simulations and lasts as a job search support not longer that 6 months after graduation.

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Learn  the job.

✨ Get the job. ✨

This syllabus is for illustrative purposes only. We continuously strive for excellence and keep our content in sync with the job market. Due to our constant updates, there may be minor differences between this syllabus and the program. If you have any questions, feel free to reach out to us. We're always happy to hear from you!