



DATA ANALYTICS BOOT CAMP

CURRICULUM OVERVIEW

Over the past decade, the explosion of data has transformed nearly every industry known to man. Whether it's marketing, healthcare, government, or activism—the ability to translate data into actionable insights has quickly become a highly in-demand skill by all. This is a 3-4months Data Analytics virtual boot-camp that will empower you to gain the knowledge and skills to conduct robust analytics on a host of real-world problems.

The program is designed to fit into your life, whether you're employed or attending college full-time, with convenient weekend and evening sessions.

The training is rigorous, fast-paced, and focused on the practical technical skills needed to solve data problems. Throughout the course, you will gain proficiency on numerous marketable technologies, including, Python, SQL Databases, Pandas, and more. Plus, you will leave with an impressive professional portfolio and the confidence to succeed in the data-driven economy.

IS THE PROGRAM **RIGHT FOR YOU?**

Are you a creative, curious, and ambitious professional looking to join the data revolution? If so—or if any of the following describes your situation—then this Data analytics boot-camp is for you. This boot-camp could be a smart career move if:

- You are currently a professional working with data, but are looking to advance your career by building technical skills.
- You are a manager or professional in a business where data can be used to boost your company's bottom line.
- You have interests in visualizing social, consumer, or popular trends.
- You are looking to enter a new field in healthcare, government, or media and are looking for a way to jump in.
- You are a full-time student, hungry to learn more and expand your skill set.

THE SKILLS **YOU'LL GAIN**



BUILDING ON THE BASICS

For those first entering the field of Data Analytics, knowing where to start can be a daunting task. That's why this curriculum is designed to provide you with a deep foundation on the core technical skills needed to succeed in the field. Throughout the program, expect to learn brand new skills and be challenged in completing difficult real-world problems to demonstrate your new abilities. By the end of the program's, you will have a strong professional portfolio showcasing your work.



WHAT YOU WILL LEARN

Work independently or in a group on complex data-mining projects.

Use advanced SQL techniques to combine multiple datasets into one so as to create even more impressive and comprehensive

Understand the basics of troubleshooting and enhancing legacy code.

Use Python libraries such as Pandas to conduct extensive data wrangling, cleaning and data processing.

Write SQL commands to perform Create, Read, Update, and Delete commands.

Build a custom interactive data visualizations using Python libraries such as Matplotlib.

Provide insights and meaning from processed data for good decision making. such as Matplotlib.

COURSE CURRICULUM BY MODULE

Module	Descriptions	What you will learn
Module 1: Python for Data Analytics	Gain a strong foothold in one of today's fundamental programming languages. In the course of this module, you'll gain deep proficiency with core Python, data analytic tools like NumPy, Pandas, Matplotlib.	<ul style="list-style-type: none">❖ Python❖ Pandas❖ Numpy❖ Matplotlib
Module 2: Database	Bring everything that you have learned in class altogether to create an impressive data-visualization. Get creative and come up with something cool to show off to the whole world!	MySQL
Module 3: Final Project	Dive deep into the most prolific database languages: SQL. Work with MySQL to organize data into well-structured and easily retrievable data formats. Work on a case study to combine data from different sources into one database.	Dreaming up something fantastic and understanding the bounds of reasonable and achievable





COURSE STRUCTURE

Over the course of 4 months, you'll attend informative virtual lectures, participate in a variety of individual exercises/tasks, and work independently. Homework/assignments provide an opportunity to apply what you've learned and build on it. The goal is to give you a comprehensive learning experience and true insight into a "day in the life" of a data professional.

DISCUSSION



Instructor-led discussions cover the background, history, and use new technologies or concepts.

HOME-WORK/EXERCISES



You'll work on home-work/ exercises/tasks and projects to put classroom teachings into practice.

PROJECTS



Your portfolio signals to employers that you are ready! You'll build a portfolio individually that demonstrate your abilities across a wide variety of technologies.