

## Why Learn Data Analytics?

Data analysis is key to the success of almost every company and every sector of the economy. With more available every day, the capacity to collect, store, analyze, interpret, and communicate this data effectively is critical to the performance of any organization. Used to inform strategy, improve quality, reach audiences, manage operations, and track finances, data analytics is a core competency in the workforce.

## Why Use Python:

- Python can work on very large datasets – with ease! It makes analyzing data from a few thousand rows to a few million rows very easy.
- It can perform complex operations – from machine learning, to web development.
- Python's code can be saved and re-run – making processes automated and a huge time saver.



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# Data Analytics with Python

## Data Analytics With Python

In this course sequence, you will get the skills you need to succeed in the booming information technology and analytics marketplace.

Learn how to gather, prepare, and analyze data with Python – the most important and sought after programming language in the field of information technology and analytics today.

## Daily Challenges

As a data analytics professional, you will face many challenges throughout your working day.

- Data is hard to get – sometimes the databases you use will not make sense, or the data is not available.
- Data is messy – most of the time, data is not in an easily available or useable format.
- Manual tasks – whenever possible, we should try to automate our tasks to reduce redundancy.



## Course Objectives

- **A solid foundation of Python Programming fundamental.**
- **Start using Python as a primary data analysis programming language.**
- **How to loop through a dataset and perform different tasks.**
- **Create, use, and understand why functions are useful and necessary for programming.**
- **Use NumPy and Pandas to gather data from various sources (excel, csv, etc.), and clean and transform that data.**
- **Create visualizations to communicate findings in Matplotlib, Seaborn, and other visualization tools.**
- **Understand hypothesis testing and how it's used in solving business use cases.**



## Included in the Course:

- **Certificate/ badge of completion**
- **Data analytics E-Book**
- **GitHub Profile set up**
- **2 personal Data Analytics projects published with project feedback**
- **Mentorship and career advice**
- **Resume building and guidance for Data Analytic jobs**
- **Office hours available for 1 on 1 with the expert in the field**

## PROJECT INFORMATION

1

*Perform analysis on CDC data to answer questions such as: does the data show significant evidence that certain demographic groups are more prone to diabetes? How and does diabetes impact the length of stay in a hospital?*

2

*Perform analysis on various tasks and activities performed by a data analyst professional and summarize the analysis*