

# Applied Data Science with Python



# Course Introduction



# Learning Path

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## Introduction to Data Science:

Focuses on the basics of data science and its applications. This course also covers data science packages that will further help you grasp the concepts.

1

**Pandas:** Focuses on the concepts of data science and data analysis, including types and structures, using Pandas functions.

3

2

**NumPy:** Focuses on the concepts of NumPy and its uses

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**Data Visualization:** Focuses on visualization techniques and different types of charts

4

**Probability Distribution:**  
Focuses on the different aspects of probability and the various types of probability distribution

6

**Math and Statistics Fundamentals:** Focuses on the fundamentals of statistics, its types, and data categorization, and the concepts of scalar, vector, and matrix

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**Advanced Statistics:** Focuses on the concepts of probability and advanced statistics, such as hypothesis testing

7

**Feature Engineering:** Focuses on feature engineering techniques like, data imputation, scaling, binning, and grouping operations

9

**Data Wrangling:** Focuses on rearranging, cleaning, and refining raw data to prepare it for model building

8

# Course Components

# Program Components



**Hands-on exercises** to practice the knowledge gained



**Course-end project** to apply the skills acquired



**Ebooks** to use as a quick reference guide



**Let's get started!**