



# DATA SCIENCE WITH PYTHON TRAINING



UNLOCKING INSIGHTS WITH  
ANALYTICS, VISUALIZATION,  
AND MACHINE LEARNING



# ABOUT US

Hachion is an organisation that has been set up to provide live instructor-led interactive online training designed for professionals and students worldwide. Our training programs cover a wide array of in-demand domains. We provide an accessible and cost-effective learning solution that caters to the needs of millions of learners. At Hachion, we are committed to empowering individuals with the skills and knowledge they need to excel in today's competitive world. Join us and take the first step toward achieving your career aspirations!

**100,000+**

STUDENTS  
ENROLLED

**25000+**

COMPLETE  
COURSES

**500+**

CERTIFIED  
TRAINERS

**1000+**

JOB  
SECURED

## Top IT firms collaborate with Hachion



# Reference Guide

## Section-1

### Course Information & Training Details

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- 👉 Salary Range
- 👉 Job Roles in Data Science With Python

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### Job Placement Services

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- 👉 Resume Building
- 👉 Linkedin profile setup
- 👉 Dice and Indeed portal accounts setup
- 👉 Interview Preparation FAQs
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- 👉 Walkthrough resume
- 👉 Resume floating
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# About Data Science With Python

Data Science with Python is a powerful combination that allows professionals to analyze data, build predictive models, and extract insights effectively. Python has become the go-to programming language for Data Science due to its simplicity, extensive libraries, and community support.

## Who can learn Data Science With Python ?

- 1 Beginners with No Coding Experience
- 2 Students and Graduates
- 3 IT Professionals Looking to Upskill
- 4 Professionals from Non-IT Fields
- 5 Entrepreneurs and Business Owners
- 6 Analysts Seeking Automation

## Skills Covered

- 👉 Python Programming
- 👉 Data Manipulation with Pandas
- 👉 Numerical Computing with NumPy
- 👉 Data Visualization
- 👉 Exploratory Data Analysis (EDA)
- 👉 Machine Learning Basics
- 👉 SQL for Data Science
- 👉 Web Scraping
- 👉 Data Engineering Concepts
- 👉 Working with APIs
- 👉 Statistics and Probability
- 👉 Project Development Skills
- 👉 Critical Thinking and Problem-Solving

## Benefits of Data Science with Python

- 👉 Easy to Learn and Use
- 👉 Versatility
- 👉 Extensive Libraries and Frameworks
- 👉 Robust Data Visualization
- 👉 Integration and Flexibility
- 👉 Wide Community Support
- 👉 Automation and Scripting
- 👉 Cross-Platform Compatibility

# About Data Science With Python

## How Training works



Course Duration : 45 Days



Classes : 1 Hour Daily



Available Slots : Morning & Evening



Week Days : Monday - Friday

## Benefits



Live Interaction Session



Customized Curriculum



Convenience & Flexibility



Hands on Project



Collaborative learning Environment



24/7 Support



Certification preparation materials



Certification guidance & Support



Life Time access to class recordings, materials



Interview FAQ's



Whatsapp Groups for better communication



Free access to one more batch



Doubt clarification session



Instant doubt clarification & Feedback



Sample Resume



Mock interview

# Data Science With Python Course Curriculum

## Topic-1 : Introduction to Data Science

- ↳ Learning Objectives
- ↳ Data Science Methodology
- ↳ From Business Understanding to Analytic Approach
- ↳ From Requirements to Collection
- ↳ From Understanding to Preparation
- ↳ From Modeling to Evaluation
- ↳ From Deployment to Feedback

## Topic-2 : Python Libraries for Data Science

- ↳ Learning Objectives
- ↳ Python Libraries for Data Science
- ↳ Import Library into Python Program
- ↳ Numpy
- ↳ Demo Numpy
- ↳ Fundamentals of Numpy
- ↳ Numpy Array Shapes and axes Part A
- ↳ Numpy Array Shapes and axes Part B
- ↳ Arithmetic Operations
- ↳ Conditional Statements in Python
- ↳ Common Mathematical and Statistical Functions in NumPy
- ↳ Indexing and Slicing in Python Part A
- ↳ Indexing and Slicing in Python Part B
- ↳ Introduction to Pandas
- ↳ Introduction to Pandas Series



# Data Science With Python Course Curriculum

- ↳ Querying a Series
- ↳ Pandas Data frame
- ↳ Introduction to Pandas Panel
- ↳ Common Functions in Pandas
- ↳ Statistical Functions in Pandas
- ↳ Date and Timedelta
- ↳ IO Tools
- ↳ Categorical Data
- ↳ Working with Text Data
- ↳ Iteration
- ↳ Plotting with Pandas
- ↳ Matplotlib
- ↳ Demo Matplotlib
- ↳ Data Visualization Libraries in Python Matplotlib
  - ↳ Graph Types
  - ↳ Using Matplotlib to Plot Graphs
  - ↳ Matplotlib for 3d Visualization
  - ↳ Using Matplotlib with Other Python Packages
- ↳ Data Visualization Libraries in Python Seaborn An Introduction
  - ↳ Seaborn Visualization Features
  - ↳ Using Seaborn to Plot Graphs
  - ↳ Analysis using seaborn plots
  - ↳ Plotting 3D Graphs for Multiple Columns using Seaborn
- ↳ SciPy



# Data Science With Python Course Curriculum

- 👉 Demo Spicy
- 👉 Sci kit-learn
- 👉 Scikit Models
- 👉 Scikit Datasets
- 👉 Preprocessing Data in Scikit

## Topic-3 : Statistics

- 👉 Learning Objectives
- 👉 Introduction to Linear Algebra
- 👉 Scalars and vectors
- 👉 Dot product of Two Vectors
- 👉 Linear Independence of Vectors
- 👉 Norm of a Vector
- 👉 Matrix
- 👉 Matrix Operations
- 👉 Transpose of a Matrix
- 👉 Rank of a Matrix
- 👉 Determinant of a matrix and Identity matrix or operator
- 👉 Inverse of a matrix and Eigenvalues and Eigenvectors
- 👉 Calculus in Linear Algebra
- 👉 Importance of Statistics for Data Science
- 👉 Common Statistical Terms
- 👉 Types of Statistics
- 👉 Data Categorization and types of data
- 👉 Levels of Measurement



# Data Science With Python Course Curriculum

- 👉 Measures of central tendency Mean
- 👉 Measures of Central Tendency Median
- 👉 Measures of Central Tendency Mode
- 👉 Measures of Dispersion
- 👉 Variance
- 👉 Random Variables
- 👉 Sets
- 👉 Measure of Shape Skewness
- 👉 Measure of Shape Kurtosis
- 👉 Covariance and correlation
- 👉 Basic Statistics with Python Problem Statement
- 👉 Basic statistics with Python Solution
- 👉 Probability its Importance and Probability Distribution
- 👉 Probability Distribution Binomial Distribution
- 👉 Binomial Distribution using Python
- 👉 Probability Distribution Poisson Distribution
- 👉 Poisson Distribution Using Python
- 👉 Probability Distribution Normal Distribution
- 👉 Probability Distribution Uniform Distribution
- 👉 Probability Distribution Bernoulli Distribution
- 👉 Probability Density Function and Mass Function
- 👉 Cumulative Distribution Function
- 👉 Central Limit Theorem
- 👉 Bayes Theorem



# Data Science With Python Course Curriculum

- 👉 Estimation Theory
- 👉 Point Estimate using Python
- 👉 Distribution
- 👉 Kurtosis Skewness and Student's T-distribution
- 👉 Hypothesis Testing and mechanism
- 👉 Hypothesis Testing Outcomes Type I and II Errors
- 👉 Null Hypothesis and Alternate Hypothesis
- 👉 Confidence Intervals
- 👉 Margin of Errors
- 👉 Confidence Levels
- 👉 T test and P values Using Python
- 👉 Z test and \$P\$ values Using Python
- 👉 Comparing and Contrasting T test and Z tests
- 👉 Chi Squared Distribution
- 👉 Chi Squared Distribution using Python
- 👉 Chi squared Test and Goodness of Fit
- 👉 ANOVA
- 👉 ANOVA Terminologies
- 👉 Assumptions and Types of ANOVA
- 👉 Partition of Variance
- 👉 F-distribution
- 👉 F Distribution using Python
- 👉 F-Test
- 👉 Advanced Statistics with Python Problem Statement
- 👉 Advanced Statistics with Python Solution



# Data Science With Python Course Curriculum

## Topic-4 : Data Wrangling

- ↳ Learning Objectives
- ↳ Data Exploration Loading Files
- ↳ Data Exploration Techniques
- ↳ Seaborn
- ↳ Demo Correlation Analysis
- ↳ Data Wrangling
- ↳ Missing Values in a Dataset
- ↳ Outlier Values in a Dataset
- ↳ Demo Outlier and Missing Value Treatment
- ↳ Data Manipulation
- ↳ Functionalities of Data Object in Python Part A
- ↳ Functionalities of Data Object in Python Part B
- ↳ Different Types of Joins

## Topic-5 : Feature Engineering

- ↳ Learning Objectives
- ↳ Introduction to Feature Engineering
- ↳ Encoding of Categorical Variables
- ↳ Label Encoding
- ↳ Techniques used for Encoding variables

## Topic-6 : Exploratory Data Analysis

- ↳ Learning Objectives
- ↳ Types of Plots
- ↳ Plots and Subplots

## Topic-7 : Feature Selection

- ↳ Learning objectives
- ↳ Feature Selection
- ↳ Regression
- ↳ Factor Analysis
- ↳ Factor Analysis Process

# Hachion Certificate

Hachion's Data Science With Python online training program is designed to make you proficient in all aspects of Data Science With Python. This course not only enhances your expertise in the field but also prepares you for Data Science With Python Certification, ensuring you stand out as a skilled professional.

## Unlock Your Hachion Data Science With Python Course Certificate.



### To receive your course completion certificate, please ensure the following:

- 👉 **Complete the Course:** Successfully finish 100% of the course content.
- 👉 **Mock Interview:** Participate in the Data Science mock interview and receive positive feedback from our experts.
- 👉 **Provide Training Feedback:** Share your experience and valuable feedback about the training program.

# Glimpse on Career in Data Science With Python



## Job Market on Data Science With Python in USA

The data science job market in the current market is experiencing significant growth, particularly for professionals skilled in Python. As of 2025, the demand for data scientists continues to rise, driven by the rapid adoption of artificial intelligence (AI) and machine learning (ML) across various industries.

The data science job market is robust and offers promising opportunities for professionals skilled in Python. The combination of high demand, competitive salaries, and ongoing investments in technology and talent development makes it an opportune time to pursue a career in this dynamic field.

### Salary Ranges



#### Entry-Level Positions

Around \$35-50/hour



#### Mid-Level Positions

Around \$50-70/hour



#### Senior-Level Positions

Around \$70-100+/hour

Note : These figures can fluctuate depending on factors such as geographic location, industry, and the complexity of the Data Science environment

## Job roles in Data Science With Python

Data Analyst

Data Scientist

Machine Learning Engineer

AI/ML Developer

Senior Data Scientist

Data Science Manager/Lead

AI Research Scientist

Chief Data Officer (CDO)

# Our Placement Services



## Explore the services we provide



### Mock Interview (LIVE) :

After completing the training, we will conduct a mock interview to assess your confidence and readiness. This session is designed to help you build confidence and identify areas for improvement. Once the mock interview is completed, we will provide detailed feedback, and our expert will guide you on how to enhance your skills further.



### Resume Building :

We offer dedicated resume-building assistance to help you craft a professional and impactful resume tailored to your desired role. Highlighting relevant skills, Structuring your resume for clarity and effectiveness. Aligning your experience with industry standards and job requirements. Customizing your resume for Data Science With Python, This service ensures your resume stands out, making a lasting impression on potential employers.



### Interview Preparation FAQs :

We will provide comprehensive interview preparation materials, including frequently asked questions (FAQs), to help you confidently tackle your interviews.



### Interview grooming sessions :

We will provide a dedicated interview grooming session to help you enhance your skills, build confidence, and present yourself effectively during interviews.

# Our Placement Services



## Linkedin profile setup :

We will assist you in setting up and optimizing your LinkedIn profile to showcase your skills, certifications, and achievements, making you more visible to potential employers and recruiters.



## Dice and Indeed portal accounts setup :

We will assist you in setting up and optimizing your accounts on Dice and Indeed portals to enhance your job search, making it easier for recruiters to discover your profile and connect with you for relevant opportunities.



## Walkthrough resume and explain about resume :

We will guide you through your resume and help you effectively explain its content, ensuring you confidently present your skills, experiences, and accomplishments during interviews.



## Doubts clarification sessions with our expert :

We offer personalized doubt clarification sessions with our expert to resolve your queries and ensure a thorough understanding of the concepts.

# Our Learners Speak



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Shital Ghaghada 



“ Great training with good course content which was extremely informative and helpful. The instructor was very thorough and knowledgeable who listened and answered the queries. Thank you for a great course training! ”



p Naidu 



“ The Data Analyst training focused heavily on hands-on coding, along with the theoretical aspects. It was highly useful in my real-time work. I recommend the training, and you will receive customized training based on your needs. I wish you the best of luck with the training and your career ”



Divya Harshika 



“ The class was excellent and very well-structured. The trainer explained all the concepts clearly with relatable examples, making it easy to understand. Their expertise and teaching style were highly commendable. ”



Tasneem ali 



“ If you are starting your career, This is the best learning platform. They provide highly skilled and amazing trainers, Who covers every topic, patiently listens and answer every question..Everyday Assignments are given for practice , I'm 100% satisfied. Thank you so much Hachion for giving me confidence and hope for my career future ! ”

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## Contact Us



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