

**Online Data Science Training**  
**Learn the ABCs of Data Science**  
**Duration: 6 weeks | Certified Training**

**About the 'Data Science' Training**

The Data Science Training by Internshala is a 6-week online training program in which we aim to provide you with a comprehensive introduction to data science. In this training program, you will learn the basics of python, statistics, predictive modeling, and machine learning. This training program has video tutorials and is packed with assignments, assessments tests, quizzes, and practice exercises for you to get a hands-on learning experience. At the end of this training program, you will have a solid understanding of data science and will be able to build an end-to-end predictive model. For doubt clearing, you can post your queries on the forum and get answers within 24 hours.

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**1. Introduction to Data Science**

*Get an overview of data science. Understand its different applications and get insights on how is data science disrupting industries.*

1.1. Data Science Overview

**2. Basic Python for Data Science**

*Learn the basics of python - how to read a CSV file, understand operators, variables, dictionaries, functions, and data structure in data science.*

2.1. Introduction to Python

2.2. Understanding Operators

2.3. Variables and Data Types

2.4. Conditional Statements

2.5. Looping Constructs

2.6. Functions

2.7. Data Structure

2.8. Lists

2.9. Dictionaries

2.10. Understanding Standard Libraries in Python

2.11. Reading a CSV File in Python

2.12. Data Frames and basic operations with Data Frames

2.13. Indexing Data Frame

**3. Understanding Statistics of Data Science**

*Learn about data distribution, probability, data statistics and types of testing. Understand the core statistics concepts for data science - Descriptive stats and Inferential stats.*

- 3.1. Introduction to Statistics
- 3.2. Measures of Central Tendency
- 3.3. Understanding the spread of data
- 3.4. Data Distribution
- 3.5. Introduction to Probability
- 3.6. Probabilities of Discrete and Continuous Variables
- 3.7. Central Limit Theorem and Normal Distribution
- 3.8. Introduction to Inferential Statistics
- 3.9. Understanding the Confidence Interval and margin of error
- 3.10. Hypothesis Testing
- 3.11. T tests
- 3.12. Chi Squared Tests
- 3.13. Understanding the concept of Correlation

#### **4. Predictive Modeling and the basics of Machine Learning**

*Learn about different predictive models & their stages, data extraction & exploration, univariate & bivariate analysis, model building, and linear regression.*

- 4.1. Introduction to Predictive Modeling
- 4.2. Understanding the types of Predictive Models
- 4.3. Stages of Predictive Models
- 4.4. Hypothesis Generation
- 4.5. Data Extraction
- 4.6. Data Exploration
- 4.7. Reading the data into Python
- 4.8. Variable Identification
- 4.9. Univariate Analysis for Continuous Variables
- 4.10. Univariate Analysis for Categorical Variables
- 4.11. Bivariate Analysis
- 4.12. Treating Missing Values
- 4.13. How to treat Outliers
- 4.14. Transforming the Variables
- 4.15. Basics of Model Building
- 4.16. Linear Regression
- 4.17. Logistic Regression
- 4.18. Decision Trees
- 4.19. K-means

#### **5. Final Project**

## FAQs

### **What is this training program about?**

This is an online training program in which you will learn about data science. You will learn the basics of python, understand the statistics used in data science, learn predictive modeling and the basics of machine learning. At the end of the training, you will be able to discover hidden patterns from unorganized data and make decisions and predictions based on it.

### **How will the training be imparted?**

You will be taught using pre-recorded videos and text tutorials. The training has quizzes, assignments, and tests to help you learn better. At the end of the training, you will attempt different projects to get hands-on practice of what you learned during your training.

### **What is the duration of this training?**

This is a 6 weeks training program.

### **What are the timings of this training program?**

As this is a purely online training program, students can choose to learn at any time of the day. The students can decide the timing according to their convenience.

### **Who can join? I am a beginner/advanced user, can I learn Data Science?**

This training would be better suited to beginners who have no prior knowledge of Data Science. Anyone who is willing to learn and has an interest in Data Science can opt for this training program.

### **Are there any prerequisites for joining this program?**

This program is for beginners. There are no prerequisites.

### **What hardware/software are required for doing this training?**

No hardware is required for doing this training. All the necessary software are uploaded online which can be downloaded during the training.

### **Will there be a certificate provided at the end of the training?**

Yes, a certificate will be provided by Internshala upon completion of the training. Students may download a soft copy of the certificate through our portal.

### **Will I be able to download the training content?**

Yes, you can.

### **Can the material be used by a group of students?**

No. These training programs are meant for individual users. Multiple users will not be allowed to access the portal using the same account.

If you have any queries or any doubts regarding the training, please write to us at [trainings@internshala.com](mailto:trainings@internshala.com) or call us on +91 844 8444 853.