

bluemap

DATA SCIENCE
TRAINING

UPGRADE YOUR KNOWLEDGE

Data Science Training

Course Overview

This course will cover beginners and intermediate level Data Science concepts, but not the whole Data Science spectrum. Candidates completing this course will be able to apply Data Science concepts in entry level job roles and will get a launch pad to implement and practice data science in complex tasks.

Duration & Module Coverage

Duration: 8 Days (16hrs)

Session Options	Module Coverage
Session Weekdays[4] : 4 days per week 2 hours per day	Day 1 - Modules 1 Day 2 - Module 2 Day 3 - Module 2 contd. Day 4 - Module 3
Session Weekends: 2 hours per day	Day 5 - Module 4 Day 6 - Module 4 contd. Day 7 - Module 5 Day 8 - Module 6

Learning Goals

By the end of this course participants will be able to:

1. Get an insight to the world of data science.
2. Understand concepts of data exploration and visualization.
3. Get an introduction to machine learning.

Pre-Requisites

Understanding of basic programming concepts is a pre-requisite for this training.

Teaching Methodology

This is a very hands-on course where participants carry out practical exercises according to the lab guide provided. The concepts are taught through implementation of real-world use-cases. Our exercises have been carefully designed to replicate scenarios participants will face in real life work conditions.

Who Should Take This Course?

This course is for professionals/fresher looking to gain exposure to data science



Course Content

1. Basics of Python for Data Science

- Advanced Python Lambda
- List comprehensions in Python

2. Advanced Python Demonstration

- The numerical python library
- The series data structure
- Querying a Series
- The DataFrame Data Structure
- DataFrame Indexing and Loading
- Querying a DataFrame
- Indexing Dataframes
- Missing Values
- Merging Dataframes
- Pandas Idioms
- Group by Scales
- Pivot table
- Data functionality

3. Statistics

- Distributions
- More Distributions
- Hypothesis Testing in Python

4. Data exploration and visualization using seaborn and matplotlib

- Matplotlib Architecture
- Basic Plotting with Matplotlib
- Scatter plots
- Line plots
- Bar charts
- Sub plots
- Histograms
- Box plots
- Heatmaps
- Animations
- Plotting with Pandas
- Seaborn

5. Introduction to Machine Learning

- Multi-variate and Univariate
- Linear regressions
- Logistic regressions

6. Text Analytics

- Regex application using Python
- NLP and sentiment analysis



Practical Learning Exercises

A lab guide will be provided to each student with requirement scenarios. Along with lab guide required software setups will be provided to set up individual scenarios for self practice.

There would be scenarios for implementing, verifying and testing all modules covered in the course.