SAMBODHI

Microsoft

Python Analytics Training Course

Project Based Immersive Learning Course

Python Analytics Training Course Overview

Sambodhi and Education Nest offer a comprehensive Python Analytics training program that focuses on the basics and fundamentals of data analytics with core aspects of Python programming. Python is an ideal programming language for data analytics, and this course is designed to equip learners with the necessary skills and knowledge to excel in the field. The program covers a wide range of opportunities that arise from studying data analytics. Upon completion of the course, learners will have a deep understanding of Python Analytics and will be equipped with the skills and knowledge required to analyze data and extract valuable insights. Enrolling in Education Nest's Python Analytics training course can help learners take their careers to new heights by gaining expertise in data analytics.

Benefits of Python Analytics Training Course:

Enrolling in a Python Analytics course provides several benefits, as it offers a comprehensive overview of data analytics tools and techniques using Python. Python is a

crucial skill for many data analytics roles, and learning it can be the key to unlocking a successful career as a data analyst. The Data Analytics with Python course covers the fundamentals of Python programming, data analytics, and data visualization, equipping learners with the skills and knowledge needed to analyze data and extract valuable insights. By enrolling in Education Nest's Python Analytics training course, learners can develop a highly sought-after skillset that will enable them to succeed in the dynamic and rapidly growing field of data analytics. It is 100% job oriented training Course.

Who should learn?

- Students
- Analytics Team Managers
- Information Architects
- Programmers
- Developers, Technical Leads, Architects
- Business Analyst
- BI Managers
- Big data Professional
- Aspirants wishing to have a career in Python

Why do you need Python Analytics Training Course?

Average Salary Growth:

The average salary growth of a Python analytics professional is influenced by various factors such as experience, skills, industry, and location. Recent data indicates an average salary range of $85,000 to $130,000 per year for Python analytics professionals in the United States. As the demand for data-driven insights continues to increase, the value of Python analytics expertise is expected to rise as well, creating more salary opportunities and potential for growth within the field.

Industries:

Python Analytics skills are in high demand across various industries and MNCs, as data analysis has become an essential aspect of business decision-making. The top industries that require Python Analytics professionals are healthcare, finance, e-commerce, telecommunications, and technology. Python Analytics professionals can work as Data Analysts, Data Scientists, Business Analysts, Machine Learning Engineers, and more in these industries. MNCs such as Amazon, Microsoft, IBM, Google, and Facebook are actively hiring Python Analytics professionals.

Position in Market:

The U.S. Bureau of Labor Statistics, employment of computer and information research scientists, which includes data analysts, is projected to grow 15 % from 2019 to 2029, which is much faster than the average for all occupations. Similarly, the job website Indeed reports that the demand for data analysts with Python skills has increased by 34% over the past five years. The website also reports that Python is the most in-demand programming language for data analysts, with a 20% increase in demand from 2020 to 2021.

Designations:

- Data Scientist
- Data Analyst
- Python Developer
- Machine Learning Engineer
- Statistical Programmer
- Data Visualization Analyst
- Data Science Consultant
- Business Analyst
- Analytics Consultant

Why Python Analytics Training Course from Education Nest

- **Free Demo on Request**
- **Live Interactive Learning**
- **Lifetime Access**
- **Flexible Schedules**
- **24x7 Support**
- **One on One Doubt Clearing**
- **Real Time Project-Based Learning**
- **Certificate Oriented Curriculum**

Key Skills Covered:

- Programming
- Predictive Modelling
- Python Programming
- Data Analysis
- Data Visualization (DataViz)
- Model Selection

Python Analytics Training Course Syllabus

Module 1: What is Analytics?

- Introduction to Analytics
- Analytics in Python
- Data Analytics Process

- Exploratory Data Analysis (EDA)
- EDA-Quantitative Technique
- EDA – Graphical Technique
- Data Analytics Conclusion or Predictions
- Data Analytics Communication
- Data Types for Plotting

Module 2: Python Basics for Analytics

- Getting Started
- Data Structures
- Control Flow and Built-in Functions
- Numpy an External Librar
- Scipy an External Library
- Using Numpy and Scipy
- Using Numpy and Scipy

Module 3: Statistical Analysis and Business Applications

- Introduction to Statistics
- Statistical and Non-statistical Analysis
- Major Categories of Statistics
- Statistical Analysis Considerations
- Population and Sample
- Statistical Analysis Process
- Data Distribution
- Dispersion
- Histogram
- Correlation and Inferential Statistics

Module 4: Python Environment Setup and Essentials

- Anaconda
- Installation of Anaconda Python Distribution

- Data Types with Python
- Basic Operators and Functions

Module 5: Mathematical Computing with Python (Numpy)

- Introduction to NumPy
- Activity-Sequence it Right
- Creating and Printing an nd array
- Class and Attributes of an array
- Basic Operations
- Copy and Views
- Mathematical Functions of NumPy
- Evaluate the datasets containing GDPs of different countries
- Evaluate the datasets of Summer Olympics 2012

Module 6: Scientific Computing with Python (Scipy)

- Introduction to SciPy
- SciPy Sub Package – Integration and Optimisation
- SciPy Sub package
- Demo – Calculate Eigenvalues and Eigenvector
- Use SciPy to solve a linear algebra problem
- Use SciPy to define 20 random variables for random values

Module 7: Data Manipulation with Pandas

- Introduction to Pandas
- Understanding DataFrame
- View and Select Data Demo
- Missing Values
- Data Operations
- File Read and Write Support
- Pandas SQL Operation
- Analyse the Federal Aviation Authority (FAA) dataset using Pandas

- Analyse the dataset in CSV format given for fire department

Module 8: Machine Learning with Scikit–Learn

- Machine Learning Approach
- Understand data sets and extract its features
- Identifying problem type and learning model
- How it Works
- Train, test and optimising the model
- Supervised Learning Model Considerations
- Scikit-Learn
- Supervised Learning Models – Linear Regression
- Supervised Learning Models – Logistic Regression
- Unsupervised Learning Models
- Pipeline
- Model Persistence and Evaluation
- Analyse a dataset to find the features and response label of it

Module 9: Natural Language Processing with Scikit Learn

- NLP Overview
- NLP Applications
- NLP Libraries-Scikit
- Extraction Considerations
- Scikit Learn-Model Training and Grid Search
- Analyse a given spam collection dataset
- Analyse the sentiment dataset using NLP

Module 10: Data Visualisation in Python Using Matplot-Lib

- Introduction to Data Visualisation
- Line Properties
- (x, y) Plot and Subplots
- Types of Plots

- Analyse the "auto mpg data" and draw a pair plot
- Draw a pie chart to visualise a dataset

Module 11: Web Scraping with Beautiful Soup

- Web Scraping and Parsing
- Knowledge Check
- Understanding and Searching the Tree
- Navigating options
- Demo3 Navigating a Tree
- Knowledge Check
- Modifying the Tree
- Parsing and Printing the Document

Module 12: Hadoop Map-Reduce and Spark with Python

- Why Big Data Solutions are Provided for Python?
- Big Data and Hadoop
- Hadoop Core Components
- Python Integration with HDFS using Hadoop Streaming
- Using Hadoop Streaming for Calculating Word Count
- Python Integration with Spark using PySpark
- Using PySpark to Determine Word Count
- Determine the word count for Amazon dataset

Career Support

Profile Building:

At Sambodhi and Education Nest, we provide the services of experienced professionals who can offer personalized assistance in crafting your CV and online profiles. They take into account your unique educational and experiential background, ensuring that your job application stands out from the rest.

Interview Preparation:

The upcoming interview preparation service will include personalized one-on-one sessions and the option for mock interviews if needed.

Job Referrals:

At Education Nest, we receive a variety of job requirements from diverse sources such as organizations, our clients, HR consultants, and a vast network of Education Nest currently employed in different companies. We strive to meet these varied requirements to the best of our abilities.

Continuous Support:

At Sambodhi and Education Nest, we provide ongoing support to our learners for as long as they need it. Many of our learners have received multiple job offers and promising employment opportunities as a result of the skills they acquire during our program.