



**FIREBLAZE  
A.I SCHOOL**

# **Data Analytics with Python**



## **PROGRAM OVERVIEW**

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Fireblaze Artificial Intelligence School aims to meet the growing demand for talent in the field of analytics by providing industry-relevant training and education to develop business-ready professionals.

We have strong foundation of training students, college faculties and Company professionals. We hold a legacy of training 1000+ students 200+ faculties. Our students are placed in various companies such as Mu Sigma ,Value Labs ,Accenture, Capgemini and many more.



## PROGRAM OBJECTIVE

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This program of Fireblaze AI School focuses on building candidates foundation in the world of Data. In this program we assume that the candidate has **no prior coding experience** and train him from basis of programming in Python to performing Exploratory Data Analysis. This would help the participants go from a real world business problem to a first cut, working and deployable Data solution to the problem.

This course will focus on practical knowledge more than mathematical or theoretical rigour. That doesn't mean that we would water down the content. We will try and balance the theory and practice while giving more preference to the practical and applied aspects of Data Analytics as the course name suggests. Through the course, we will work on 2 case studies of real world Datasets to help students grasp the practical details of building data driven solutions. For each Concept in the course, we would provide examples to provide the intuition and show how the idea to used in the real world.

# DESCRIPTION OF PROGRAM

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- The duration of the program is for 1 Month. Out of which theory to practical ratio is 1:9.
- There are no pre requisite for this course.
- During this 1 month of Training the candidate will dive in to the world of Data Analytics and would be made versed with
  - Software Installation : Anaconda || Jupyter notebook
  - **Python Programming**
    - ~ History
    - ~ Feature
    - ~ Setting up path
    - ~ The Basics Arithmetic
    - ~ Control Statements
    - ~ Conditional Statements
    - ~ Strings Handeling
    - ~ Data containers: Lists, Dictionaries,Tuples
    - ~ Sorting
    - ~ Functions - Randomness , User Defined

# KEY POINTS OF PROGRAM

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- ~ Importing libraries
- Data handling in Python with **NumPy**
  - ~ Introduction 2D and 3D array
  - ~ Objects Array Creation
  - ~ Routines Array from Numerical Ranges
  - ~ Indexing
  - ~ Slicing
  - ~ Mathematical Functions
  - ~ Statistical Functions
  - ~ Sort, Search, Counting Functions
  - ~ Arithmetic Functions
  - ~ Array Manipulation
  - ~ Linear Algebra
- Getting Started with **Pandas**
  - ~ Introduction to pandas
  - ~ Data Structures - Series, DataFrame
  - ~ Indexing
  - ~ Reindexing
  - ~ Dropping entries from an axis

## KEY POINTS OF PROGRAM

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- ~ Selecting Entries
- ~ Data Alignment
- ~ Sort and Rank
- ~ Summery Statistic
- ~ Handling Missing Data
- ~ Hierarchical Indexing
- Concepts of Cleaning
  - ~ Merge
  - ~ Merge on Index
  - ~ Concatenate
  - ~ Combining
  - ~ Reshaping
  - ~ Pivoting
  - ~ Duplicating
  - ~ Mapping
  - ~ Replacing
  - ~ Renaming
  - ~ Binning

# KEY POINTS OF PROGRAM

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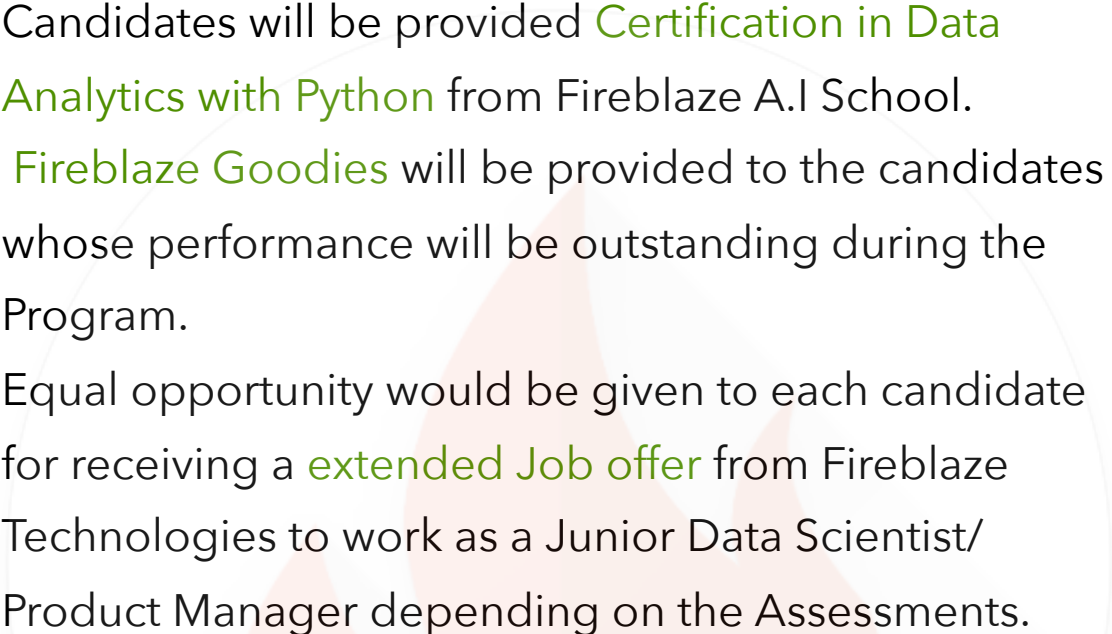
- Concepts Data Wrangling
  - ~ GroupBy on DataFrames
  - ~ GroupBy on Dict and Series
  - ~ Aggregation
  - ~ Splitting Combining
  - ~ Cross Tabulation
- Data Visualisation using **Matplotlib**
  - ~ Plotting Line graph in
  - ~ Plotting Bar graph
  - ~ Plotting Histogram
  - ~ Pie Charts
  - ~ Scatter Plot
- Data Summarisation and Insight generation
- Capstone Case Study projects for summarisation of the course.

Additional information about the usage of Python in industry would be discussed. As in Data Science , Machine Learning and etc.



## KEY TAKEAWAYS OF THE PROGRAM

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- Candidates will be provided **Certification in Data Analytics with Python** from Fireblaze A.I School.
  - **Fireblaze Goodies** will be provided to the candidates whose performance will be outstanding during the Program.
  - Equal opportunity would be given to each candidate for receiving a **extended Job offer** from Fireblaze Technologies to work as a Junior Data Scientist/ Product Manager depending on the Assessments.
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# STRUCTURE OF THE PROGRAM

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- Duration : 1 Month
- Delivery Mode : Offline
- Training Duration : 1 Month (25 hrs) + 7 Days for Project.
- Location : Fireblaze A.I School, Nagpur
- Vacancies : 20 Seats Strictly

For further details you can visit : [www.fireblazeaischool.in](http://www.fireblazeaischool.in)  
And also contact +91-93250 13467

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