Flair TECHNOLOGIES

PYTHON ANALYTICS

Master Python skills for real-world analytics.

Diverse Tech Topics

- Python Programming
- Data Handling with Pandas
- Exploratory Data Analysis
- Data Visualization Tools
- Time-Series Analysis
- Numerical Computing with NumPy
- Real-World Analytics Projects

ENROLL NOW

+91 974 974 9596
www.flairtechnologies.in

PROGRAM HIGHLIGHTS

Flair TECHNOLOGIES

Comprehensive Curriculum

01

Covers Python, Pandas, NumPy, EDA, visualization, and reporting for real-world data analysis.

Learning Notes for Each Session

02

Session-wise learning notes provide structured summaries of key concepts, tools, and techniques for efficient review and retention.

Advanced Concepts & Tools with Collaborative Environment

03

Gain expertise in advanced concepts via interactive, collaborative, and practical learning sessions

Hands-On Projects with Expert Instructors

04

Real-time projects with in depth training on Python, Pandas, NumPy, visualization, and reporting using datasets.

Mock Interviews & Resume Preparation

05

We take mock interviews and provide you feedback which helps you how to prepare for real Interviews also we help you in resume preparation based on your skills and experience.

1:1 Meeting with our experts

06

You can have 1:1 meeting to discuss your career path and guidance on how to prepare your resume and job placements.

DATA ANALYTICS - PYTHON OUTLINE

PYTHON SETUP & GETTING STARTED

- Installing Jupyter / VS Code
- Introduction to Python in data workflows
- Working in Jupyter Notebooks: Cells, Markdown, Shortcuts
- Python file types: .ipynb, .py
- Best practices for writing readable, clean analysis code

WORKING WITH DATA FILES

- Reading/writing CSV, Excel, and JSON files
- File paths and directories using os and pathlib
- Handling encoding issues and bad headers
- Reading large files in chunks
- File clean-up automation

DATA AGGREGATION & GROUPING

- Using .groupby() for summaries
- Multiple aggregations using .agg()
- Counting unique values
- Row-wise calculations
- Calculating percentages within groups
- Creating pivot tables with .pivot_table()
- Crosstab analysis

MERGING & COMBINING DATA

- pd.merge() - inner, left, right, outer joins
- pd.concat() - appending rows/columns
- Joining on index vs column
- Handling column conflicts during merge
- Use case: Merging sales with region/category/master data

PYTHON ESSENTIALS FOR ANALYSTS

- Variables, Data Types (int, float, str, bool, list, tuple, dict, set)
- Type conversion, type checking
- Control Flow: if, elif, else, nested conditions
- Loops: for, while, break, continue, range()
- Functions, Lambda expressions
- Basic Exception Handling: try, except, finally

CORE PANDAS FOR DATA ANALYSIS

DataFrame Basics

- Creating DataFrames (from CSV, dicts, lists)
- Indexing & slicing: .loc[], .iloc[], []
- Adding/removing columns/rows
- Renaming columns, setting index
- Basic data inspection: .head( ), .info( ), .describe( )

Data Cleaning

- Handling missing data: .isnull(), .fillna(), .dropna()
- Removing duplicates
- Replacing and mapping values
- String operations: .str.lower(), .str.replace(), .str.extract()

Data Transformation

- Creating new calculated columns
- Applying functions row-wise (.apply())
- Binning data using cut() and qcut()
- Using map(), replace(), and np.where() for classification logic
- Changing column data types with .astype()

DATE AND TIME HANDLING

- Parsing date columns with pd.to_datetime()
- Extracting year, month, day, weekday
- Filtering by date ranges
- Creating date features (e.g., quarter, month name)
- Time-based grouping (monthly, weekly, daily)

EXPLORATORY DATA ANALYSIS (EDA)

- Identifying outliers using IQR
- Frequency counts, value distributions
- Feature correlation analysis (.corr())
- Skewness, kurtosis, and data shape
- Detecting patterns before visualization

VISUALIZATION WITH MATPLOTLIB & SEABORN

Matplotlib Basics

- Bar charts, line charts, pie charts
- Customizing axes, titles, legends
- Saving plots as images

Seaborn Essentials

- Countplot, barplot, boxplot, histplot, heatmap
- Distribution & scatter plots
- Grouped plots with hue and col
- Plot styling with themes and palettes

NUMPY FOR NUMERIC OPERATIONS

- Creating arrays, array indexing
- Element-wise operations
- Aggregation functions (sum, mean, std)
- Boolean indexing
- Reshaping and flattening
- Use in performance optimization with Pandas

REAL-WORLD REPORTING TASKS

- Exporting cleaned data to Excel
- Writing multiple sheets to Excel using ExcelWriter
- Adding dynamic filenames with timestamps
- Generating summary tables
- Automating a simple monthly reporting task

FLAIR TECHNOLOGIES - DATA ANALYTICS

PROGRAM DURATION & FORMATE

45 SESSIONS | ONE MONTH | MON TO SAT (DAILY 1 HOURS)

MODE

ONLINE / OFFLINE

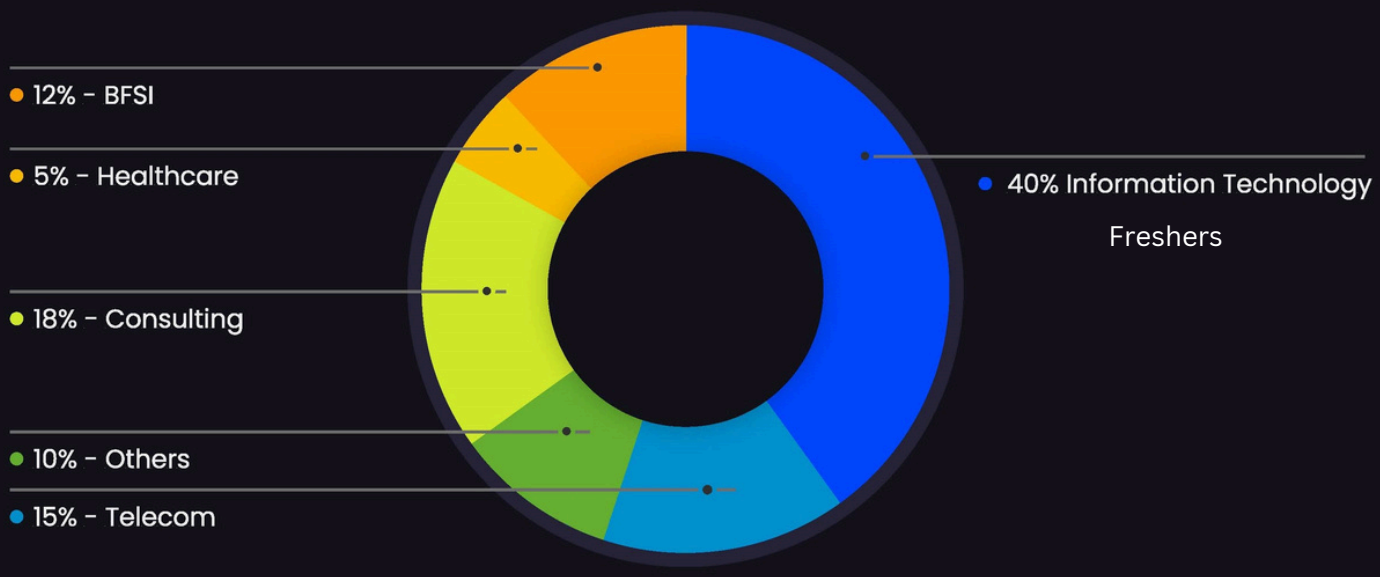
ELIGIBILITY

IT Professionals

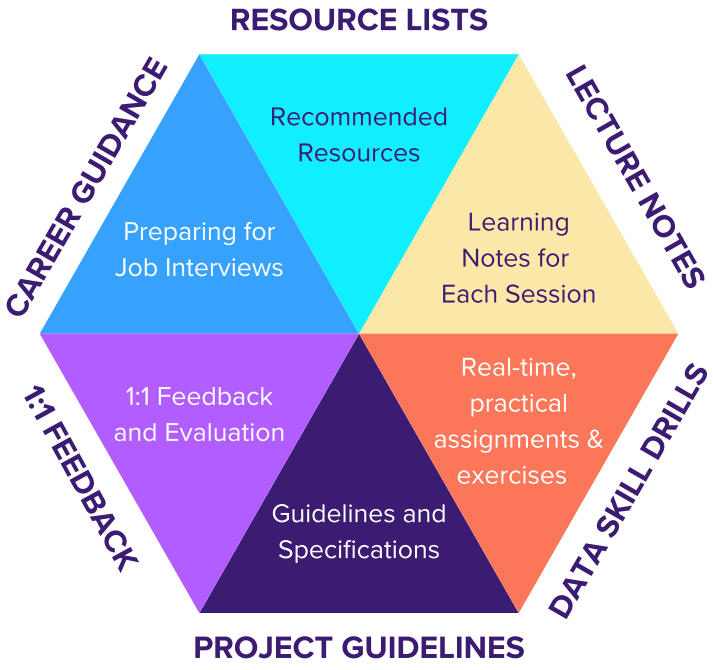
Meet the Batch

Flair TECHNOLOGIES

Industries Our Learners Come From



WHAT YOU ACHIVE



TARGET GOALS

1. Resource Lists
2. Lecture Notes
3. Hands-on Exercises
4. Project Guidelines
5. 1:1 Feedback
6. Career Guidance

We are pioneers in providing trainings by certified Instructors who are highly qualified with decades of experience in the subject matter. Flair Technologies was expertise in providing quality Industry Oriented Training with Interview Preparation and Placement Assistance.

GOALS ACHIVED

1. Expertise in Python Analytics
2. Ready for Interview
3. Placement in MNC

FLAIR TECHNOLOGIES

FLALR TECHNOLOGIES was founded in 2014 With the mission to provide high quality software Trainings. Despite facing challenges due to full-time commitments, our enthusiasm for teaching never waned.

info@flairtechnologies.in
Drop Us A Line

+91 974 974 9596
Call Us Now

Our Location
Bengaluru, India