



LEARN TODAY AND LEAD TOMMOROW



 **Python**
Tutorial for Beginners



The diagram consists of nine interconnected hexagons arranged in a grid-like pattern. The hexagons are colored and labeled as follows:

- History (Green)
- Architecture (Yellow)
- Constructs (Orange)
- Frameworks (Pink)
- Features (Red)
- Flavors (Purple)
- File Extensions (Teal)
- Applications (Blue)
- Python vs Java vs C++ (Dark Blue)



Overview

Let eMexo Technologies **Best Python Training in Electronic City, Bangalore** take you from the fundamentals of Python to Advance Python Training and make you an expert in developing real time Python applications. Here are the major topics we cover under this Python course Syllabus, [Introduction to Python](#), [Beginning Python Basics](#), [Python Program Flow](#), [Functions & Modules](#), [Exceptions Handling](#), [File Handling](#), [Classes In Python](#), [Generators and iterators](#), [Data Structures](#), [Collections](#), [Advanced Concepts – Intro to NumPy and Pandas](#), [Writing GUIs in Python \(Tkinter\)](#), [Python SQL Database Access](#), [Network Programming](#), [Date and Time](#), [Few more topics in-detailed](#), [Regular expression](#), [Threads](#), [Django](#), [Accessing API](#). Every topic will be covered in mostly practical way with examples.

All the topics will be covered with Practical and hands on training for our **Python Course in Electronic City**. Our trainers have industry experience with live project experience in cutting edge technologies which they teach. We hire only Best Python industry specialists as trainer for our Python Training in Electronic City.

If you are looking for **Python Training in Electronic City**, eMexo Technologies is the **Best Python Training Institute in Electronic City**. Come over to our training institute for a free demo class. Let our trainer give you a demo on Python and only then you take the decision to enroll into the training program.

Training Features

Expert Instructors

60 hours of Instructor led Classes. Weekend class: 20 sessions of 3 hours each and Weekday class: 30 sessions of 2 hours each.

Real life Case Studies

Do a real life case study to understand the usage on real world scenarios.

Assignments

Each class will be followed by practical assignment which can be completed before the next class.

Unit 1 : Introduction to Python Training

- Need for Programming
- Advantages of Programming
- Overview of Python
- Organizations using Python
- Python Applications in Various Domains
- Python Installation
- Variables
- Operands and Expressions
- Conditional Statements
- Loops
- Hands-On

Unit 2 : Sequences and File Operations

- Method of Accepting User Input and eval Function
- Python - Files Input/Output Functions
- Lists and Related Operations
- Tuples and Related Operations
- Strings and Related Operations
- Sets and Related Operations
- Dictionaries and Related Operations
- Hands-On

Unit 3 : Deep Dive – Functions and OOPs

- User-Defined Functions
- Concept of Return Statement
- Concept of `__name__` and `__main__`
- Function Parameters
- Different Types of Arguments
- Global Variables
- Global Keyword
- Variable Scope and Returning Values
- Lambda Functions

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- Various Built-In Functions
- Introduction to Object-Oriented Concepts
- Built-In Class Attributes
- Public, Protected and Private Attributes, and Methods
- Class Variable and Instance Variable
- Constructor and Destructor
- Decorator in Python
- Core Object-Oriented Principles
- Inheritance and Its Types
- Method Resolution Order
- Overloading
- Overriding
- Getter and Setter Methods
- Inheritance-In-Class Case Study
- Hands-On

Unit 4 : Working with Modules and Handling Exceptions

- Standard Libraries
- Packages and Import Statements
- Reload Function
- Important Modules in Python
- Sys Module
- Os Module
- Math Module
- Date-Time Module
- Random Module
- JSON Module
- Regular Expression
- Exception Handling
- Hands-On

Unit 5 : Introduction to NumPy

- Basics of Data Analysis
- NumPy – Arrays

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- Operations on Arrays
- Indexing Slicing and Iterating
- NumPy Array Attributes
- Matrix Product
- NumPy Functions
- Functions
- Array Manipulation
- File Handling Using NumPy
- Hands-On

Unit 6 : Data Manipulation using pandas

- Introduction to pandas
- Data structures in pandas
- Series
- Data Frames
- Importing and Exporting Files in Python
- Basic Functionalities of a Data Object
- Merging of Data Objects
- Concatenation of Data Objects
- Types of Joins on Data Objects
- Data Cleaning using pandas
- Exploring Datasets
- Hands-On

Unit 7 : Data Visualization using Matplotlib

- Why Data Visualization?
- Matplotlib Library
- Line Plots
- Multiline Plots
- Bar Plot
- Histogram
- Pie Chart
- Scatter Plot
- Boxplot
- Saving Charts

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- Customizing Visualizations
- Saving Plots
- Grids
- Subplots
- Hands-On

Unit 8 : GUI Programming

- Ipywidgets Package
- Numeric Widgets
- Boolean Widgets
- Selection Widgets
- String Widgets
- Date Picker
- Color Picker
- Container Widgets
- Creating a GUI Application
- Hands-On

Unit 9 : Developing Web Maps and Representing Information using Plots (Self-paced)

- Use of Folium Library
- Use of Pandas Library
- Flow Chart of Web Map Application
- Developing Web Map Using Folium and Pandas
- Reading Information from Titanic Dataset and Represent It Using Plots

Unit 10 : Computer Vision using OpenCV and Visualization using Bokeh (Self-paced)

- Plotting Charts Using Bokeh
- Beautiful Soup Library
- Scrap All Hyperlinks from a Webpage Using Beautiful Soup and Requests
- Plotting Charts Using Bokeh
- Plotting Scatterplots Using Bokeh
- Image Editing Using OpenCV
- Face Detection Using OpenCV
- Motion Detection and Capturing Video

FAQs

1.How is the training organised? How much percentage is theoretical and how much is practical hands on?

We at eMexo believe nothing beats a hands-on practice when it comes to learning a concept. Our teaching methodology is 100% practical hands-on oriented. You learn a concept, you practice it then and there with the trainer. We also give you assignments for each topic which you can practice at home and any doubts regarding the topic can be cleared with the trainer next day.

2.What is the course duration ? How and when do you plan to complete the course ?

We generally cover our courses in 60 hours, however, we are aware that we can't put a hard- stop to learning with a number. Our trainer will make sure that you have learned everything that is part of the curriculum. This could mean 48 hours or 60 hours, doesn't matter.

3.What is the material provided in the training ?

We have industry standard course material which is used by our trainers to train you. At the end of the training apart from the notes which you have taken during the course, we will also provide you with the training material which was used. This training material includes the training content, interview questions etc.

4.Do you help in preparing for the interview ?

Our trainers are working professionals who work in MNC's. They are the expert in their domain and they know exactly what an interviewer looks into a candidate. Our expert trainers apart from sharing the interview questions they will also conduct mock interviews to help you prepare for the real interview.

5.Who are your trainers ?

Our trainers are industry experts who work in their respective technologies day in day out. They work in MNC's and are technology experts within their organisation.

6.What is the total batch size per course?

We maintain a strict batch size of maximum 5 students. We also provide exclusive one to one training as well. Talk to our training partner to get more details.

7.Do you provide certification for the course?

Yes, at the end of training we provide a certification of completion.

8. Will I be joining a new batch or be merged with another batch ?

You will be added to a new batch.

9. Is fast track training available?

Yes, we provide fast-track training as well for those who want to complete the course faster. The curriculum and the total hours required to complete the course will remain same. However, the trainer will be spending more hours with you to complete the course.

10. Do you assist in job placement ?

Our trainers are expert professionals in their organisations and they often act as the interviewer to hire new candidates. Our trainers will help you prepare your resume with industry standards. After all, they know exactly what to look in a resume.

11. Timings for trainings - Regular training/weekend training

We provide both regular and weekend training. Talk to our training partner to learn more about the timings.

12. Will you be working on a live project during training ?

Yes, apart from doing the hands-on practice our trainer will also be taking a real-world project and work with you for the implementation.

13. What happens if I miss a class?

If you miss a class the content of that class will be taught to you again. With us you might miss a class but not the content.

14. Can I attend a demo before the actual class?

Yes, absolutely! Talk to our training counsellor on phone at 9513216462 or email us at info@emexotechnologies.com to arrange for a free demo. You can also fill in the contact us form below and we will call you to discuss your training requirements.