

RayatShikshanSanstha's  
**KarmaveerBhauraoPatilCollege, Vashi**  
Sector-15- A, Vashi, Navi Mumbai - 400 703  
(Autonomous)

## **Department of Information Technology**

### **SKILL BASED COURSE**

### **FOR T.Y.B.Sc IT.**

## **“PYTHON PROGRAMMING & ITS APPLICATIONS”**

**1. NAME OF THE COURSE:** -Python Programming & Its Applications

**2. OBJECTIVES OF THE COURSE:**

- Master the fundamentals of writing Python scripts
- Learn core Python scripting elements such as variables and flow control structures
- Discover how to work with lists and sequence data
- Write Python functions to facilitate code reuse
- Use Python to read and write files
- Make their code robust by handling errors and exceptions properly
- Work with the Python standard library
- Explore Python's object-oriented features

- Search text using regular expressions

3. CourseDuration:40 Hrs.

4. Intake Capacity: 100 students

6. Duration: 6weeks

7. Evaluation Pattern:  
Project Implementation

8. Course taken by: EDUXLABS.

## **SYLLABUS :**

### **1. Python Course Content (20 Hours) :**

<b>Training Topics</b>	<b>Training Hours (20-Hours)</b>
1. Introduction to Python Programming.	1-Hour
2. Basics of python programming	2-Hours
3. Installation of different packages in python from external source	1-Hour
4. Reading and handling the csv files	1-Hour

5. Understanding and implementing SMTP lib for sending/Receiving Email.	3-Hours
6. GUI programming (Creating your own desktop application)	4-Hours
7. Python Kivy(Creating your own desktop/Mobile application)	2-Hours
8. Understanding and setting-up Buildozer	1-Hour
9. Database Connectivity in python <ul style="list-style-type: none"> <li>• Introduction to databases</li> <li>• Linking the databases to python</li> <li>• Accessing the database using python</li> </ul>	3-Hours
10. Regular Expression	2-Hours

## 2. Projects included in 20-Hours Training :

1. GUI based automated system for Email marketing
2. GUI based Data fetcher and top score returner with database connectivity
3. GUI based typing speed test app to test the time and speed of the user typing.
4. Music player in python
5. Build an assistant that can perform some tasks for you like finding my youtube subscriber count, weather data, current time, etc using python
6. Chatbot with python

## COURSE OUTCOMES:

Upon successful completion of this course, the student will be able to:

1. Define and demonstrate the use of built-in data structures “lists” and “dictionary”.
2. Design and implement a program to solve a real world problem.
3. Design and implement GUI application and how to handle exceptions and files.

4. Make database connectivity in python programming language.