

## 45 DAYS/ONE MONTH ONLINE INTERNSHIP PROGRAM POWERED BY UGCPL

# PYTHON FOR INDUSTRIAL APPLICATION

# <mark>(Using DJango)</mark>

## Important information related to 45/30 Days Internship Program

- On registration confirmation, a common whatsapp group will be formed, where the students will be getting all necessary updates including the joining link (MS Teams / Google Meet/Webex) for online sessions.
- Two-hours online session 3/4 days- per week will be held from 3.30 pm to 5.30 pm or 4:00 pm to 6:00 pm regularly on alternate days basis. Timing schedule/number of days per week may change on request of majority of the participants
- 4 25 % of the allocated time will be for real time project work implementation.
- Project work will be in group of students (group will be consisting of a maximum of 8 students).
- Submission of complete project report by the participant is mandatory for the Internship Certification– One copy of the project report needs to be submitted at the parent Institution/Department and another copy will be required to be submitted to UGCPL Training Team.
- Software based project work will be free of cost and sufficient requirement for the Internship Certification.
- Upon submission of project report in the concerned parent Institute/Department, the participants will be able to download their Internship Certificates within 10 to 15 working days from our website (www.ugcpl-india.com). The hard copy of the certificates will be submitted to the T&P Cell of the concerned University/Institute by UGCPL within 20 days time period.
- The participants will have to make their own arrangement of resources like Laptop or PC or smart phone and internet connectivity for attending the sessions through MS Teams/Google Meet/Webex platform.

## HOW TO REGISTER

Please follow the following steps for successfully registering in our Training-cum-Internship program.

**Step 1:** Please select the area of Internships-cum-Industrial training you wish to enrol.

Step 2: Visit our website <a href="https://www.ugcpl-india.com">www.ugcpl-india.com</a>

Step 3: Click on **Register Now** tab in top right corner given in our website by paying the necessary fees. OR you can also click in the given link: <u>https://www.ugcpl-india.com/register.aspx</u>

Step 4: You will receive confirmation of payment in e-mail post successful payment within 3 days.



- Step 5: You will receive the Whatsapp Group Link for your specific batch/areas of Internship at least 3 days prior to start of Internship through e- mail. Please provide correct e-mail address during registration
- Step 6: You will receive the class joining link and schedule details over whatsapp group as well as in your registered e-mail address.
- Step 7: Once you have successfully completed the Internship programme and submitted the project report, you

will be able to download your Internship Certificate.

Course Structure/Schedule of the Internship on

## **Python for Industrial Applications**

<mark>(using Django)</mark>

#### Prerequisites

This course is suitable for students, developers, data analysts, and statisticians with very basic knowledge of Computer Science.

Module 1
Introduction to Python
History of Python Using Python Interpreter
The Interpreter and its Environme
Using Python as Calculator
First Step towards Programming
Module 2
Basic Syntax
Python Identifiers
Python Keywords
Python Comments in Python
Command Line Arguments
Parsing Command-Line Arguments
Module 3
Variable Types
Assigning Values to Variables
Multiple Assignment Standard Data Types
Python Numbers
Python Strings
Data Type Conversion
Module 4
Python Datastructure
Introduction to List
Work on Tuples
Sets
Dictionary
List Comprehension
Madula 5

#### Module 5



Conditional and Iterative statements If Statements Looping Techniques for Statements The range function BREAK Statement Basic Operators Types of Operators Python Arithmetic Operators Python Comparison Operators Python Logical Operators Python Logical Operators Python Identity Operators Python Operators Precedence Module 6

Functions Defining a Function Calling a Function Global vs. Local variables Locating Modules Creating Modules

#### Module 7

Files I/O Printing to the Screen Reading Keyboard Input The input Function Opening and Closing Files The open Function The file Object Attributes The close() Method Reading and Writing Files The write() Method



#### Module 8

Introduction to Django What is Django? Django and Python Django's take on MVC: Model, View and Template DRY programming: Don't Repeat Yourself How to get and install Django

#### Module 9

Getting started with Django Important Core Files: Templates Adding static files Models and Databases Admin Interface MVT- In details

Module 10

Forms and Validations
Forms
Validation
Relative URL
Template Inheritance
Module 11
Advanced Django
Django's in-built User
Registration
Login
Logout
Generic Views
CRU D Implementation

## **Project work and documentation**

