PYTHON
for
SOCIAL
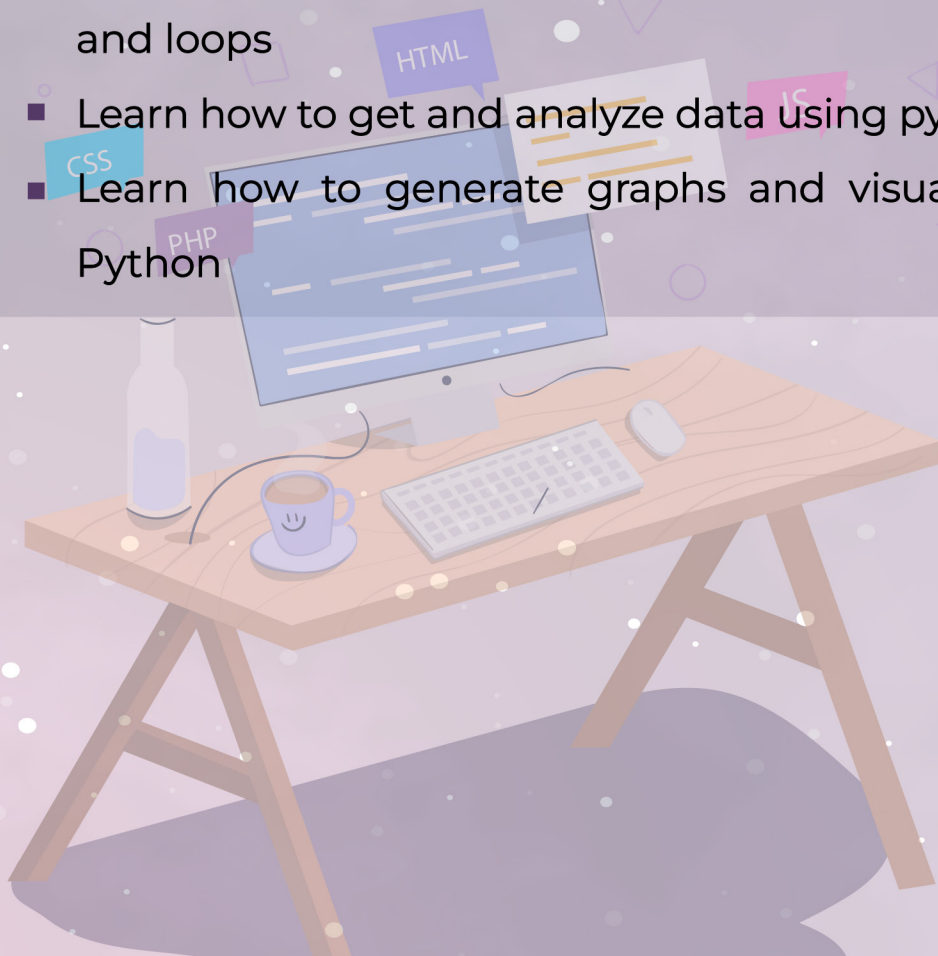## SCIENTISTS
2023

31st Jan–2nd Feb, & 13th–15th Feb

A.R. Kamal Seminar Hall, PIDE, QAU Campus, Islamabad

The training course "Python for Social Scientists" aims to acquaint participants with the basics of the Python programming language and its application to data collection, analysis, and visualization. The course is divided into two modules and will be offered in two weeks (03 Hours x 06 Days). In the first module (Week #1), participants will learn about variables, data types, operators, structures, conditions, loops, functions, and classes. This will enable participants to investigate writing succinct and efficient codes. During the second module (Week #2), participants will use data to answer real economics questions covering popular exploratory and statistical data analysis techniques and generate graphs using the Python program.

LEARNING OUTCOMES

Upon the completion of this two-weeks training course, the participants will be able to:

- Describe the basics of the Python programming language
- Use variables to store, retrieve and calculate information
- Utilize core programming tools such as structures, functions and loops
- Learn how to get and analyze data using python
- Learn how to generate graphs and visualize results using Python

TRAINING SCHEDULE

Week 1:
INTRODUCTION TO PYTHON

Day	Time	Topics	Resource Persons
Tuesday 31st Jan	10:00 AM	Introduction to Python	Izzah Salam
	10:30 AM	Variables & Data Types	
	11:45 AM - 1:00 PM	Operators	
Wednesday 1st Feb	10:00 AM	Recap Day 1	Memoona Afsheen Malik
	10:15 AM	Conditions	
	11:15 AM	Loops	
	12:30 PM - 1:00 PM	Functions	
Thursday 2nd Feb	10:00 AM	Recap Day 1 & 2	Irfan-ul-Haq Qureshi
	10:15 AM - 1:00 PM	Structures	

Week 2:
PYTHON FOR SOCIAL SCIENTISTS (DATA ANALYSIS & VISUALIZATION)

Day	Time	Topics	Resource Person
Monday 13th Feb	10:00 AM – 1:00 PM	Numpy	Rabeeh Ayaz Abbasi
Tuesday 14th Feb	10:00 AM – 1:00 PM	Pandas	
Wednesday 15th Feb	10:00 AM – 1:00 PM	Matplotlib & Seaborn	

HOW TO REGISTER?

Interested individuals are required to fill out the online Google Form https://forms.gle/c53A7rtTcZt4ypwz8 latest by **Friday 27th January 2023**.

There are only 30 seats available. Preference will be given to mid-career researchers, academicians, and practitioners on a first come first serve basis.

COURSE FEE?

There is NO course fee. The course is sponsored by RASTA program.

Participants will be required to bring NOC from their organization (in case of professionals) or Recommendation Letter from the research supervisor/HoD (in case of university students).

CONTACT

Dr Marriam Mohsin
Assistant Professor, PIDE
Email: mariam@pide.org.pk

Ms Izzah Salam
Data Visualization Expert,RASTA
Email: izzah@pide.org.pk
Tel: 051 9248144

RASTA

RASTA Project Management Unit
Pakistan Institute of Development Economics
Email: rasta@pide.org.pk | Twitter: @RASTA_PIDE | URL: www.pide.org.pk/rasta
Tel. +92 51 9248144