



ed-watch
Your online resource partner



Live - Cohort

DATA SCIENCE WITH PYTHON 4.0

Break Through Data Barriers: Master Python to Solve Complex Problems

Certificate on successful completion.



Starting 29th April 2024



8 - 10 weeks



Three virtual classes each week

PROGRAM OVERVIEW

More and more Accountants, Data Analysts, Business Analysts and Risk Managers are learning Python for developing reports, calculating complex information and presenting data in the form of dash boards and financial reports.

This program is equally beneficial for people who are new to Python as well as those familiar with the language and who want to up their game and excel in data science using Python.

The program starts with the basics of Python from understanding and learning how to code, what are the major concepts and how to perform complex calculations using Python. It later takes a deep dive into the advanced concepts before moving on to a more advanced level consisting of data analysis and data presentation.

In the later modules, the program covers data presentation in the form of tables, charts, grids, displaying Images with Matplotlib. Data Analysis Module covers data collection, cleaning, processing, and plotting using Seaborn. This is 10 weeks live program for a hands-on learning experience.

COURSE RESOURCE

- Hand-on class projects with solutions
- Quizzes and Assignments
- Access to recorded lectures post-live class ON LMS.

WHO SHOULD ATTEND?

- Accountants and Finance Managers
- Data Science Professionals
- Risk Managers
- Business Analysts
- Data Analysts
- Programmers

PROGRAM OBJECTIVE

At the end of the program, participants should be able to:

- Carryout complex calculations
- Perform Data Mining and complex Data Analysis on huge data records
- Make Interactive Dashboards, Business Presentations, and other Reports for Boards

COURSE COVERAGE

Module A: Introduction & Calculation

Lesson 1: Python Introduction
Lesson 2: Variables and Datatypes
Lesson 3: User Input and Output
Lesson 4: Using Python for calculations
Lesson 5: Control Statements
(a)Conditionals
(b)Loops
Practice 1: calculating salary knowing the hourly rate for an employee.
Practice 2: calculating the profit for a bank account after 5 years
Quiz

Module B: Advanced Python

Lesson 1:Functions
Lesson 2: Local and global scope
Lesson 3:Lists
Lesson 4:Tuples
Lesson 5:Dictionaries
Lesson 6: Introduction of Python Modules (Matplotlib, Seaborn, numpy and pandas)
Practice for each module
Quiz

Module C: Visualization with Matplotlib and Seaborn

Lesson 1: Introduction, why do we need to visualize our data?
Lesson 2: Data Cleaning- null and infinites values, outliers and data formatting etc.
Lesson 3: Improving Default Styles with Seaborn
Lesson 4: Scatter Plots
Lesson 5: Activity for Data Visualization

Lesson 6: Histogram and Line Chart
Lesson 7: Bar Chart
Lesson 8: Heatmap
Lesson 9: Displaying Images with Matplotlib
Lesson 10: Plotting multiple charts in a grid
Practice project
Quiz

Module D: Data Manipulation with Python

Lesson 1: Introduction what is a dataset and why do we need it?
Lesson 2: Loading the dataset and looking at slices and views of it
Lesson 3: Group by aggregates to summarize data
Lesson 4: Tidy and reshape data
Lesson 5: Write functions and apply them on the data
Lesson 6: Plotting using Seaborn
Project
Quiz

Module E: Introduction to Machine Learning with Python

Lesson 1: What is Machine Learning
Lesson 2: Regression
Lesson 3: Classification
Lesson 3: Model Evaluation Metrics
Project
Quiz



TRAINER'S PROFILE

Ahmed Ghamal

Machine Learning engineer at Tarjama.
Python, SQL, Pytorch, Data Science frameworks,
Power BI



Ahmed Gamal is an Applied Data Scientist at Tarjama, the IT company building Machine Translation models. He is also Machine Learning Lead at Udacity. He was previously a data scientist at Unilever Egypt where he has remained in charge of projects for:

Creating dashboard for sales for MEPS (The Middle East + Pakistan + Sri Lanka) region.
Automating the generation of analytics reports using Airflow, Python, and Power BI.

Creating a dashboard for mobile Application usage (UFS Sales Pro) that serves as a tracking tool for Unilever He is a Bachelors' in Computer Science and a Machine learning Engineer.



PROGRAM DETAILS

- 4th Batch is Starting 29th April 2024
- 8 - 10 weeks long
- E-Learning – Live classes, 3 classes of 1 hour per week.
- Classes will be conduct on Wednesday, Thursday, and Friday from 8:30 PM – 9:30 PM (GMT +5).
- 60% passing criterion.
- Quizzes & Assignments
- Recorded sessions available 24/7 on the LMS uploaded within 24 hours of the class.
- Online support during business hours is available.
- Weekly Progress report to HR where enrolled by Company.

Group discounts available.

REGISTRATION & CONTACT DETAILS

[Register Here](#)

For more details or customization of training program contact:

Email Us:

jane@ed-watch.org

contact@ed-watch.org

VISIT US

www.ed-watch.org

Call or WhatsApp US

+971 505 653 520

+1 929 361 2818

+92-343-315-9074

+21-3-483-1184



Ed-Watch.org

