

€ TRAINING

Python Coding in Procurement





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Introduction:

This training program is designed to equip professionals with essential Python coding skills to leverage technology effectively in their roles.

Program Objectives:

At the end of this program, participants will be able to:

- Provide a foundational understanding of Python programming concepts.
- Explore practical applications of Python in procurement tasks and processes.
- Automate repetitive procurement tasks using Python scripts.
- Enhance data analysis capabilities for informed decision-making in procurement.
- Foster innovation and efficiency through the integration of Python coding in procurement practices.

Targeted Audience:

- Procurement professionals at all levels seeking to enhance their skills and stay ahead in the rapidly evolving digital landscape.
- Procurement managers, analysts, specialists.

Program Outline:

Unit 1:

Introduction to Python for Procurement:

- Overview of Python programming language.
- Setting up Python environment.
- Basic syntax and data types.
- Variables and operators.
- Control flow: loops and conditionals.

Unit 2:

Data Handling and Analysis in Procurement:

- Working with data structures: lists, tuples, dictionaries.
- Reading and writing files in Python.
- Introduction to libraries for data analysis: Pandas and NumPy.
- Data manipulation and cleaning techniques.
- Exploratory data analysis for procurement datasets.

Unit 3:

Automating Procurement Tasks with Python:

- Introduction to automation concepts.
- Using Python to automate repetitive procurement tasks.
- Web scraping for procurement data collection.
- Interacting with APIs for procurement data retrieval.
- Building reusable scripts for procurement automation.

Unit 4:

Advanced Data Analysis Techniques:

- Advanced data manipulation with Pandas.
- Data visualization using Matplotlib and Seaborn.
- Statistical analysis for procurement insights.
- Introduction to machine learning for procurement forecasting.
- Case studies and practical applications of advanced data analysis in procurement.

Unit 5:

Integration and Deployment in Procurement Workflow:

- Best practices for integrating Python scripts into procurement workflows.
- Version control and collaboration with Git and GitHub.



- Packaging Python scripts for deployment.
- Strategies for maintaining and updating Python-based procurement solutions.