Tel: +1-929-672-1814
Email: info@genai-training.com
www.genai-training.com

Course Title: Python for Data Analysts

Course Price: $299

Course Outline:

Getting Started with Python
Setting up Python Environment
Overview of Integrated Development Environments (IDEs) like PyCharm, VSCode
intro to Python, Python fundamentals, Control flow, Functions and Modules
Python for Data Science
Introduction to Python programming
Essential libraries: NumPy, Pandas, Matplotlib, Seaborn
What are the uses of python Libraries?
Basic Data Handling, including Data selection and Filtering.
Data Loading, cleaning, Preprocessing, aggregation and grouping and exploring datasets.
Data preprocessing technique & Data Visualization with Pandas.
Projects and Practice.

COURSE TITLE: Python for Data Analysts & Data Engineers			
Course Number (*)	GENAI-108		
Pre/Co-Requisites	None		
Department	Training		
Instructor Name (*)	Harsh Sareen	**Email (*)**	info@genai-training.com
Office Location	On-line	**Class Hours**	TT: 9:00pm – 10:30PM EST
Telephone No.	+1-929-672-1814		
Class media	Google Meet	**Class Recordings**	GenAI Portal

COURSE INFORMATION/ DESCRIPTION OF THE COURSE

This course is designed for aspiring data engineers / data analysts who wish to harness the power of AI through Python to extract, analyze, and visualize data. Throughout the course, participants will learn the fundamentals of Python programming, focusing on libraries such as Pandas, NumPy, Matplotlib, and Seaborn. Key topics include data manipulation, cleaning, and transformation, as well as exploratory data analysis (EDA) techniques. Practical exercises and projects will enable learners to apply their skills to real-world datasets, ensuring a solid grasp of Python's capabilities in a data analytics context. By the end of the course, participants will be proficient in using Python to uncover insights and make data-driven decisions. No prior programming experience is required, making this course suitable for beginners and those looking to transition into the field of data analytics.

*LEARNING RESOURCES

* Recommended resources (books, online courses, tutorials)
- Community and Support

Tel: +1-929-672-1814
Email: info@genai-training.com
www.genai-training.com

- Joining Python communities and forums
- Finding mentors and collaborators
- Additional Resources
- Reading Materials and References on GenAI-training portal
- Suggested books and online articles
- Tools and IDEs
- Overview of Integrated Development Environments (IDEs) like PyCharm, VSCode
- Community and Support
- Access to online forums, discussion groups, and mentorship opportunities
- This course outline is designed to provide a comprehensive introduction to Python for beginners, covering all fundamental concepts, hands-on exercises, and practical applications to ensure a solid foundation in Python programming.

*COURSE OUTCOMES

- Python Proficiency: Develop a strong foundation in Python programming, tailored specifically for data analysis/data engoneers tasks.
- Data Manipulation: Master data manipulation techniques using Pandas, including data cleaning, merging, reshaping, and aggregation.
- Numerical Operations: Perform complex numerical operations and statistical analysis with NumPy.
- Data Visualization: Create compelling visualizations with Matplotlib and Seaborn to effectively communicate data insights.
- Exploratory Data Analysis (EDA): Conduct thorough exploratory data analysis to identify patterns, trends, and anomalies in datasets.
- Data Cleaning: Learn methods to handle missing data, outliers, and other data quality issues.
- Real-World Application: Apply Python skills to real-world datasets through hands-on projects and case studies.
- Automation Skills: Automate repetitive data tasks to increase efficiency in data processing workflows.
- Problem-Solving: Enhance problem-solving abilities by tackling various data challenges and developing analytical solutions.
- Data-Driven Decisions: Gain the confidence to use Python for making informed, data-driven decisions in professional settings