

@Thelearningskills

DATA ViSUALiZATIION WiTH PYTHON

@Thelearningskills

DATA VISUALIZATION WITH PYTHON

Course Duration: 12 Weeks

The objective of this course is to equip participants with the skills and knowledge needed to create effective data visualizations using Python. By the end of the course, students will be proficient in using Python libraries such as Matplotlib, Seaborn, Plotly, and Folium to visualize data, communicate insights, and create engaging interactive visualizations.

Week 1: Introduction to Python Programming

- Basic Python syntax and data types
- Variables, operators, and control structures
- Functions and libraries in Python

Week 2: Data Structures in Python

- Lists, tuples, and dictionaries
- Working with data structures
- List comprehensions and other advanced techniques

@Thelearningskills

Week 3: File Handling and Data Import

- Reading and writing files in Python
- Handling different file formats (CSV, Excel)
- Data import and preparation for visualization

Week 4: Introduction to Data Visualization

- Understanding the importance of data visualization
- Principles of effective data visualization
- Choosing the right visualization type

Week 5: Matplotlib for Basic Plotting

- Introduction to Matplotlib library
- Creating line plots, scatter plots, and bar charts
- Customizing plot appearance and style

Week 6: Advanced Matplotlib

- Creating subplots and multiple plots
- Annotations and text in plots
- Saving and exporting plots

@Thelearningskills

Week 7: Seaborn for Statistical Visualization

- Introduction to Seaborn library
- Creating statistical plots (histograms, box plots, violin plots)
- Customizing Seaborn plots

Week 8: Plotly for Interactive Visualization

- Introduction to Plotly library
- Creating interactive plots (scatter plots, bar charts, heatmaps)
- Adding interactivity and animations to plots

Week 9: Geographic Data Visualization with Folium

- Introduction to Folium for geographical data visualization
- Creating interactive maps and markers
- Customizing map styles and features

Week 10: Data Visualization Best Practices

- Effective storytelling through data visualization
- Color theory and colour choices in data visualization
- Designing dashboards and reports

@Thelearningskills

Week 11: Data Visualization with Pandas and Seaborn

- Using Pandas' built-in visualization capabilities
- Seaborn for enhancing visualizations with statistical details
- Combining Pandas, Seaborn, and Matplotlib for complex visualizations

Week 12: Final Project and Course Wrap-Up

- Final project assignment: Creating a data visualization project
- Presentation and discussion of final projects
- Course review and key takeaways
- Next steps in data visualization and Python learning

ADD-ons

**Hands-
on-
Project**

**Lifetime
Career
Guidance**

**24/7
Whatsapp
support**

FAQ (Frequently asked questions)

1. Who is this course designed for?

This course is designed for data enthusiasts, analysts, and professionals who want to enhance their data analysis skills by learning how to visualize data effectively using Python.

2. What prior knowledge or skills are required for this course?

Participants should have a basic understanding of Python programming and data analysis concepts. Familiarity with data manipulation libraries like Pandas is beneficial but not mandatory.

3. What tools and libraries will be used in this course?


The course primarily utilizes Python and popular data visualization libraries such as Matplotlib, Seaborn, Plotly, and Folium. Participants will need access to a Python environment for hands-on exercises.

4. What types of data visualizations will be covered in the course?

The course covers a wide range of data visualizations, including static and interactive charts (line plots, bar charts, scatter plots), statistical visualizations (box plots, histograms), geographical maps, and more.

5. Is there a final project or assignments in this course?

Yes, participants will work on practical assignments and a final project where they will create data visualizations using real-world datasets. These projects allow students to apply what they've learned.



FAQ (Frequently asked questions)

6. Is a certificate provided upon course completion?

Most course providers offer certificates of completion, which can be a valuable addition to your professional portfolio.

7. What are the career or practical applications of this course?

Data visualization skills are highly sought after in various industries, including data analysis, business intelligence, journalism, and research. Participants can use these skills to enhance their career prospects and effectively communicate data-driven insights.

8. What are the next steps after completing this course?


After completing this course, participants can explore more advanced data visualization techniques, dive deeper into data analysis, or consider courses in related fields such as data science and machine learning.

9. Is this course suitable for beginners?

This course assumes a basic understanding of Python, so participants with some programming knowledge will find it more accessible. However, beginners with a strong willingness to learn are welcome.

10. Is there any post-course support or resources available?

Many course providers offer access to course materials and may provide additional resources or forums where participants can continue learning and ask questions.





Contact Us For More Info



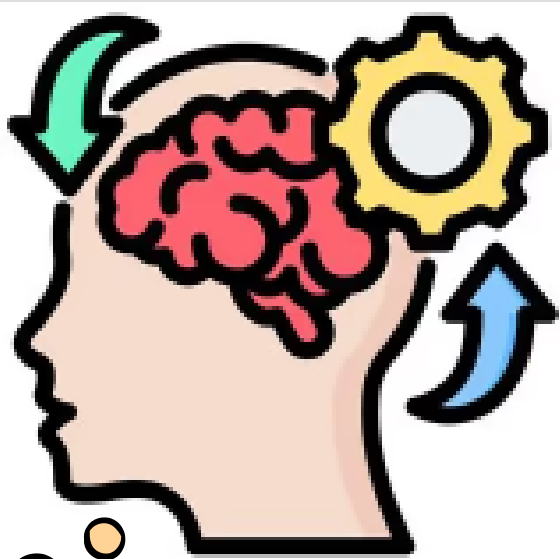
+91-9910986344



info@thelearningskills.com

Website

www.thelearningskills.com



Home

We at the learning skills serve our users with the right knowledge. You will find all the best courses on our platform. We also update the latest news on...

 Learn Educate Earn / Nov 27, 2018

