Here is the detailed plan:

Learning Schedule for: Data Science

Duration : 2 months

Learning Style : Mix

"The best way to get started is to quit talking and begin doing." - Walt Disney

Here you go! Enjoy :) :

Month 1:

1. Week 1:
   - Main topics to cover: Introduction to Data Science, Python basics, NumPy, Pandas
   - Practical exercises: Complete exercises in Python, NumPy, and Pandas tutorials; Practice data cleaning and manipulation using Pandas

2. Week 2:

- Main topics to cover: Data Visualization, Matplotlib, Seaborn
- Practical exercises: Create visualizations using Matplotlib and Seaborn; Practice data exploration using visualization techniques

3. Week 3:
   - Main topics to cover: Machine Learning basics, Scikit-learn
   - Practical exercises: Complete exercises in Scikit-learn tutorials; Practice building simple machine learning models

4. Week 4:
   - Main topics to cover: Supervised Learning, Regression
   - Practical exercises: Practice building regression models using Scikit-learn; Complete exercises in Regression tutorials

5. Monthly Project:
   - Description: Build a simple predictive model using regression
   - Skills applied: Data cleaning, visualization, machine learning
   - Estimated time: 10 hours

6. Monthly milestone: Complete a project that demonstrates understanding of data science basics

7. Self-assessment task: Reflect on progress, identify areas for improvement, and adjust pace accordingly

Month 2:

8. Week 5:
   - Main topics to cover: Unsupervised Learning, Clustering

- Practical exercises: Practice building clustering models using Scikit-learn; Complete exercises in Clustering tutorials

9. Week 6:

- Main topics to cover: Natural Language Processing (NLP)
- Practical exercises: Complete exercises in NLP tutorials; Practice text preprocessing and sentiment analysis

10. Week 7:

- Main topics to cover: Deep Learning basics, TensorFlow/Keras
- Practical exercises: Complete exercises in TensorFlow/Keras tutorials; Practice building simple deep learning models

11. Week 8:

- Main topics to cover: Review and Practice
- Practical exercises: Practice building complex models using various techniques; Review and practice all concepts learned throughout the period

12. Monthly Project:

- Description: Build a complex predictive model using multiple techniques
- Skills applied: Data science, machine learning, deep learning
- Estimated time: 20 hours

13. Monthly milestone: Complete a project that demonstrates understanding of advanced data science concepts

14. Self-assessment task: Reflect on progress, identify areas for improvement, and prepare for final project or exam

Key Milestones :

1. Complete a simple predictive model using regression (Week 4)

2. Complete a complex predictive model using multiple techniques (Week 8)

3. Review and practice all concepts learned throughout the period (Week 8)

Advanced Topics (for latter part of the learning period):

15. Big Data Analytics

- Subtopics: Hadoop, Spark, NoSQL databases
- Resources: Online courses, tutorials, and books on Big Data Analytics

16. Advanced Deep Learning

- Subtopics: Convolutional Neural Networks (CNNs), Recurrent Neural Networks (RNNs)
- Resources: Online courses, tutorials, and books on Advanced Deep Learning

Community and Support :

17. Recommended forums or communities: Kaggle, Reddit (r/learnprogramming and r/datascience)

18. Potential mentorship opportunities: Kaggle mentors, Data Science professionals on LinkedIn

19. Study group suggestions: Join online study groups or create a local study group with friends or colleagues

Assessment and Evaluation :

20. Suggested methods for tracking progress: Keep a learning journal, track progress on a Kanban board

21. Key performance indicators: Completing projects on time, achieving milestones, improving skills

22. Final project or exam details: Build a comprehensive predictive model that demonstrates understanding of data science concepts

Additional Tips :

23. Time management strategies for a 2-month learning period: Create a schedule, prioritize tasks, and take breaks

24. Recommended pace and intensity based on the 2-month duration: Start with a moderate pace and increase intensity as needed

25. Strategies for maintaining motivation over 2 months: Celebrate small wins, reward yourself, and remind yourself of the goal

"Believe you can and you're halfway there." - Theodore Roosevelt

Additional Resources

https://www.datacamp.com/tutorial/pandas

https://www.learndatasci.com/tutorials/python-pandas-tutorial-complete-introduction-for-beginners/

https://alamwasim225.medium.com/introduction-to-pandas-for-data-science-15be6e70dd25?source=post_internal_links---------7----------------------

https://seaborn.pydata.org/

https://builtin.com/data-science/data-visualization-tutorial

https://www.stratascratch.com/blog/4-python-data-visualization-libraries-you-can-t-do-without/

https://scikit-learn.org/stable/tutorial/basic/tutorial.html

https://scikit-learn.org/stable/

https://scikit-learn.org/stable/index.html

https://towardsdatascience.com/a-brief-introduction-to-supervised-learning-54a3e3932590?gi=97ac2028d70c

https://www.geeksforgeeks.org/regression-classification-supervised-machine-learning/

https://www.geeksforgeeks.org/ml-types-learning-supervised-learning/

https://srisindhu.medium.com/what-is-unsupervised-learning-and-algorithms-used-for-unsupervised-learning-d04c03c923b7?source=post_internal_links---------5----------------------------

https://medium.com/analytics-vidhya/unsupervised-learning-clustering-techniques-e1b7e8fa8704?source=post_internal_links---------6----------------------------

https://saturncloud.io/glossary/unsupervised-learning/

https://builtin.com/artificial-intelligence/natural-language-processing-nlp

https://opendatascience.com/?s=natural+language+processing

https://opendatascience.com/tag/natural-language-processing/

https://www.tensorflow.org/tutorials

https://www.tensorflow.org/learn

https://www.tensorflow.org/resources/learn-ml/basics-of-machine-learning

https://google.github.io/eng-practices/review/reviewer/

https://github.com/google/eng-practices/blob/master/review/reviewer/index.md

https://www.learningscientists.org/retrieval-practice

https://nips.cc/Register/view-registration

https://www.eventbrite.com/e/alta45-bilingual-reading-series-asian-literature-july-tickets-338506661537

https://bookbybook.blogspot.com/p/welcome-to-big-book-summer-2022-this-is.html