

Data Science and Artificial Intelligence

Introduction to 3-Months Course

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Introduction to myself

My Name is Dostdar Ali,

- Education: MS in applied Mathematics and Machine learning.
- Institution: COMSATS university Islamabad.
- Research Domain: Neural Network, Deep learning.
- Data science and AI: One month ago I have Complete my six Months course.
- Current Status: Am a visiting lecturer at Karakorum international.
- Teacher Associate: Up Come march in 2024 at university Of Baltistan.
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Why to learn Data Science and Artificial Intelligence? **Who** can learn , serving as a newly innovation the realm of data science and AI. What **Career** do I adopt?

The curriculum progresses, one-week for **Python Crash Course**, two weeks for **Basic Mathematics and Statistics**, followed by four-week each modules on **Data Science** and **Machine Learning**. The final week is dedicated to **Freelancing**.



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Week 1: Python Crash Course

- Introduction to Python syntax and data types.
- Control flow and loops.
- Functions and modules.
- File handling in Python.



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Weeks 2-3: Basic Mathematics and Statistics

- Algebra and calculus fundamentals.
- Descriptive and inferential statistics.
- Probability theory.



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Weeks 4-7: Data Science

- Data exploration and cleaning.
- Data visualization with tools like Matplotlib and Seaborn.
- Introduction to Pandas for data manipulation.
- Case studies and practical applications.



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Weeks 8-11: Machine Learning

- Supervised and unsupervised learning.
- Regression and classification algorithms.
- Clustering and dimensionality reduction.
- Model evaluation and hyperparameter tuning.



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Week 12: Freelancing

- Freelancing platforms and marketplaces.
- Building a freelance portfolio.
- Client communication and project management.



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Final Project

- Introduction and background of the course.
- Overview of Python, mathematics, statistics, data science, and machine learning modules.
- Demonstration of a final project.



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Thank you!

