

Python for Data Science

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1 Introduction and Course Information

2 Week 1: Getting Started with Data Science

- ACQUIRE
- PREPARE
- ANALYZE
- REPORT
- ACT

Data preparation is very important to do.

Select technique , build model - evaluate - classification - regression - clustering - association - analysis - graph analysis

3 Week 2: (Optional) Background in Python and Unix

Course Week 2: (Optional) Background in Python and Unix Python: Key Data Structures
Video: String Functions

- 4 **Week 3 - Jupyter Notebooks and Numpy**
- 5 **Week 4 - Pandas**
- 6 **Week 5 - Data Visualization**
- 7 **Week 6 - Mini Project Week**
- 8 **Week 7 - Introduction to Machine Learning**
- 9 **Week 8 - Working with Text and Databases**
- 10 **Week 9 - Final Project Part 1**
- 11 **Week 10 - Final Project Part 2**

References

- [1] A. C. Melissinos and J. Napolitano, *Experiments in Modern Physics*, (Academic Press, New York, 2003).