

Python Intensive Course

Day	Topics
DAY1	<ol style="list-style-type: none"> 1. Using the IPython shell and "Python notebook" 2. Fundamentals 3. Conditional Statements 4. Loops 5. Data Structures: <ol style="list-style-type: none"> 1. Integer, Floats and Strings 2. Lists and Tuples, 3. Dictionaries, 4. Sets 6. Functions, 7. optional: recursive functions, decorators 8. File Handling
DAY2	<ol style="list-style-type: none"> 9. Exception Handling 10. Object-Oriented Programming (OOP) with Python <ol style="list-style-type: none"> 1. Introduction 2. Class and instance attributes 3. Data abstractions with getters and setter 4. Properties 5. Operator “overloading” 6. Inheritance 11. Inheritance 12. Numpy <ol style="list-style-type: none"> 1. Data Structures 2. Ufuncs 3. Slicing 4. Changing Dimensions and Shapes 5. Broadcasting 6. Various Mathematical Functionalities

DAY3

13. Matplotlib

1. Plotting Data
2. Linestyles and Colors
3. Axis and Spines
4. Manipulating Tick Label
5. Subplots
6. Contour Plots

14. Pandas

1. Series
2. Series to DataFrames
3. Series, DataFrames vs. Dictionaries
4. Working with DataFrames
5. Reading and Writing csv and dsv files
6. Working with Excel Files in Pandas
7. Hierarchical Indexing
8. Working with incomplete data, NaN