

**Agenda, Basic Python Course**

Day	Topics
<b>DAY1</b>	<ol style="list-style-type: none"><li>1. The Origins of Python</li><li>2. Starting with Python: The Interactive Shell</li><li>3. Using the IPython notebook and Spyder</li><li>4. Executing a Script</li><li>5. Data Types and Variables<ol style="list-style-type: none"><li>5.1. The special nature of variables in Python</li><li>5.2. Sequential Data Types: Lists and Strings</li><li>5.3. Dictionaries, Sets and Frozen Sets</li><li>5.4. copying vs. referencing data, Shallow and Deep Copy</li></ol></li><li>6. Conditional Statements: if statement and ternary if</li><li>7. Input</li></ol>
<b>DAY2</b>	<ol style="list-style-type: none"><li>8. Loops: While and for-loops with the Python „else“</li><li>9. Functions, global and local data, Parameter Passing in Function</li><li>10. Read and Write Files</li><li>11. Modular Programming and Modules</li><li>12. Lambda Operator, Filter, Reduce and Map</li><li>13. List Comprehension</li><li>14. sort and sorted with custom made sort criteria</li></ol>