

Objective

This course has been designed for the beginners to help them understand the basics to advanced concepts of Python programming language. After completing this tutorial, you will find yourself at a great level of expertise in Python programming, from where you can take yourself to the next levels.

Course Content

(35 Hr)

-  **Introduction** (30 min)
 - Python Overview
 - Why to learn Python
 - Python vs Java
-  **Python Environment Setup** (3.5 Hr)
 - Installation
 - Virtual Environment
 - IDE 1 Setup: Pycharm
 - IDE 2 Setup: Jupyter Lab
-  **Programming Basics Part I** (4 Hr)
 - Variables & Assignments
 - Basic Datatypes & Operators
 - Conditional and Looping Construct
-  **Programming Basics Part II** (10 Hr)
 - Numbers and Strings
 - Data Structures – List, Tuples, Set & Dictionaries
 - Date & Time
 - Functions
 - Modules
 - Exceptions
-  **Advance Concepts Part I** (5 Hr)
 - File I/O Operations
 - Classes & Objects
 - Multithreading
-  **Advance Concepts Part II** (5 Hr)
 - Working with database – Mysql
 - Working with Xml
 - Working with JSON



Data Science Basic

(5 Hr)

- Introduction to Numpy
- Introduction to Pandas

Project Submission

(5Hr)

<< need to design>>