

Certificate Course in Artificial Intelligence (AI) using Python

Eligibility : Basic knowledge of any Programming language, laptop in working condition with latest configuration .

Duration : 60 Hours (2 - 3 Hrs/Day)

Course Outline:

- ✓ **Introduction of Artificial Intelligence (AI)** : Basics concept of Artificial Intelligence, Necessity of Learning AI, Application of AI, Examples of AI, Why Python for AI.
- ✓ **Python**: Introduction, Python Language, its programming constructs, various datatypes, operators.
- ✓ **Conditional statements Loops and control flow**: If else statements, For loop, While loop, break and Continue.
- ✓ **Data Structures - Collection Datatypes**: Strings, Lists, Tuples, Sets and Dictionaries.
- ✓ **Functions**: Function definition, calling a function.
- ✓ **Modules**: Importing various modules in python program.
- ✓ **Numpy** : Python NumPy library for n-dimensional arrays.
- ✓ **Artificial Intelligence, Data Science Concepts & Machine Learning**: Machine Learning types and applications, Feature Matrix, Training, Test and Validation Matrix, SciPy, sklearn, Application of Artificial Intelligence.
- ✓ **Pandas** : Python Pandas Library for file handling, Data Frames for data analytics, importing json and csv files.
- ✓ **Visualization** through matplotlib and seaborn
- ✓ **Concepts of Artificial Neural Networks and Deep Learning.**